License Plate Readers

Vendor: Originally named Appian Technologies Inc, then name changed to
NDI Technologies
Contract# 0800796

Appian Technologies:

Purchase Order Number	Amount	Invoice number	Invoice Amount	Tax amount on Invoice	Fund Coding	Quantity of Readers Ordered w/Equip and Maint
2008001333	19,000.00	12	19,000.00	1,377.50	0413-0032980-0046302	1
2008001948	19,000.00	13	19,000.00	1,337.50	6807-0035490-0090082	1

NDI Technologies:

Purchase Order Number	Amount	Invoice number	Invoice Amount	Tax amount on Invoice	Fund Coding	Quantity of Readers Ordered w/Equip and Maint
2009001727	44,700.00	300277	44,700.00	-	0413-0035410-0041690	2
2012004368	209,268.00	300630	209,268.00	-	0413-0032980-0044420	6
2012004839	517,386.15	300664A	253,698.15	-	0413-0035490-0053333	37
2012004840	571,171.85	300652A	485,495.85	-	0362-0035490-0044995	60
2013001079	17,960.00	300670	17,960.00		0362-0035490-0044995	4

Total Amount:	1,398,486.00				Total Ordered:	111

POLICE	***Charlotte-Mecklenburg Police Department***		**SOP**
	Standard Operating Procedure	Automated License Plate Reader	
CHARLOTTE-MECKLENBURG		***Effective Date* 4/29/2011**	**1 of 7**

I.   PURPOSE

To establish guidelines for CMPD employees for the deployment, maintenance, training, data storage, and associated uses of both fixed and mobile automated license plate readers (ALPR) used by CMPD. It is the purpose of these procedures to serve as a guide for the use of ALPRs which collect and store large amounts of data (license plates, dates, times, and locations of vehicles) for future records management, analysis and dataset linking.

II.   POLICY

ALPR technology automates a process that, in the past, was conducted manually by officers, tag by tag, with much discretion. ALPR is an information technology system with the capability for quick scanning and matching capabilities. In addition to recovering stolen vehicles, ALPR data can be used to confirm a suspect's alibi or whereabouts at a particular date and time. Data may also be used for predictive purposes, i.e., to scan and record vehicular activity in high risk/crime locations and unusual patterns of traffic by one or multiple vehicles resulting in a heightened risk or concern that emerges from analyzing the data.

III.   DEFINITIONS

A.   Automated License Plate Reader (ALPR) system: Either mobile or at fixed locations, equipment consisting of camera(s), computer, and computer software used to automatically recognize and interpret the characters on vehicle license plates. The ALPR can scan and read over 3,000 license plates per hour. Digital images captured by the cameras are converted into data, which is processed through the ALPR system. This data is then compared against a list of license plates bearing some significance to the CMPD. If the information supplied via the ALPR system alerts ALPR Operators to an offense or relevant intelligence on a vehicle, the vehicles may be stopped to allow further investigation. Stored data may also be analyzed at a further date for investigative purposes.

B.   ALPR Manager: Command staff level employee designated by the Chief of Police or designee who is responsible for the management of the ALPR program including its administration, troubleshooting, training, repairing and coordinating all aspects of the ALPR system.

C.   ALPR-Generated Data: All information including GPS coordinates, date and time of a license plate reading, the optical character recognition interpreted data, and any ALPR-generated digital photographic image(s) of the license plate and vehicle generated entirely through the use of and by the ALPR equipment.

D.   ALPR Operator: A sworn or non-sworn employee properly trained in the use of the CMPD ALPR system.

E.   Download: The transfer of hot list data from NCIC, KBCOPS, or other data sources consisting of license plates and associated data.

F. External Hot List: A database populated with items of specific concern to the investigative and/or enforcement interests within the CMPD's jurisdiction. External hot lists originate from sources other than CMPD such as NCIC and KBCOPS data.

G. Local Hot List: An addition to the ALPR server database that is appended to the External Hot List. The local hot list consists of license plates of local investigative significance entered into the server hot list by an ALPR operator.

H. Alert: A positive indication, by visual and/or audible signal, of a potential match between data on the hot list and a license plate scanned by the ALPR system. An alert is not conclusive confirmation that a license plate is wanted. Additional investigation is always warranted when an alert is indicated.

I. Mobile ALPR: ALPR cameras mounted on patrol cars and other vehicles operating in a mobile environment.

J. Fixed ALPR: ALPR cameras mounted on traffic signal poles and mounted traffic signal mast arms

IV. DAILY CHECKLIST and PATROL PROCEDURES for MOBILE MOUNTED ALPR

A. Daily Checklist

1. Officers will visually inspect the exterior cameras to ensure the lenses are clear and the cameras have not been altered in any way.

2. Download the most current data file of stolen and "of interest" vehicles containing all of the current NCIC information.

3. Manually add any license plate numbers of interest that warrant a law enforcement related alert.

4. ALPR Operators should leave the ALPR system operational while patrolling during the duration of the shift. The ALPR screen can be minimized in the background and can be constantly operational even when on other calls or conducting preventative patrol.

5. ALPR Operators can adjust the manner in which they drive to maximize the number of tags being read.

   a. The front facing camera allows for the tags to be read in close proximity to the right front of the police vehicle.

   b. The rear facing allows for tags to be read at a further distance in relation to the camera and is designed to capture tags on vehicles traveling the opposite direction of the police vehicle.

c.   The side facing camera allows for tags to be read on vehicles in a parked position. This function is best utilized when driving in parking lots with a high volume of vehicles.

6.   Officers must upload ALPR data to the computer server at the end of each shift and confirm that the data transfer is complete.

7.   ALPR Operators may program their patrol car laptop computers/office computers to monitor selected fixed ALPR cameras

B.   Patrol Procedures

1.   Use crime analysis data to accurately target patrols in areas specifically related to crime trends where the collection of this data will benefit future and current investigations.

2.   Target areas should be small enough (usually less than a half mile wide) for patrol units to drive through every street within the hotspot in less than 30 minutes.

3.   Staying in strategic locations for 30 minutes or less ALPR Operators would be more effective in deterring criminal activity.

4.   ALPR Operators should be given 3-5 small crime strategic locations to patrol in a shift.

5.   To maximize effectiveness, ALPR Operators should move from strategic location to strategic location in a completely random fashion.

6.   ALPR Operators should use "sweep and sit" scheme.

7.   "Sweep" each strategic location at least once for parked and moving vehicles.

8.   "Sit" at certain locations, at the discretion of the ALPR Operator, in which the probability of a suspect vehicle traveling by would be the greatest.

V.   PROCEDURES for FIXED ALPR

A. Daily Checklist

1.   Download the most current data file of stolen and "of interest" vehicles containing all of the current NCIC information.

2.   Manually add any license plate numbers of interest that warrant a law enforcement related alert.

3.   ALPR Operators may leave the ALPR system operational while performing their duties during the duration of their shift. The ALPR screen can be minimized in the background and can be constantly operational.

VI.   Responsibilities

A.   ALPR Operators shall receive formal training prior to using the ALPR system.

B.   ALPR Operators shall exercise safety when operating the mobile ALPR system.

1.   Use of any device during the operation of a motor vehicle must comply with current State law including CMPD Policies and Directives.

2.   ALPR Operators will pay careful attention to driving and will not use the ALPR system in any manner that would endanger or distract them, resulting in an accident.

C.   It shall be the responsibility of each ALPR Operator to ensure the download of the most recent hot list occurs on the mobile computer prior to deployment of the ALPR equipment.

D.   When using an ALPR-equipped vehicle, ALPR Operators should have the system in operation to include a connection to the ALPR server so as to maximize the opportunity to scan vehicles, compare them to the hot list and collect ALPR data in a central repository.

E.   Upon receiving an alert from either the mobile or fixed ALPR, the ALPR Operator will use the displayed information to determine the accuracy and nature of the alert. The ALPR Operator will visually verify that the subject tag and the actual read on the ALPR screen are the same (i.e. correct letters, numbers, state and any other information that can be matched).

F.   Once the ALPR Operator has confirmed that the alert is valid, he or she shall take appropriate action based on the type of alert in accordance with training.

1.   If the alert is for a stolen or felony vehicle, the ALPR Operator will confirm the alert is still active by running a check on the information through NCIC.

a.   Receipt of a stolen or felony vehicle ALPR alert may not rise to the level of reasonable suspicion and is certainly not sufficient probable cause to arrest without confirmation that the vehicle is still wanted.

b.   If the alert is for another type of want, the ALPR Operator will read the description of the alarm and use the appropriate action or reporting method. Confirmation of the alert is essential prior to the stop of any person.

G.   Ensure that all positive "hits" on the Terrorist Watch List are reported to the Terrorist Screening Center (TSC). All Terrorist Watch List hits will be handled by phone. There will be no radio traffic concerning Terrorist hits except in the case of emergencies. ALPR Operators must be familiar with the (3) three levels of Terrorist.

Watch List hits:

1. Level (1) one stop hold and contact TSC

2. Level (2) two keep a visual and contact TSC for further instructions and do not alert subjects of your presence

3. Level (3) three document information, take no action, report information to TSC

H. Some ALPR Operators will be power users and may assist with the training of new ALPR Operators, troubleshooting problems with the ALPR system, helping their co-workers understand the value of the ALPR system, and improving the operations of the ALPR system.

VI. SUPERVISORS

A. Supervisors will monitor the use of ALPR mobile and fixed systems and ensure they are being used properly.

B. Supervisors will ensure mobile ALPR systems are deployed during the shift by trained ALPR Operators.

C. The mobile ALPR systems should be deployed to maximize its ability to scan as many license plates as possible.

D. The supervisor shall investigate any damage to mobile and fixed ALPR's in accordance with established procedures. Damage and any reports or documentation will be forwarded to the ALPR Manager.

VII. ALPR MANAGER

A. The ALPR Manager will determine how the fixed and mobile ALPR system will be integrated into CMPD's patrol and investigative functions. He or she will also determine any restrictions for the use of the ALPR system.

B. The ALPR Manager will validate training for ALPR Operators to ensure ALPR Operators are properly trained before accessing ALPR data or participating in ALPR field operations, to ensure training is timely and adequate, to ensure proper operations in accordance with this Standard Operating Procedure, and to ensure all training is documented.

C. The ALPR Manager will recommend policy changes to the Field Services and Investigative Services Deputy Chiefs.

VIII. DATA RETENTION and USE

A. Data will be stored on CMPD database residing on a City of Charlotte server and will not be stored outside the control of the CMPD.

B. All ALPR-generated data will be purged after an 18-month retention period unless a longer retention period has been identified for court or investigative purposes.

1. For retention beyond the 18-month retention period, officers must scan the

"Exhibit Report" into KBCOPS.

2. ALPR Operators will be responsible for advising their supervisor when ALPR data they marked for extended retention is no longer needed.

3. The ALPR system automatically erases stored data when the retention period has elapsed.

C. Access to ALPR data is restricted to CMPD personnel, in furtherance of a criminal justice purpose, ALPR data may be shared verbally by a member of CMPD with another criminal justice agency. Any other use of this data is strictly forbidden.

1. Users will be able to access the ALPR data by providing the established user name and password. This access will allow for the user to query information as it pertains to vehicle tags read by the tag reader cameras.

2. The ALPR manager will determine the personnel to have access to the database for investigative queries and reports. Any requests for database access will be handled on a case by case basis and those granted access will be provided the user name and password for access.

3. Information stored includes a photo of the registration plate showing the rear of the vehicle, a date and time stamp of when the registration plate was read by the ALPR and a GPS coordinate to identify the exact location the registration plate was read by the ALPR.

IX. ALPR MAINTENANCE

1. Neither the ALPR equipment nor or software operating system shall be modified without direction from the ALPR Manager.

2. Under no circumstances shall an ALPR unit be connected to or removed from the vehicle while the ALPR unit is powered up. Connection or disconnection of the camera unit from the ALPR system when powered will result in significant damage to the ALPR system.

3. Any time the ALPR unit is disconnected or removed from the vehicle, it shall be placed in a protective storage case or the ALPR's original packaging and secured to prevent damage.

4. ALPR camera lenses may be cleaned with glass cleaner or mild soap and water and a soft, non-abrasive cloth.

5. Damage to fixed or mobile ALPR equipment shall be immediately reported to a supervisor. The supervisor shall document (and investigate, if necessary) any damage in accordance with established procedures. Damage will also be reported to the supervisor's Captain and the ALPR Manager.

6. The ALPR Manager shall be notified immediately of any ALPR equipment needing maintenance or repair and ensure that all maintenance and repair of

ALPR equipment is completed.

VeriPlate 101 & VISCE 101: An Introduction to LPR
Charlotte-Mecklenberg Police Department – August 24, 2012

Instructor: Keith Yahn, NDI

9:00 am – 10:00 am – ALPR Overview: Training Room # 2123

- General overview of LPR
- How LPR works
  - Cameras
  - Capturing Lanes
- License plates and IR light
  - Differences in plates
  - Getting the best "captures" and "reads"
- Hotlist extracts and timing
  - State / NCIC
  - Using your own hotlists
  - The Live Check benefit
- VeriPlate system connections and connectivity
- Basic troubleshooting and diagnosing common issues

10:00 am – 10:15 am BREAK

10:15 am – 11:45 am– VISCE Back Office: Training Room # 2123

- Using the VISCE Server to complete simple searches
- More complex searches and scenarios
- LPR for Crime Analysis
- Creating / Importing your own hotlists
- The future of LPR

11:45 am – 1:00 pm LUNCH BREAK

1:00 pm – 2:00pm– Road Warrior & RDS Overview

- Starting the system and "Syncing" Hotlists
- Interface Overview
  - Overview Picture, Plate Patch, Text Read
  - Interface Demonstration
  - Capture Mode
  - Search Mode
  - CMIS Results
  - Configurations Options

2:00 pm – 2:15 BREAK

2:15 pm – 3:00 pm- Q&A w/Wrap Up TBD

ndiRS

NDI RECOGNITION SYSTEMS
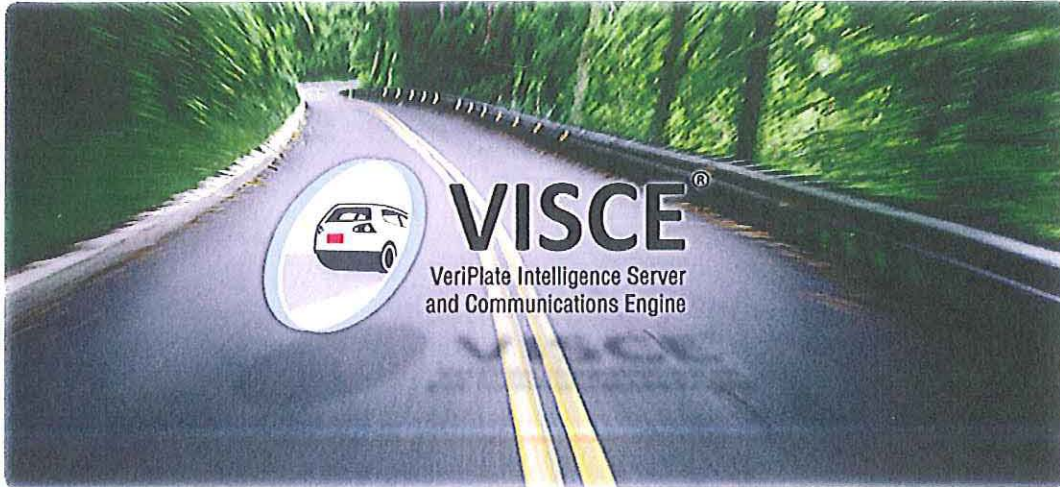
VISCE User Manual

Version 3.3

Modified December 3, 2010

385 Commerce Way, Longwood, Florida 32750 USA

Table of Contents

Getting Started

Introduction to VISCE

Welcome to VISCE, VeriPlate Intelligence Server and Communication Engine. This program allows you to record, search and organize data gathered from your cameras, mobile or static. This manual is here to help you navigate around the website. Should you have any questions about any part of this program, please do not hesitate to contact us, (contact information located in the back).

Overview of Website

Logging In

You are provided with a user name and password to VISCE. Simply enter them and you will be admitted to the site.

REMINDER: After 20 minutes of inactivity, VISCE will log you off and return you to this page.
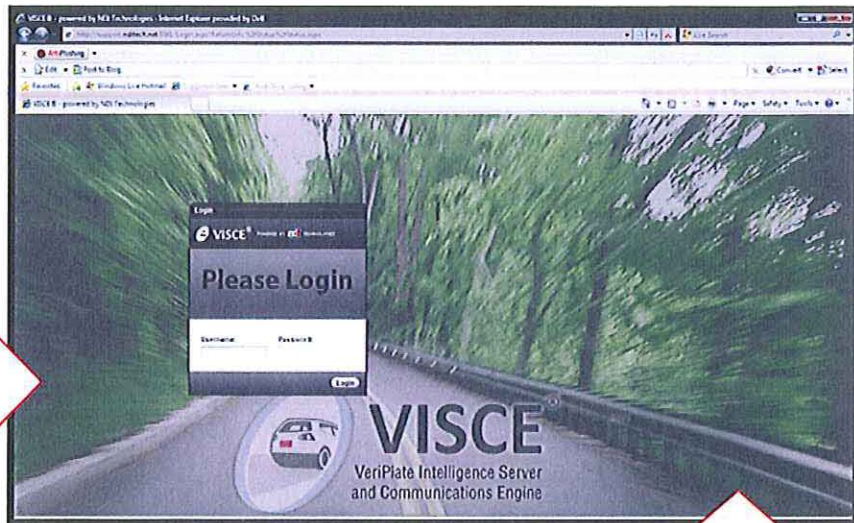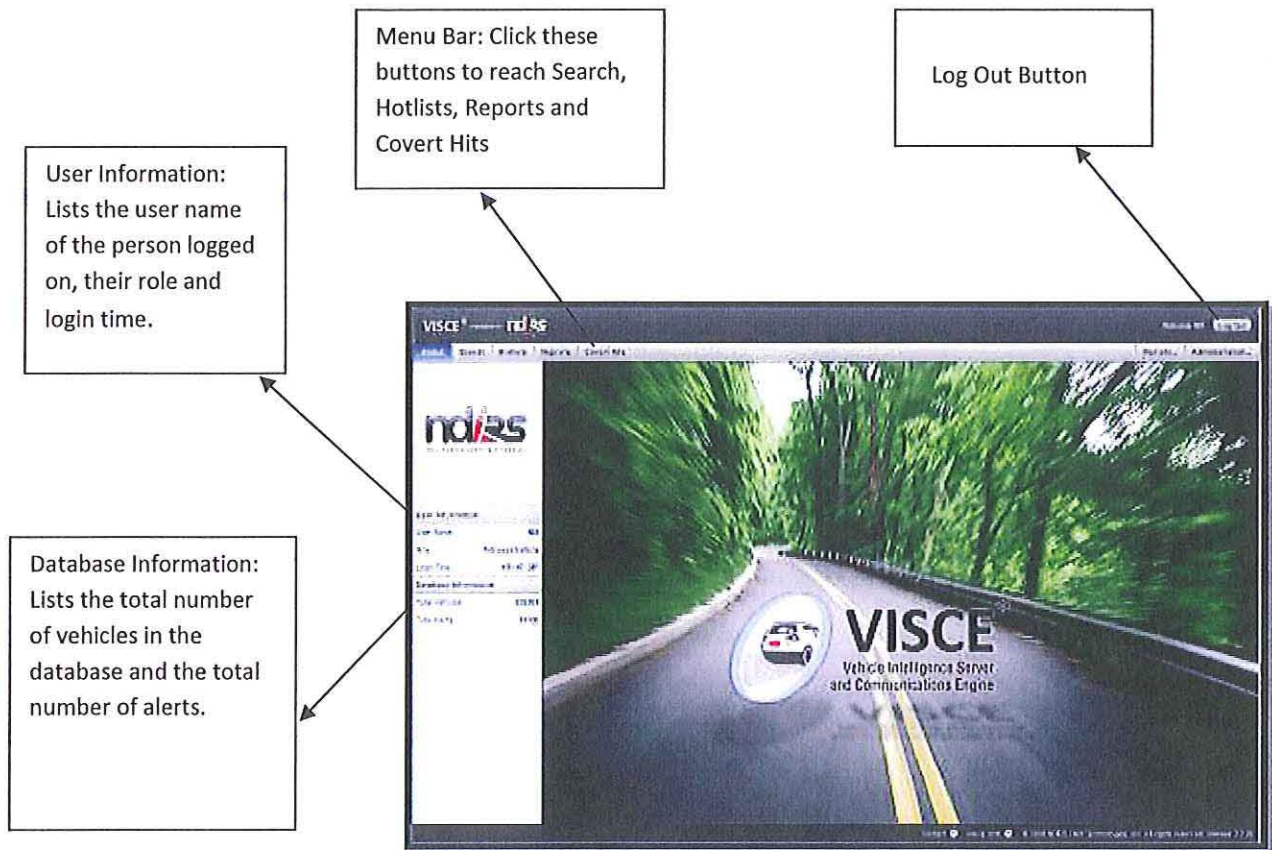
Once logged in, there are 4 general areas in which you can pursue and organize information; Status, New Search, Hotlists and Reports. Each of these areas is described in the following chapters of this manual.
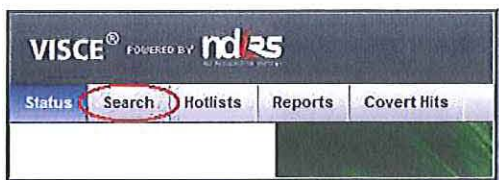
REMINDER: Your product is licensed and has a limited number of users. No more than that number can be logged on at once, so remember to log off when you are done!

Status

The status page is rather like a title page, giving you basic information about this session. A diagram of this page can be seen below. Perhaps the most important things here are the tabs or buttons located at the top. These allow you to navigate to the different areas of VISCE.

Menu Bar: Click these buttons to reach Search, Hotlists, Reports and Covert Hits

Log Out Button

User Information: Lists the user name of the person logged on, their role and login time.

Database Information: Lists the total number of vehicles in the database and the total number of alerts.
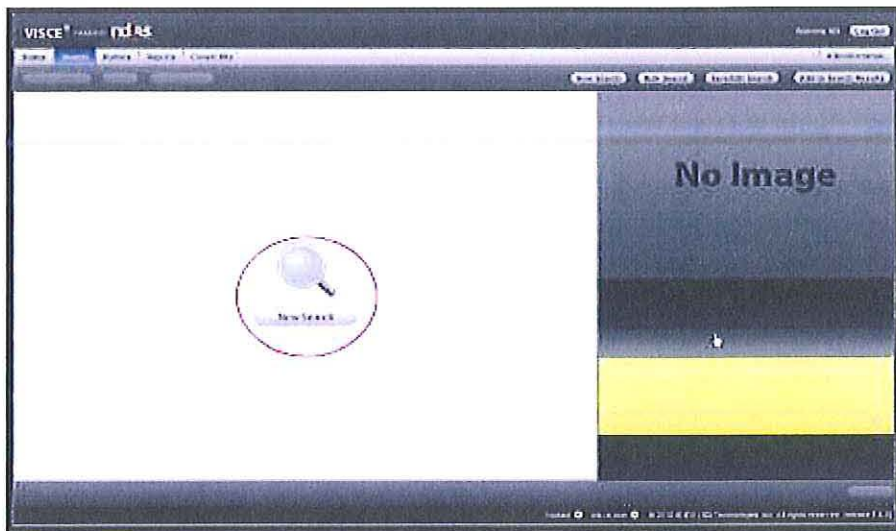
Searches

There are a numbers of ways to search the information in your database. Start by hitting the Search button on the menu bar.

Once you reach the search screen, you can set the parameters of your search by a number of variables: by tag number, vehicle, asset, location, date/time or by alert. You can search by a single variable or by multiple variables. First, each of the variables will be explained and then a later section will cover searching by multiple variables.

New Search

Chances are this will be the function you use most frequently. Begin by clicking the button in the middle of the screen; you can create both New Searches and access Saved Searches by clicking this button.

This window will pop up for you to enter the search parameters into. Notice in the bottom right hand corner there are 3 buttons; Save, Clear and Search. Save and Clear can be used at any time to save search parameters or clear them. When you have entered all the information you need to outline the search you want, hit Search or enter. If you want to access search parameters that have already been saved, hit Saved Searches in the upper right hand corner.

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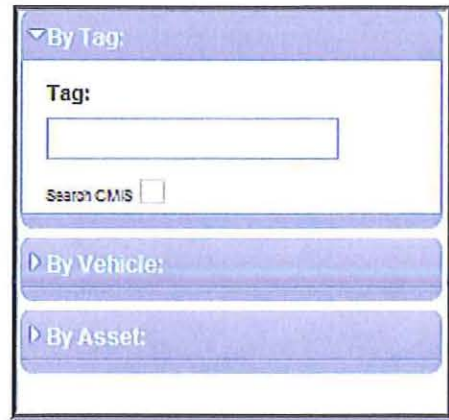## Searching by Different Single Variables

Tag Number

Normally when the New Search window is opened, the By Tag option has already been expanded for you. If it has not, simply click on the blue title bar and it will expand down.

If you have a specific tag number: Type the tag number in; it doesn't matter whether or not you have the CAPS lock on. Once you have entered the tag number, hit the Search button in the lower right hand corner of the window.

If you only know part of the tag number: For example, "AB89 _ _", type in the known portion of the tag number and then "*" (AB98*). The asterisk represents a 'wild card' option. You do not need to type in 2 asterisks for 2 numbers, one covers all missing digits. Hit the Search button in the lower right hand corner of the window. All plates with the beginning characters "AB89" will be returned in the search. This type of search can be used any time more than 2 characters located anywhere on the tag are unknown.

If you know all of the tag number with the exception of one character: For example, "ABC _ 23". Type in the known portion of the tag number, substituting a "?" for the unknown character. Hit the Search button in the lower right hand corner of the window. All plates with the characters "ABC_23" will be returned in the search.

By Vehicle

In this parameter, you can enter the Make, Model, Color and Year of any vehicle and Search. The drop down shows any data that exists in the Database while the capture details allow you to add it.

Entering the Make, Model and Color of the vehicle will be of more use under the Capture Details section.

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By Asset

To open this parameter, click on the blue title bar and it will drop down. The Search Parameters that can be entered in this option are: User Name, Camera, System, Force/Organization Name, Direction and Lane.

A User is defined as something that uses the system: a human user, a camera, A VeriPlate system or even a force, (police, Sheriff, etc).

To set these parameters, click on the arrow/triangle on the right side of each bar. A drop down menu will appear with your organization's possible users/systems/force names. Select one by highlighting the option. You may set all of these Asset parameters to conduct your search, or only one if needed. Hit the Search button in the lower right hand corner of the window. All plates captured under these User parameters will be returned.

By Location

To open this parameter, click on the blue title bar and it will drop down. Searching by location allows you to search for plates captured within a radius of a certain place as well as search by Co-ordinates.

Begin by typing the address of the location you would like to be the center of your radius. Although this engine uses Google Maps to locate addresses, *it does not accept "Corner of ___ and ___" directions.* You can enter a street name without an address number.

When entering your state, you can use the drop down menu by clicking the arrow/triangle to the right of the bar, or you can begin typing the postal abbreviation for your state in the window and the program will select a state for you.

Once you have typed the appropriate information in the Address, City, State and Zip Code bar, hit Find Address Matches. Allow some time for the engine to search for possible matches. These will appear in the window at the bottom window labeled Possible Address Matches. If there is only one possible match, the program will automatically use it in the search. If there is more than one possibility, highlight your preferred address by clicking it.

Finally, set your radius. Using the drop down menu, select the number of miles from this address you would like the search to include. Hit the Search button in the lower right hand corner of the window. The search will return all plates captured within the radius indicated.

To search by Coordinates, click on the 'By Coordinates' tab and enter the latitude, longitude and radius and hit Search to retrieve the results.

By Date/Time

To open this parameter, simply click on the blue title bar and it will drop down. Using Date and Time as a parameter allows you to look in a specific time frame, this would be as long as days or months to as short as minutes, depending on your needs. From Date indicates the beginning date of your Search and To Date indicates the ending date of your search.

Similarly, 'From Time' indicates the beginning of your time frame and 'To Time' the end of your time frame.

Entering Dates: To enter a date, click on the textbox and a calendar will auto populate. You can either select a date from the calendar or enter the date manually.

To navigate the calendar, use the arrows/triangles at the top of the calendar, using the right arrow to advance the calendar and the left arrow to reach previous months. Once you have the desired month, click the desired date on the calendar and it will automatically appear in the Date bar.

Entering Times: Enter the time in the boxes provided for 'From Time' and 'To Time'.

When typing in the times, the program accepts both military time, such as 21:00 and standard time such as 11:00. When using standard time, you will have to enter AM or PM.. You do not have to add the colon when typing the time, it will appear automatically. When typing in the time, you can be specific down to the minute, using times such as 11:23 AM or 18:56.

Times do not have to be entered if they are not important to your search, as long as the dates are entered. When this is done, the program automatically sets the times, (both To and From), as midnight, or 00:00.

When you have entered From Dates and Times and To Dates and Times, hit the Search button in the lower right hand corner of the window. The search will return all plates captured within the time frame indicated.

Entering a Specific Time Frame on the One Day: To enter parameters for a time period that occurs on one day, simply make sure that both the 'To Date' and 'From Date' have the same date. Then enter the times to encompass the time frame you would like.
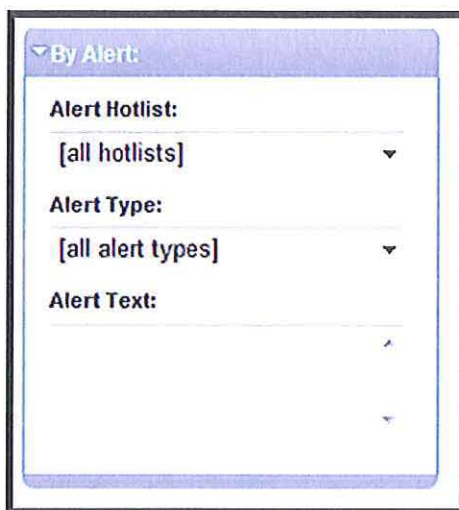
By Alert

To open this parameter, simply click on the blue title bar and it will drop down. Hotlists are those lists which contain tag numbers/car descriptions with alerts on them. Alert Type indicates the specific type of alert on a car, such as Warrant, Stolen Plate or even Sex Offender. Your organization may upload your own Hotlists and Alert Types, (such as FDIC, loop analysis, stolen plates, etc.). *These Alert Types will only function for NCIC or FCIC Alerts.*

To set these parameters, click on the arrow/triangle on the right side of each bar. A drop down menu will appear with your organization's possible hotlists/alert types. Select one by highlighting the option.

You may set all three of these User parameters to conduct your search, or only one if needed. Hit the Search button in the lower right hand corner of the window. All plates captured under these Alert parameters will be returned.

Alert Text: This allows you to search the text of the actual messages written regarding alerts. Type the text of the message into the Alert Text box and the program will return results on Alerts that have that text present.

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Options

You can view thumbnail pictures of the images captured by checking the 'Show Thumbnail' checkbox. To view only desired number of search results, enter a number in the 'Max. Results' text box. For example, to view only 10 records, enter 10 in 'Max Results'.

Searching by Different Multiple Variables

Searching by multiple variables is as easy as filling in each of the parameters by which you want to search. An example is given here. You can search by as many variables as you like; this is just an example of a search with a few variables.

This search includes the System and Organization under 'By Asset' (circled in blue) and 'From Date', 'From Time', 'To Date' and 'To Time' Date/Time under 'By Date/Time' (circled in green).

REMINDER: To close a parameter, click on the bar again. A parameter bar may closed AND have information in it at the same time- look for the checkmark on the right side of the bar to see that your parameter information is still there.

REMINDER:
The Clear button can be used clear text that you have typed if you have made a mistake. It will also clear any text visible in all fields of the New Search

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Edit Your Search

Editing your search means changing the parameters by which you want to search. You could always hit New Search again, but all the parameter information you had entered before would be cleared. By using Edit Search, the parameter information remains intact, allowing you to add or subtract to it as needed.

Before the Search Results have been Returned: Editing your parameters before hitting Search does not require using the Edit button. Simply click on the field of the parameter variable you want to change, highlight the information, and delete it. Then type in the revised information.

After the Search Results have been Returned: To edit parameters after a search has been returned, click the Save/Edit Search button seen here circled in red. Once this button has been pushed, it will take you back to the New Search window where you can click on the parameter variables you want to change. Once you have changed what you need, hit Search and results will be returned. This editing process can be done to a search as many times as needed.

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Save Your Search

Saving a Search saves the parameter information that you've entered. There are a couple of steps to do this.

1. Type the information in to the parameter bars as you would normally.

2. Once you are satisfied with the information entered, hit the Save button in the bottom right corner of the window, (circled here in red).

3. Depending on the web browser you use, you may receive the following message, "This website is using a scripted window to ask you for information. If you trust this website, click here to allow all scripted windows". In order to save your search, you must allow the scripted window. Click the bar and follow the directions it gives. Once this is done, hit the Save button in the New Search window again.
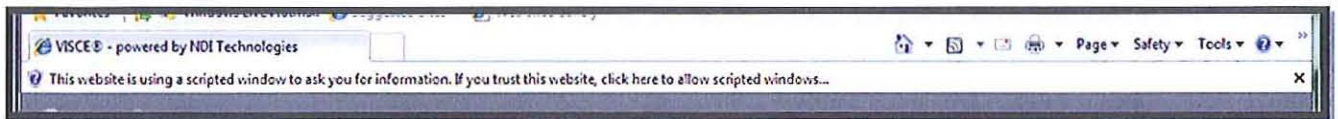
4. A small window will appear labeled "User Prompt". Type in the desired name for your search. Once done, hit OK.
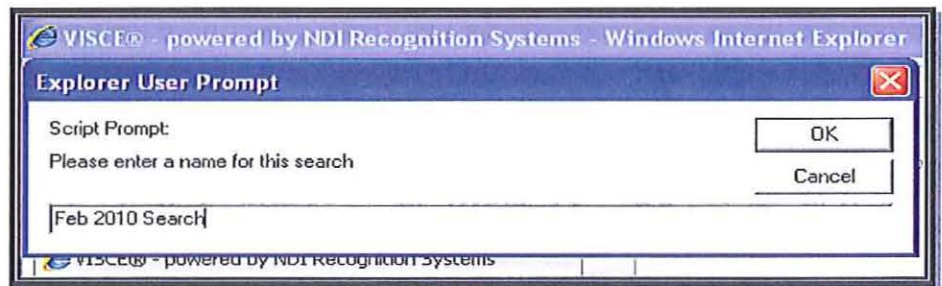
5. You will notice the program 'loading' for a few seconds. Once this is done, check to make sure your search has been saved. In the upper right corner of the New Search window, you'll notice a button labeled Saved Searches, (see above screen shot, it is circled in yellow). Click this button.

6. A Saved Searches window will appear. Highlight your search by clicking on it. Once the search has been highlighted, the Load Search button will be available. To get your search results, click the Load Search button, (circled in red). The New Search window will appear with your saved parameter information. Hit the Search button to see the results as you normally would.

7. If you do not see your search title in the Saved Searches window, it has not been saved. Exit the Saved Searches window and repeat the saving process.

FAQs about saving searches:

- Can I Edit a Saved Search? Yes you can. After retrieving your search, (step 6), you will find yourself at the New Search window with your saved parameters. Simply click the parameters you with to edit and change the information as you would normally.

- Can I save a search *after* the results have been returned? Yes you can. To save it from the Search Results page, hit the Save/Edit Search button in the right hand corner of the screen. This will take you to the New Search window with your parameter information already entered. Pick up the saving process from step 2.

Bulk Search
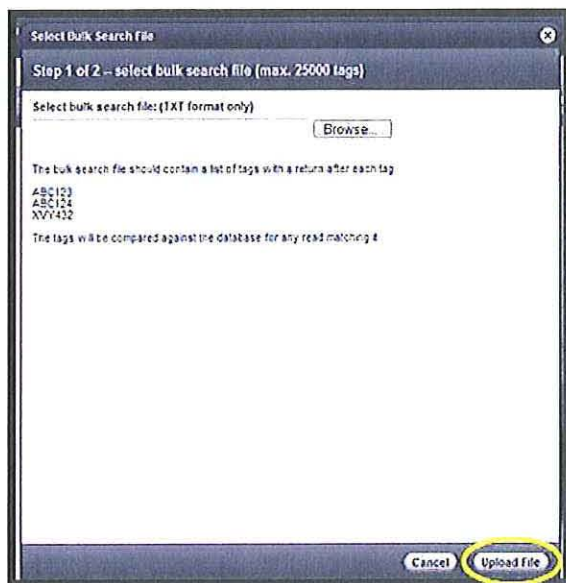
Bulk Search was created for searches that involve *a list of tag numbers that you have already made*. The list must be Text, (txt*) format. To use your list, follow the directions below.

1. From the main Search screen, find the Bulk Search button in the upper right corner of the screen and click it.

2. A smaller window will appear prompting you to browse for your saved list. You'll notice that a small example of a list is given in this window.

3. Once you've browsed through your files and selected your list, hit the Upload File button in the lower right hand corner, (circled in yellow). The program will return the Search Results page.

Add to Search Results

Adding to the results of previous search is quite simple. Perform the first search as you would normally, filling in all the search parameters as you would under the Searching By Different Variables section of the manual. Search by these parameters. Once the Results have been returned, the Add to Search Results button, (circled in red), in the upper right hand corner will become active.


Click this button and another New Search window will pop up, just like the previous one. Fill in the parameters for the Search you would like to add to the previous results; perhaps another time period, or traffic going in a different direction. Once these have been entered, hit the Search button as you would normally. The Search Results page will contain the results of both Searches.

Exporting Search Results

To export Search Results, click on the 'Export Results' button in the upper right hand corner next to the 'Add to Search Results' button. Upon clicking the button, a File Download window is populated. You can either click on the 'Open' button to just open the Search results in an Excel file or click on the 'Save' button to Save the results in your computer. When you click on 'Save', a window is opened where in you can select a desired folder on your computer to save the results. Enter a file name and click on Save.

Click on 'Cancel' to exit without opening or saving the Search results.
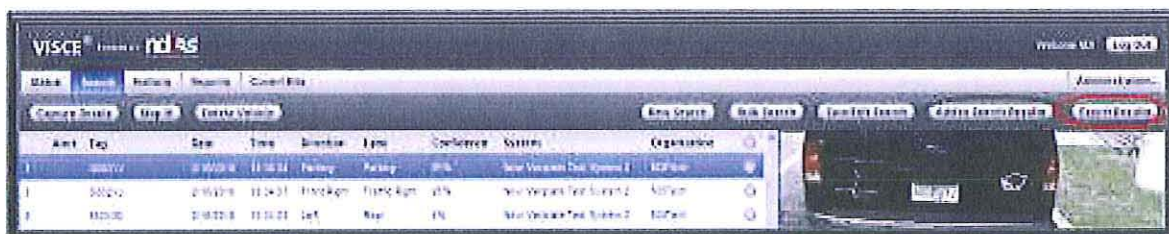
Search Results

Once you have completed any of the previous searches, results will be returned based on your parameters. Below is an example of search results based on these parameters; Date/Time: from 2/01/2010, 10:00am to 2/28/2010, 5:00 pm.

Each aspect of the plate is listed beneath the label on the upper grey, (outlined here in red).

Alerts will appear on any search if they are present. To order the results differently, click the aspect or column name you want the tags to be ordered by. Clicking once will put them in ascending order, twice will result in descending order. Clicking Tag Number will put the tags in alphabetical order with those tags that have numbers first on the plate first, then As, Bs and so on. Should the search have included more than one direction, clicking the Direction aspect would group tags by direction or by camera mounted on the car.

At the bottom of the screen is another grey bar, (outlined here in green), which lists the number of results and how many pages these are spread across. You can navigate these pages using the 'Previous' and 'Next' buttons on the left and right sides of the tool bar. To navigate up and down the current page, a scroll bar is located to the right of the list or you can use the arrow keys.

To see one of the specific tags, select it by clicking on it.

Upon selecting a plate, you are given a vehicle image, (also known as color image or over view), an up-close picture of the tag captured in Infrared, (also known as the IR or plate patch), and the program's read of the plate.

To enlarge either the vehicle or plate image, click directly on it. This will give you a window with magnifying options. The screen shot to the right gives the vehicle from the search above. The magnifying glass icons outlined in red allow you to magnify or minimize the vehicle image.

The icons outlined in green will either enlarge the image as big as possible or minimize it to the smallest possible size.

The same window will appear if you have clicked on the plate patch with the same minimizing and magnifying options for the image.
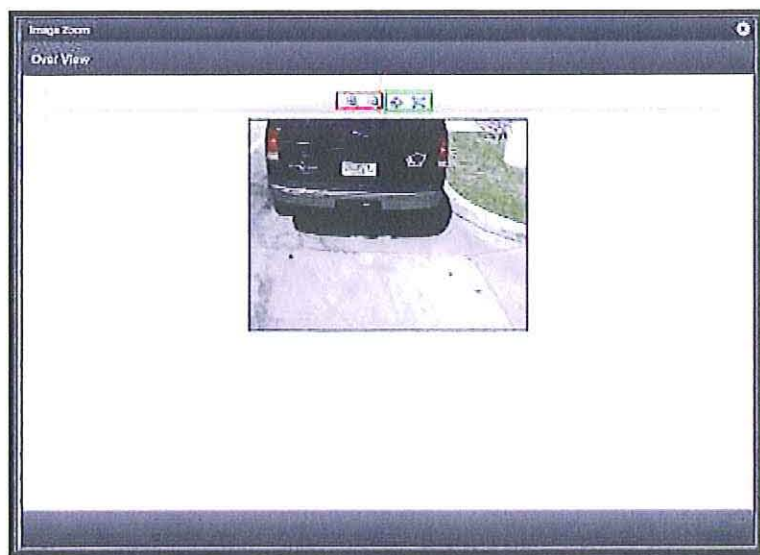
Capture Details

(This is an example of a vehicle which has Capture Details, Images and Map co-ordinates). To the left of the screen, just about Tag Number on the upper grey bar is an option called Capture Details. Capture Details gives you even more information about the individual tag you have selected.

Details: Upon clicking it, a smaller window will pop up, automatically bringing you to the Details tag of this option. This shows the basic information about when and where the plate was captured, filling in data about the different parameters you would see listed in the Search window. You also have the option of filling in the make, model and color of the vehicle here. Select one of the variables by clicking on it and a drop down menu will appear from which to choose. Remember to select and fill in Vehicle Make first when using this option. The program creates the Vehicle Model menu based on the Vehicle Make selection.

Images: The Images option isolates the images associated with the tag. You can edit the tag from here or from the Search Results page.

Map: This shows where the plate was captured at. The option is the same at the Map It! option on the Search Results screen.

Click on 'Hybrid' tab in the map window to see the hybrid view of the location of capture (as seen here in the right picture)

Alerts: This option gives more details on any alerts that may be out on this tag. In the above example, the car has no alerts out on it. The screen shot on the next page shows an example of tag that does have an alert out on it.

Below is an example of a positive alert. When a positive alert is present, the line the Tag is listed on will be red and have an exclamation point at the end of it under the Alert label on the grey bar. To see the Capture Details, select the Tag by clicking it. Then click the Capture Details button.

The Alert tab on the Capture Details window will be red and the number of alerts on the tag listed next to the tab in parentheses. Select the tab by clicking on it. Along the left hand side of the window will be a list of alerts out on the tag. Select the desired alert by clicking it. Details on the alert will appear on the right hand side of the screen. These include: which Hotlist the Alert has come from, Date/Time of the plate capture, a Message with further details on the Alert, and Outcome, which notes whether or not some action has been taken on the Alert thus far.

Notes: Notes are additional data on the plate capture that do not always have to do with an Alert. Search performed does not have any Notes present.

Below is an example of a Capture Details record that has a Note present.
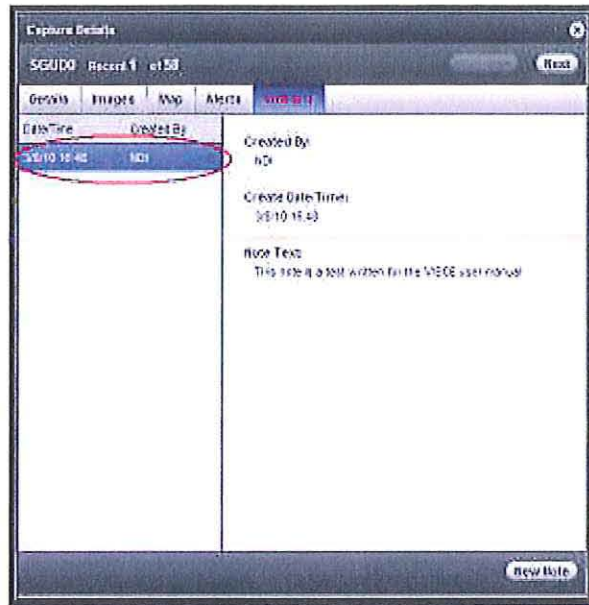
To view the Note highlight the entry on the left, (circled here in red), by clicking on it. If it is the only note present, it will already be highlighted and the text will be visible to the right.

Insert New Notes: To insert Notes on a plate capture, begin by clicking the New Note button located in the lower right corner of the window, (circled here in red). Then click on the Note Text box in the middle of the window. Type you note in here and hit Save, located in the lower right corner of the screen, or hit enter on your keyboard.

More than one note can be made on the same vehicle; simply follow the directions above to add more notes.
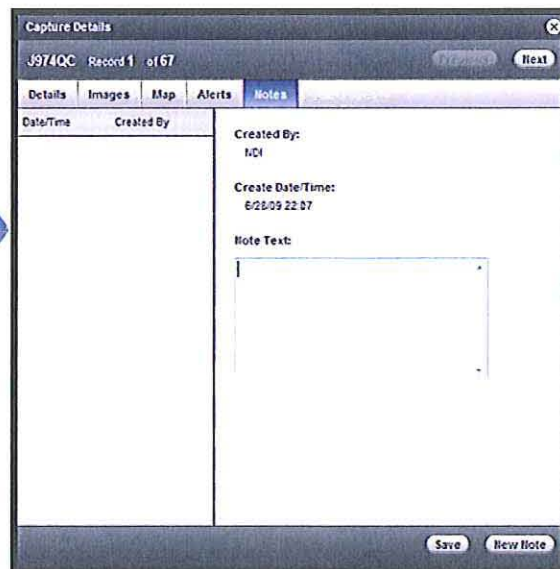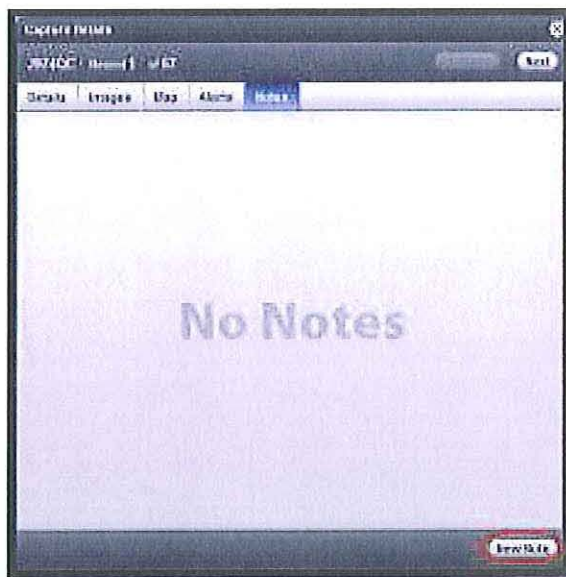
Map It!

The Map It! option is the same as the Map tab located on Capture Details; it shows you where the tag was captured. The button is located on the Search Results page in the upper left hand corner, circled here in red). Upon clicking this, a map generated by Google maps will appear showing the location at which the tag was captured.

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Manually Changing Tag Information
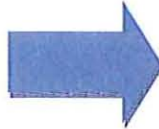
Occasionally, a mistake may occur in the program where it has read a plate as being something other than what it actually reads. Although this is rare, the odd shadow on a plate or perhaps obstruction by a trailer hitch or personalized plate border results in an off reading; to the right is an example. The plate can clearly be read as J95SZU, but the program has taken the 'U' to be an 'O'.

This is best corrected from the Search Results window. Click the **Edit Plate** button in the lower right corner of the screen, (circled here in red). This will highlight the plate read allowing you to change the tag number as needed. Once done, hit **Enter** on your keyboard to finalize the changes.

This editing process can also be done from the Images tab of Capture Details. Below a screen shot can be seen of the same tag number. In the bottom right corner of the Capture details screen can be seen an **Edit Plate** button, (circled here in red). Click this and follow directions listed above.

REMINDER: Once you have changed a plate read, you should note it in the Notes tab of Capture Details, otherwise no record will exist of the previous read.

Hotlists

All the hotlists are displayed in this page under the Hotlists column. There are 2 main hotlists - NCIC and FCIC to which the user has Read only access.

NCIC is the National Crime Intelligence Center and FCIC is the Florida Crime Intelligence Center. The user cannot edit or delete any of the data in these two tables.

When you click on any hotlist, you will find there are two tabs – 'Vehicles in this hotlist' and 'Clients'.

The 'Vehicles in this hotlist' tab when selected displays all the vehicles present in the hotlist. The 'Clients' tab displays the client names. Clients are units that will be associated with the hotlists.

There is a check box for each client which when checked will assign the hotlist to the selected client. This will also activate the hotlist on the client's system. You can also find information about Last Server update and Last client update.

The Clients are displayed based on the Organizations that the hotlist and client are assigned to. For example if Client 1 belongs to Organization A and Client 2 belongs to Organization B and the Hotlist 'ABC' has been assigned to only Organization A, then only Client 1 is displayed in the client section for Hotlist 'ABC'.

Create New Hotlist

You can create a new Hotlist by clicking on the 'New Hotlist' button. Upon clicking the button, a small pop up window is displayed and you can type in the Hotlist Name.

A Hotlist can be created with only Partial plates. To create such a hotlist select the 'Partial Plates Only' option. The Partial Plates option designates the hotlist to only contain partial license plates.

For example, the hotlist can only contain plates such as "ABC*" (All plates that start with ABC), "*123" (All plates that end with 123) etc. If an ALPR unit was to read a plate that matches the partial string (e.g ABC) then an alert is displayed to the user.

'Covert' option can be selected to give access to different set of users. When the box is checked, the Drop down menu becomes active allowing you to highlight and choose user roles. All users attached to this user role will see any alerts pertaining to the Covert Hotlist.

Similarly, you can select the Priority level for the Hotlist by making a selection in the Drop down menu available for Priority. Notes can be added in the 'Description' box.

A Hotlist can be set to expire on any day. 'Expire' meaning the

Hotlist becomes inactive on that particular date and time. To enter an expiration date and time, simply click in the box provided for Expiration Date. A calendar is auto populated and you can select any desired date. You can enter the time for expiry. If you do not enter the time, the default time for expiry will be set to 12:00 am.

An expiration date can also be entered manually. Fill in a number for 'Expire In' field and select the radio button to indicate if the number represents Days or Hours. You can click the 'Save' button to Save the changes and 'Cancel' to Cancel the entries.

After saving the changes, you can see the Hotlist you just created under the Hotlists column.
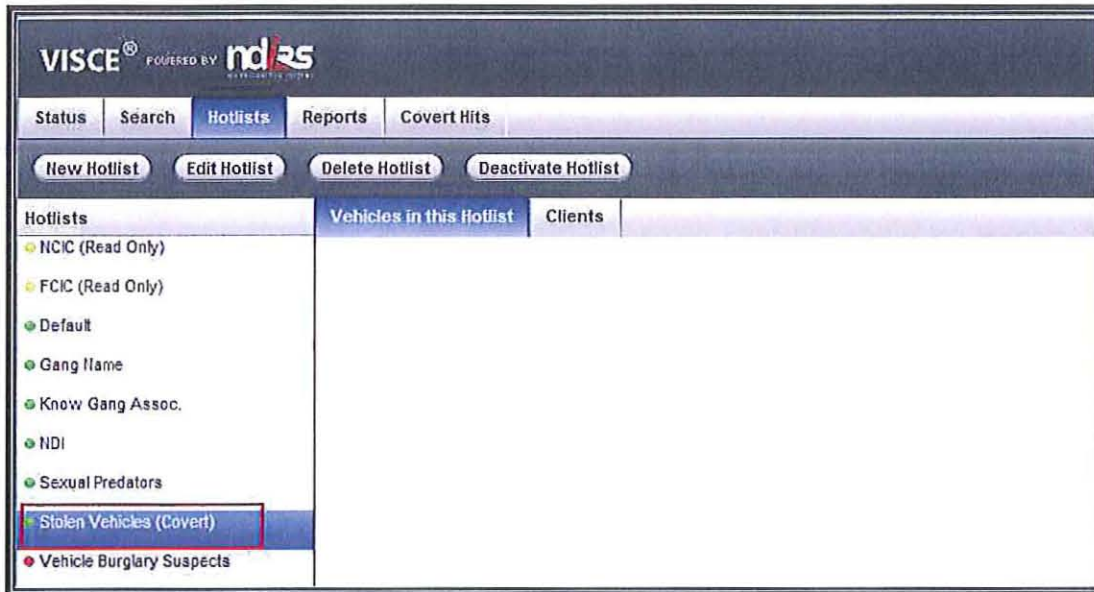
Delete or Edit a Hotlist

In order to delete a hotlist, you can select the Hotlist name in the Hotlist column and click on the Delete Hotlist button in the upper menu bar.
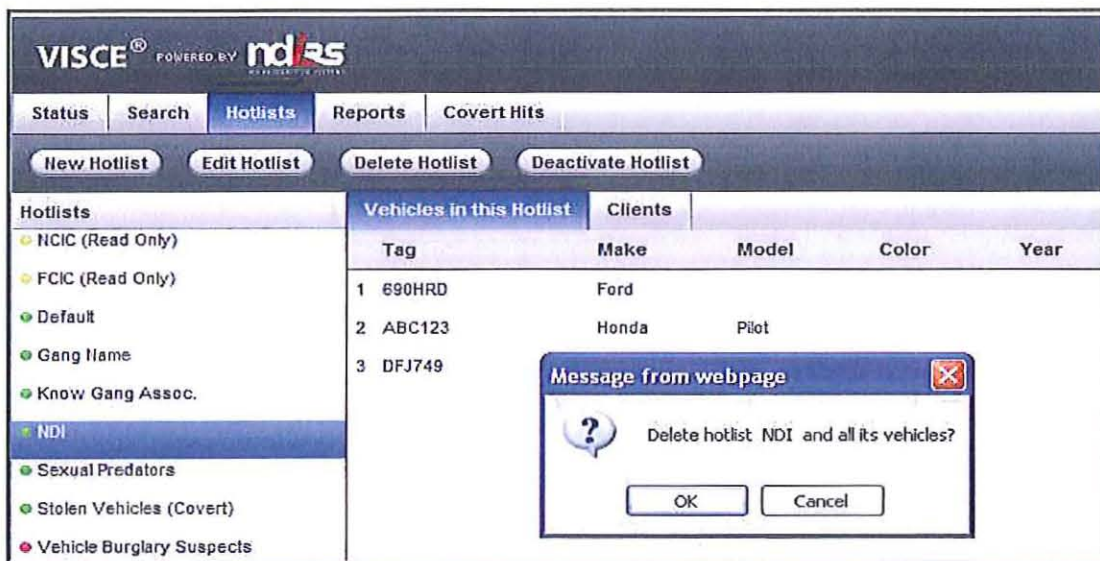
When the Delete Hotlist button is clicked, a pop up window is displayed with the message 'Delete Hotlist <hotlistname> and all its vehicles?' Click Ok to delete or Cancel if you don't want to delete the list.

Deleting will PERMANENTLY remove this hotlist and there is no way to recover. So please be absolutely sure when you perform this function.
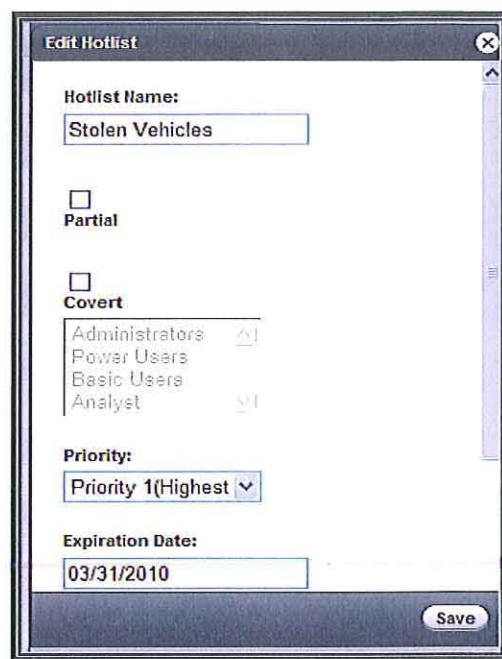
To edit any list, you can select the Hotlist name and then click on Edit Hotlist. A pop up window is displayed. The Hotlist Name will be prefilled. You can edit the name, the Priority, Description, Expiration Date and Expire In fields.

Click on Save to save the changes or Cancel to cancel the changes.

Activate/Deactivate Hotlist

A Hotlist can be active or inactive. When a hot list is no longer used, you can make it inactive instead of permanently deleting it and then you can activate it at a later date when required.

For example, a hot list can be created and made active only for a certain period, like 'Hotlist for Bike Week only'. After the Bike week, the hotlist can be made inactive.

If the Hotlist is active a green circle will be displayed beside the name of the Hotlist. If the Hotlist is inactive, a red circle is displayed.

When a Hotlist is inactive and if you want to activate the hotlist, simply select the hotlist and click on the Activate Hotlist button. A popup window is displayed with the message 'Activate this hotlist?' click on 'Ok' to activate or click on 'Cancel' to exit without activating the hotlist.

Similarly, if you want to deactivate any hotlist, select the inactive hotlist and click on the Deactivate Hotlist button on the upper menu bar to activate any hotlist.

Upon clicking the button, a pop up window is displayed with a message 'Proceeding will deactivate the hotlist for ALL clients. Continue?' You can click the Ok button to proceed or Cancel button to cancel without activating the Hotlist.

Notice that the button is displayed as 'Activate Hotlist' or 'Deactivate Hotlist' depending upon whether the hotlist is inactive or active.
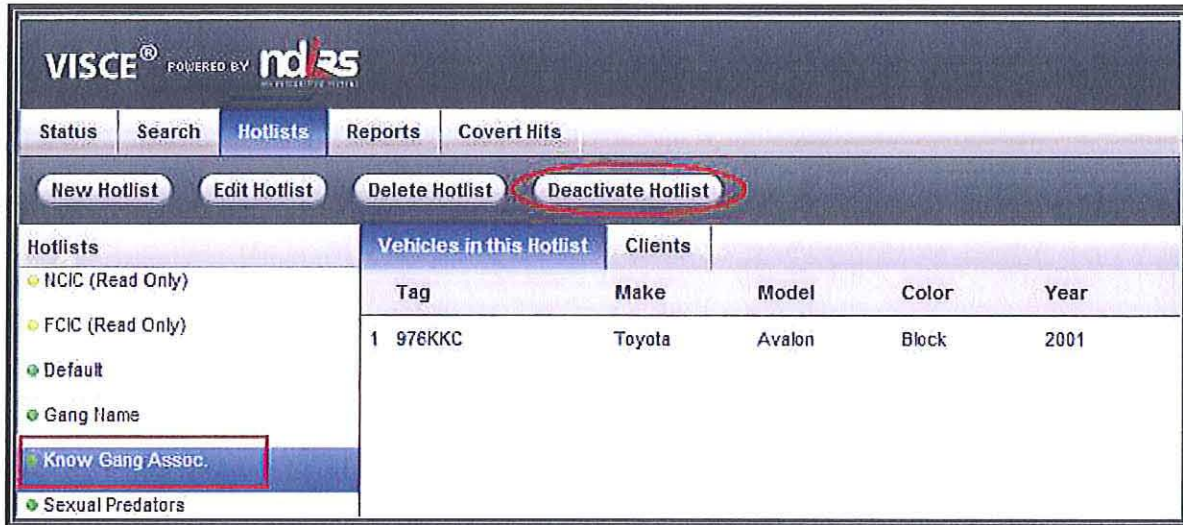
Adding and Editing Vehicles to the Hotlist

To add vehicles to the Hotlist you just created, click on the 'Edit Hotlist Vehicles' button at the bottom of the page. Then click on 'Add Vehicle' button. A pop up window is displayed where you can enter the Tag number, Vehicle Make, Vehicle Model, Vehicle Year and Vehicle Color.

You can also add notes in the text box provided for Notes. Click on Save to add the new vehicle or click on Cancel to exit without saving the changes.

To edit information about the vehicle, click on 'Edit Hotlist vehicles' and then click on the vehicle information to highlight the row. Now click on the 'Edit Vehicle' tab to make changes.
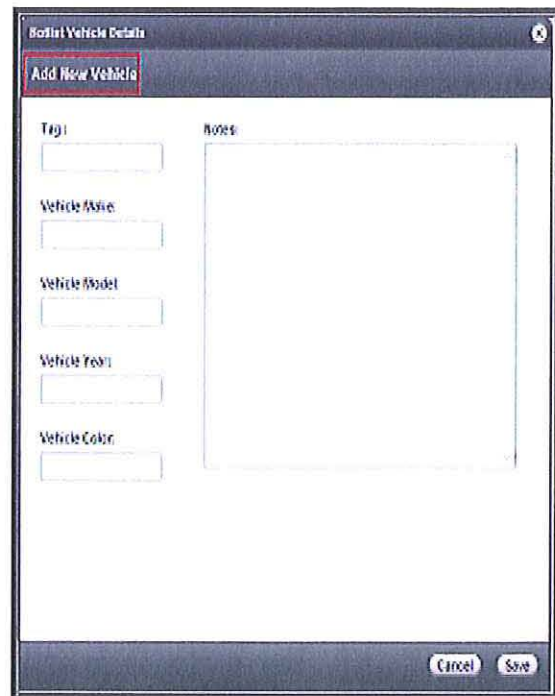
Deleting a vehicle in the hotlist

To delete a vehicle in the hotlist, select the vehicle and click on the 'Delete Vehicle(s)' button in the menu below the screen.
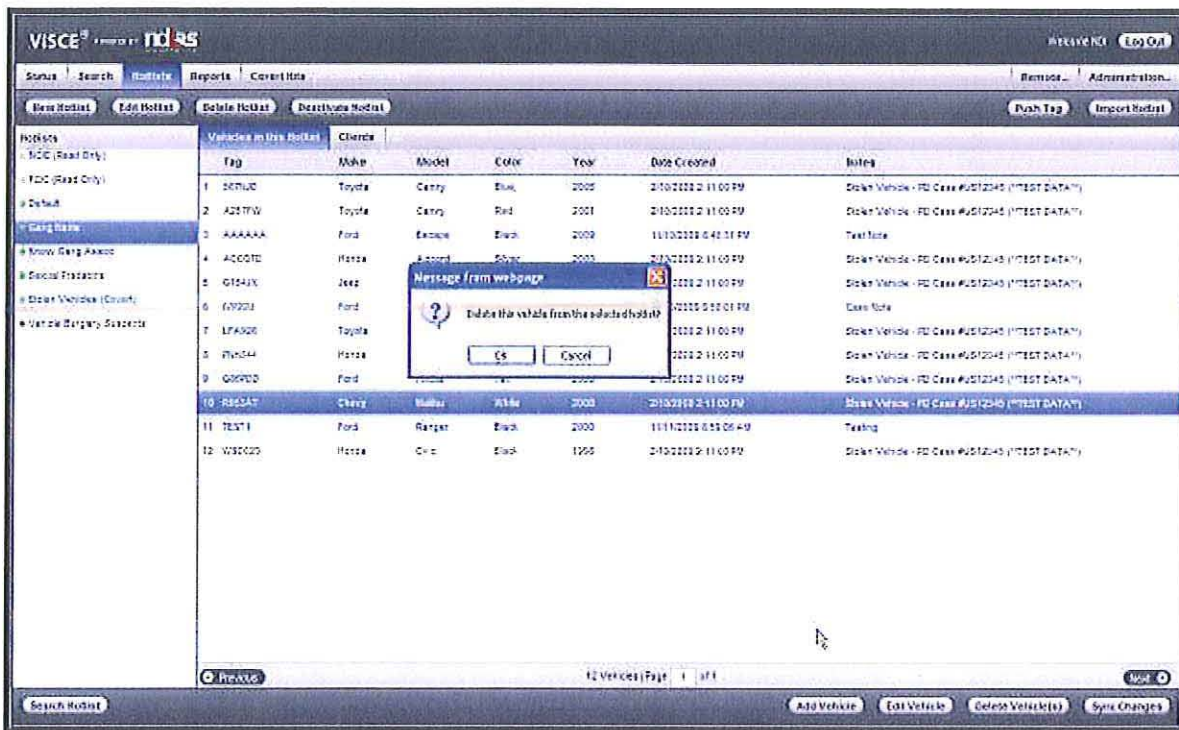
You can select multiple vehicles at the same time. Just press and hold Shift key and then select the vehicles that need to be deleted and then click on the Delete Vehicle(s) button. A popup window is displayed with the number of vehicles to be deleted.

Click 'Ok' to delete or 'Cancel' to exit without deleting the vehicles.

Search Hotlist

To search for a vehicle in any Hotlist, select the Hotlist and then click on the 'Search Hotlist' button. Enter the Search Parameters. You can enter the Tag number, Vehicle Make, Vehicle Model, Vehicle Year or Vehicle Color and hit the Search to look up for results.
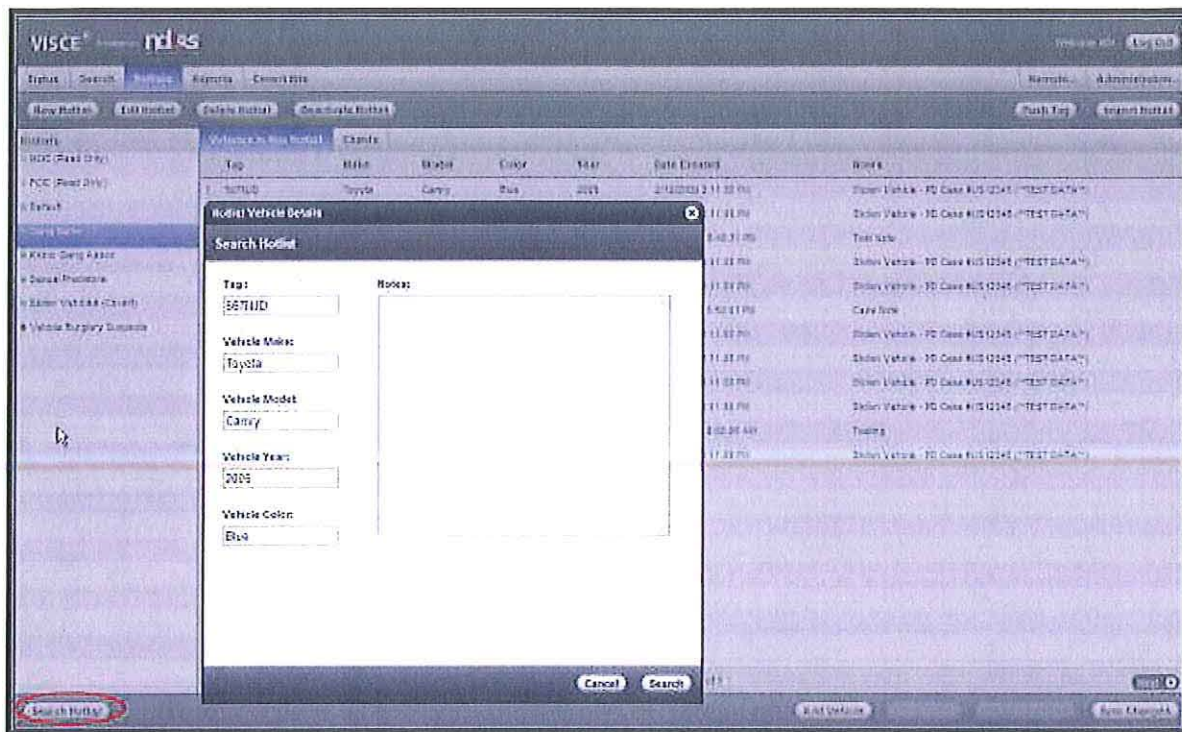
You can even Search for a vehicle by Notes by entering the notes in the Notes box. All vehicles that match the search criteria will be displayed in the hotlist. Click on Cancel button to exit. Click on 'Show all vehicles' button to display all the vehicles in the Hotlist.

Sync Changes
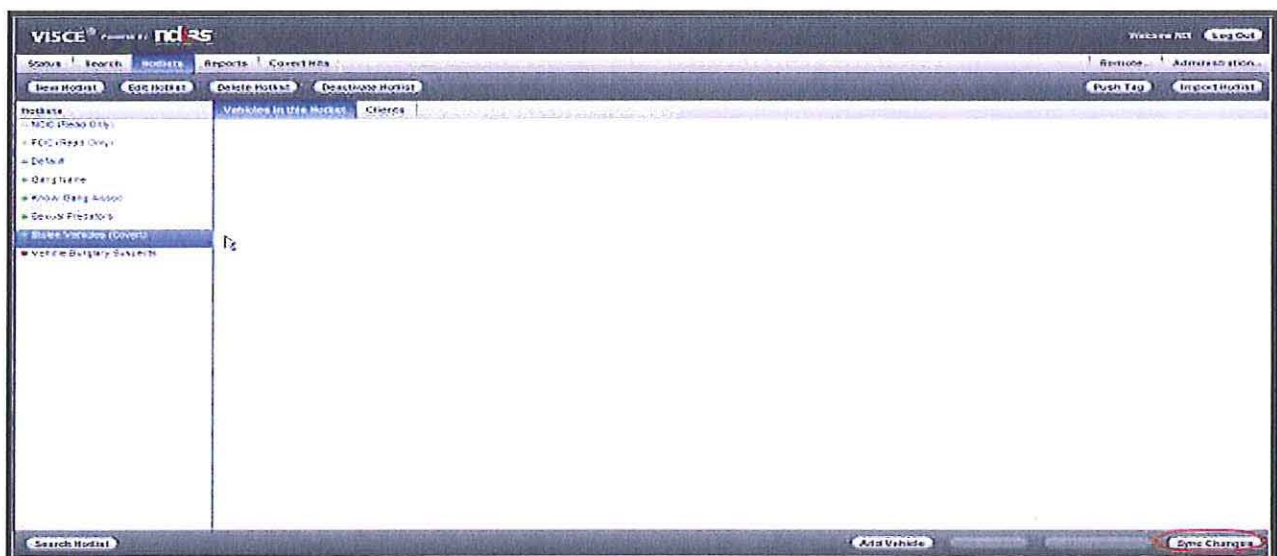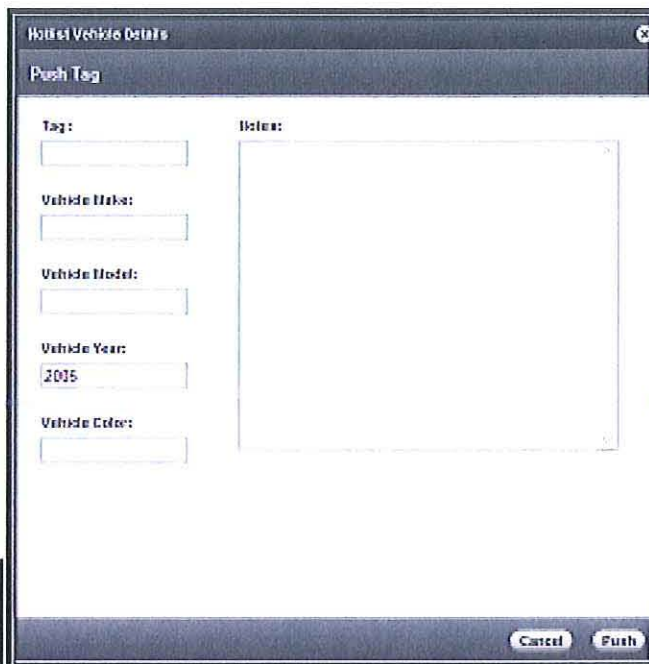
After making changes to Hotlists or any of the vehicles in the Hotlists, click on the 'Sync Changes' button to sync the changes made in the application to the client(s).

Syncing will make sure that all the ALPR clients associated with this hotlist will be updated with the latest version of the hotlist along with all the changes that you've done thus far. It is a good practice to make changes and save hotlists but only do a Sync Changes once at the end, once you've completed and saved changes to all the hotlists.
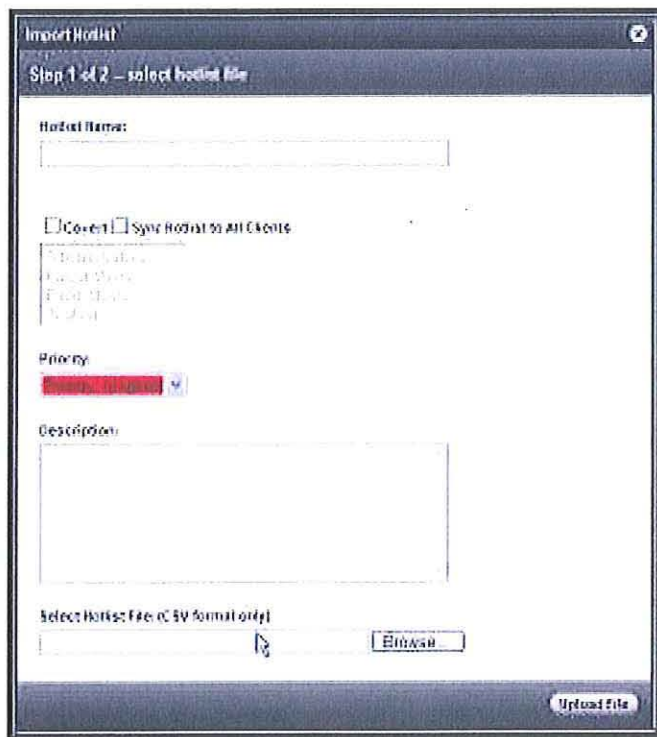
Push Tag

To provide any Hotlist vehicle immediately to an officer on duty or to any user, simply click on Push Tag button and enter the details of the vehicle like Tag number, Vehicle Make, Vehicle Model, Vehicle Year and/or Vehicle Color. You can enter any notes if required. Click on 'Push' button and the vehicle will be added to the 'Default 'Hotlist for immediate access.

Click on Cancel to exit without pushing the vehicle.

Import Hotlist

A list of Hotlists can be imported from your local computer. In order to do so, you should have the list in CSV format only on your computer.

Click on Import Hotlist button. A window is opened where in you can enter Hotlist name, select the covert option, Sync option (when this option is checked the hotlist is synced to all clients) and Priority. You can enter any Description.

Click on the Browse button to select the Hotlist file on your computer. After selecting the file, click on 'Upload File' button.

Another window is displayed with the details of the hotlist. Click on the column to assign a name from the list which populates.

Now click on Import Hotlist button, a window with a message saying 'Hotlist successfully imported' is displayed. Click on Ok. The new list is created successfully.

Reports

Reports are generated based on parameters you enter, much as the Searches were. These are printable compilations of data. Each type report has a small variety of parameters by which you can compile your Report. *All Reports follow the same format with only a few changes between them to allow for different parameters.*
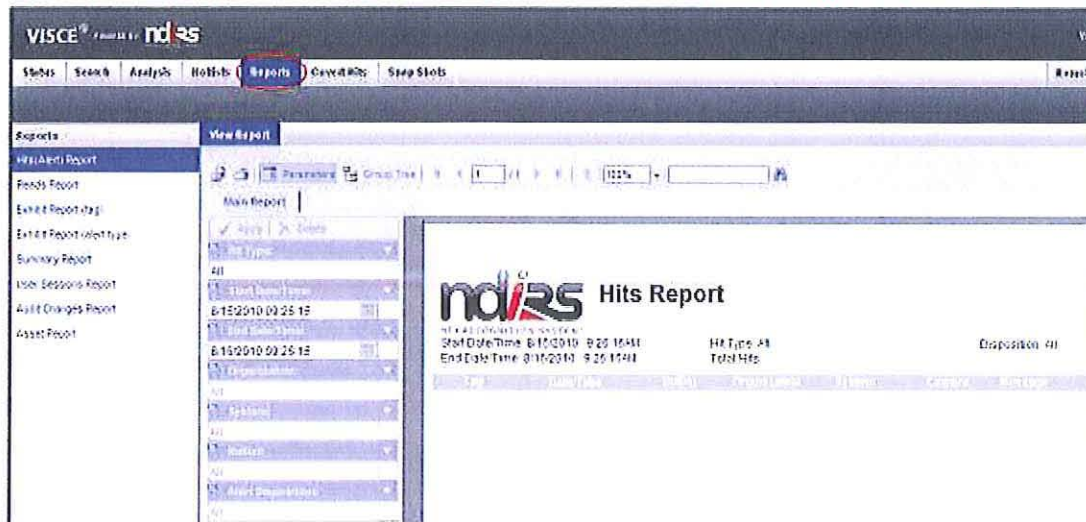
To begin, click the Reports tab located on the main tool bar, (circled here in red). This will give you a screen where you can select which type of report you want. Each of the types of reports will be covered in depth in the following pages of this manual.

Parameters:

The Hits report offers 7 parameters by which you can refine your report. You do not need to set each parameter in order to generate a report. Listed here are:

Hit Type- for example, a stolen vehicle, warrant, missing person, etc.
Start Date/Time- the beginning date and time of the report time period.
End Date/Time- the ending date and time of the report time period.
Organization- most often this is your own organization, although you may choose to have others

listed.
System- the camera systems you have are listed here, whether they are mobile or static.
Hotlist- for example, FCIC, NCIC or any local hotlists you may have chosen for your software.

Alert Disposition – for example, False Alert, Instate Alert or any dispositions you may have chosen.

The example used in this progression is Hit Type, although all the parameters

work the same way.

The sole exceptions are the Date/Time parameters; these will be discussed later.

Reminder: Not all parameters are listed for each report. Those that are not necessary are not listed in the parameter section.

To edit the parameter type, click on the blue bar with the parameter label on it.

This will highlight the bar and a small icon will appear to the left of the bar, (circled here in red). This indicates a list from which you can choose. Click on this and a small window labeled 'Enter Value' will pop up which will give you a drop down menu from which to select. Click the arrow at the end of the bar to access the menu. Select a Hit Type with your curser. Disregard the Enter a Value field.

To exit the window and confirm the parameter you have just entered, click OK, (circled here in red). Should you decide you did not want this parameter option, just hit Cancel or 'X' out of the window.

Any parameter can be edited after data has been entered, simply follow the above process again to give the parameter a new value.

Once you are satisfied with the parameters you have entered, hit the Apply button at the top of the parameters menu.

Date/Time Parameters: Today's date and time will automatically appear in the End Date/Time field. The Date/Time fields can be set one of two ways.

The first way is by clicking the icon on the right side of the bar. Clicking this will give you the Enter Values window for this parameter. You may type the date and time in here, but unlike Searches, there is a specific format. *All Date/Time settings in Reports must be entered: mm/dd/yyyy hh:mm:ss.* You may also use the Calendar option form this window by clicking the icon to the right of the bar.

You may select the date on the calendar by clicking it but the time still has to be typed in. To navigate through the months and years, there are arrows to either side of the calendar title. The arrows on the left allow you to change the month, (circled in red) and the arrows to the right allow you to change the year, (circled in green). Once satisfied with the date and time, hit **OK**.

The Calendar option can also be accessed from the Date/Time fields on the parameter menu. The calendar icon it located at the right side of the Date/Time bars. Click these and follow the same directions as above.

Once a Date/Time has been selected, an asterisk will appear in that parameter bar, (circled here in green). Dates/Times can be changed at any time by clicking on the field and following the procedures above.

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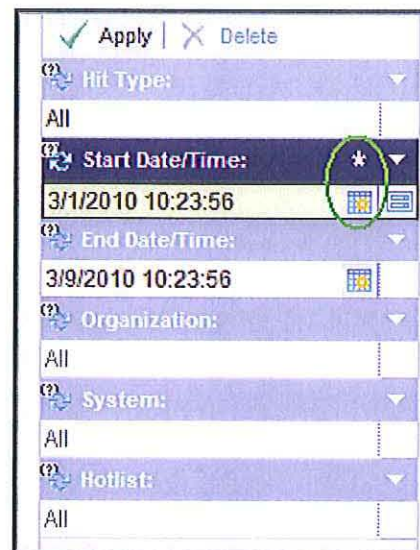
The Menu Bar

From this menu bar you can save, print, set parameters, arrange group trees, navigate through the pages of the report, increase or decrease the size of the report preview on the screen and even search for specific type within the report. Each icon is identified below.
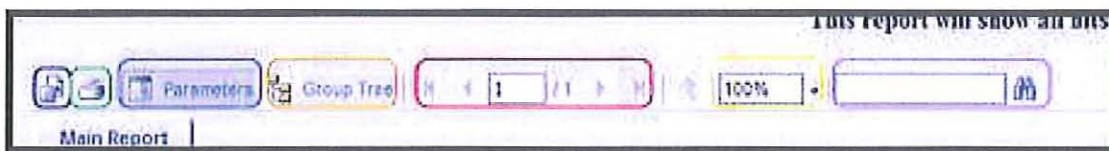
REMINDER: When using the Export Report option, be mindful of your security settings; they may block your first attempt to export a report.

- Export Report- outlined in dark blue, this icon allows you to save, or export, this report to your local computer. To the right we see a screen shot of the Export window. Once you select which pages to export, you computer will take over, asking you whether you would like to save the file or find a program to read it. If you choose save, you computer will offer to save the report as an RPT type.
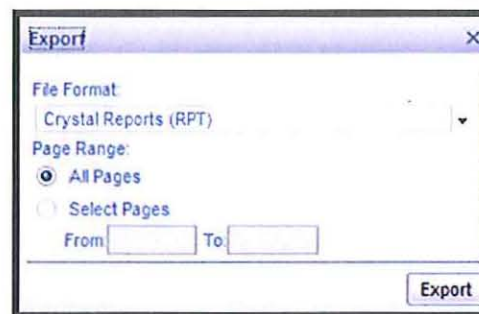
- Print- outlined in green, this allows you to print the report.

- Parameters- outlined in light blue, this icon allows you to bring up the parameters you set for you report. This icon is darker in the example because it has been selected.

- Group Tree- outlined in orange, Group Tree is an option that allows you to navigate through the report based on a major aspect of the report. *Although the icon is always present on the toolbar, not all reports can use this option.* This is most useful in the User Session and Summary reports

- Page Navigation- outlined in solid red, this shows you which page you are on out of the total number of pages in the report. Those plain arrows on the left and right of the field allow you to navigate page by page. The arrows bordered by a line take you to the first page, (on the left side of the field), or the last page of the report, (on the right side of the field).

- Magnification- outlined in yellow, this allows you to changes the size of the print preview you see on the screen. The small black arrow to the right of the field brings up a drop down menu from which you can select a size.

- Text Search- outlined in lavender, this allows you to search for text within the report. Type the text you are searching for in the field, (it may be a tag number, a specific time, etc.), click the binocular icon to the right and the program will highlight all lines with that text present. *This search is case sensitive.*

Hits (Alert) Report

The Hits report condenses all alerts that have occurred within the set parameters into a printable report. On the Hits Report page you will find the parameters to the left, (outlined in red) and the print preview in the center, (outlined in green). The Date/Time will automatically be filled in with today's date and time. The Group Tree Option is not available here.

Reading the Hits Report

Once parameters have been entered and applied, a report is generated. Above is an example; for this report only the Date/Time parameters were set. The period shown here, is from 3/8/2009-3/9/2010. The parameters for the report are listed at the top along with the total number of tags listed (outlined here in red). Below that is a heading bar, (outlined here in blue), listing all the data associated with the tags found in the report. After the heading bar the list of tags that fit the report parameters begins.

Of the aspects listed on the heading bar, most are self explanatory. However, System, Camera and Message can be explained further. Shown in green is a mobile camera system; noted under Camera is the word 'rear'. This means the plate was captured using the rear facing camera from the vehicle. Under Message we see what would have been visible under the Notes tab of Capture Details.

Reads Report

The Reads Reports condenses all the plate captures, or reads, into a printable report. When you select this report, the Date/Time will automatically be filled in. The From Date will show the date before today, with the time exactly 24 hrs prior to the current time. The From Date will show today's Date and Time. The Group Tree Option is not available here.

Reading the Reads Report

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Once parameters have been entered and applied, a report is generated. Above is an example; for this report only the Date/Time parameters were set. The period shown here, is from 4/29/2010-6/30/2010. The parameters for the report are listed at the top along with the total number of tags listed, (outlined here in red). Note that this report also tells you the number of Hits, or alerts, found in this list. Below that is a heading bar, (outlined here in blue), listing all the data associated with the tags found in the report. After the heading bar the list of tags that fit the report parameters begins.

Specific to the report are the aspects of Direction, Lane, Lat and Long. The Direction refers to the direction the Camera is pointing, Lane refers to what lane the car was in when the plate was captured, and Lat and Long are short for Latitude and Longitude, thus giving you the exact location where the plate was captured. Below is an example from a mobile system.

Date/Time	Tag	H	System	Camera	Direction	Lane	Lat	Long
6/15/2009 7:06:33PM	442WTK		PipsDemoVehicle	Rear	Rear Left	0	28.24033	-82.33394
6/15/2009 7:06:35PM	Q62WZT		PipsDemoVehicle	Rear	Rear Left	0	28.24030	-82.33444
6/15/2009 7:06:41PM	Q1855E		PipsDemoVehicle	Rear	Rear Left	0	28.24024	-82.33506
6/15/2009 7:07:36PM	VO763C		PipsDemoVehicle	Rear	Rear Left	0	28.23799	-82.34393
6/15/2009 7:07:47PM	I71IDU		PipsDemoVehicle	Traffic Left	Front Left	1	28.23745	-82.34572
6/15/2009 7:08:16PM	DEJ56		PipsDemoVehicle	Traffic Right	Front Right	2	28.23635	-82.34945
6/15/2009 7:08:54PM	US7YTP		PipsDemoVehicle	Rear	Rear Left	0	28.23075	-82.35127
6/15/2009 7:08:57PM	188JNG		PipsDemoVehicle	Rear	Rear Left	0	28.22936	-82.35152
6/15/2009 7:09:02PM	781YHV		PipsDemoVehicle	Rear	Rear Left	0	28.22899	-82.35178
6/15/2009 7:09:48PM	326WPA		PipsDemoVehicle	Rear	Rear Left	0	28.21844	-82.35332
6/15/2009 7:09:54PM	911LNU		PipsDemoVehicle	Rear	Rear Left	0	28.21693	-82.35332
6/15/2009 7:09:57PM	J85WBC		PipsDemoVehicle	Rear	Rear Left	0	28.21514	-82.35333

Total Scanned 41   Total Hits 0

Start Date/Time 6/15/2009 10:05:15AM
End Date/Time 6/16/2009 10:05:15AM   Organization: NDITech

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Outlined in green are three lines showing different Cameras, Directions and Lanes. A Lane marked '0' is next to the camera. If a Lane is marked '1' it is one Lane away from the vehicle with the camera on it; if it is marked '2' it is two Lanes away from the vehicle with the camera on it.

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Exhibit, (Tag) Report

The Exhibit Report gathers all information about a certain tag number into a printable report.
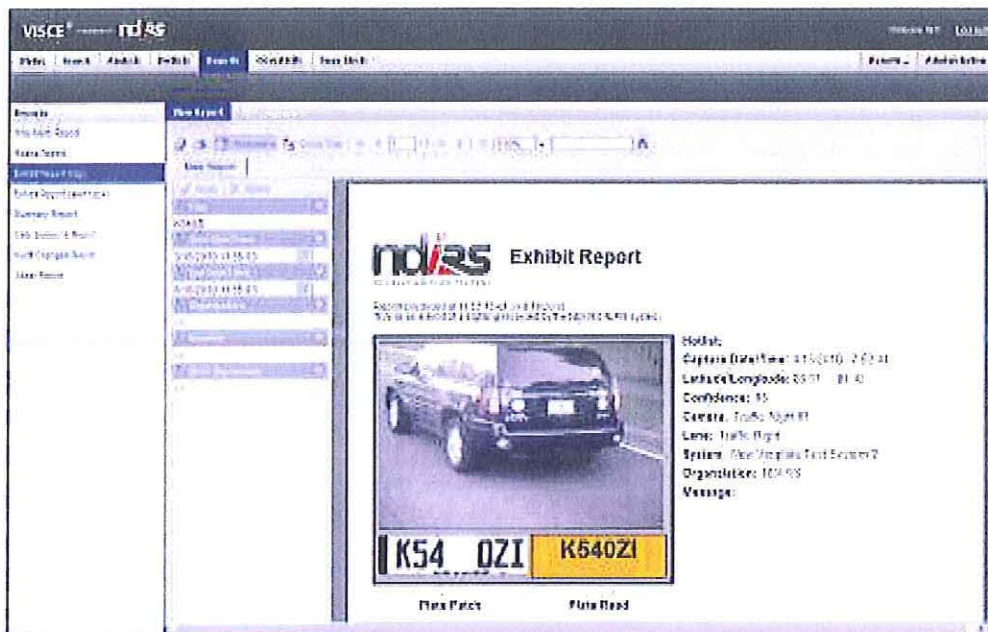
There is an added field in the parameters for you to enter a tag number, this is not case sensitive. When the Date/Time parameters have been added, the report gives you a comprehensive overview of how many times that plate has been captured over a period of time. The Group Tree Option is not available here.

Reading an Exhibit, (Tag) Report

The picture seen here is the same Vehicle Image, Plate Patch and Plate Read that can seen on the Search Results page and Images tab under Capture Results for this tag number.

To the right of the images all the information that can be seen under the Images tab of Capture Results can be found. Lane refers to what lane the car was in when the plate was captured, and Lat and Long are short for Latitude and Longitude, thus giving you the exact location where the plate was captured. Also filled in is Confidence, which refers to the confidence level the program has that it read the plate correctly. This would only be filled in if using PIPS software. At the very bottom of the report is the Notes section, not filled in because there were no notes on this vehicle. Below is an example of a report on a car on a Hotlist.
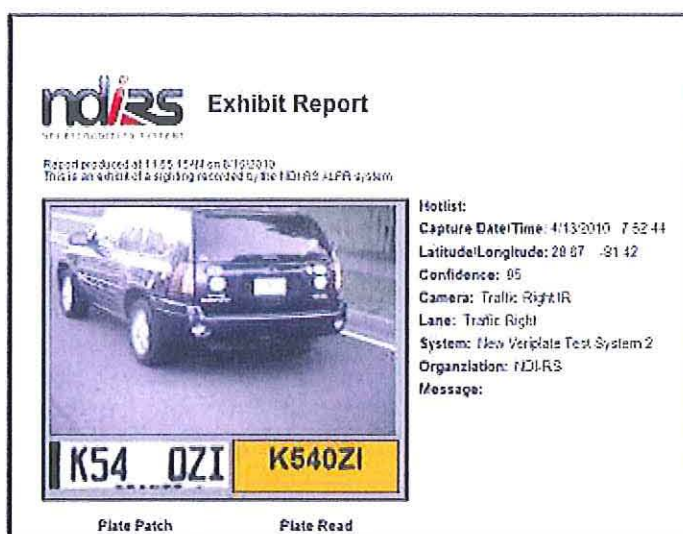
Again, only those aspects for which information is available are filled in. The information listed here is the same as what would be found under the Alert tab of Capture Details.

Exhibit Report, (Alert type)

These reports compile printable data similar to Exhibit (tag) Reports. The difference is that instead of entering specific plate number as a parameter, you enter a Hit Type or Hotlist. The program then gathers images that conform to those parameters. As with the other reports, the Date/Time will automatically be filled in with today's date and time. Notice the different amount of parameters available for this type of report. The Group Tree Option is not available here.
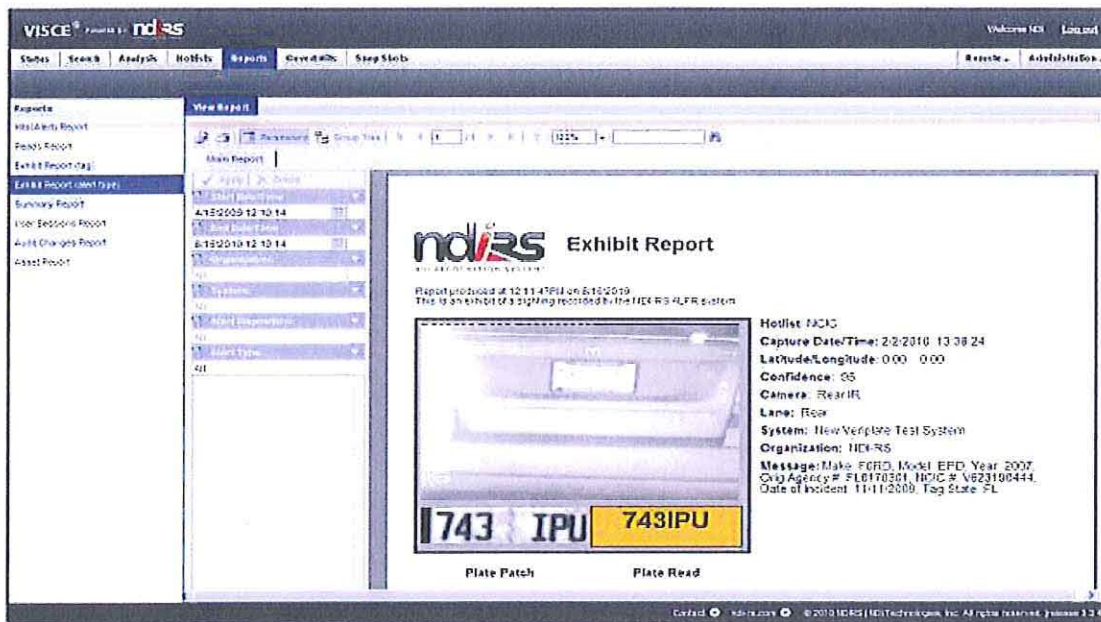
Reading an Exhibit Report, (Alert type)

Here is an example of an Exhibit report. The parameters have been set as follows: Hit Type, All; Start Date/Time, 4/15/2009, 12:100:14; End Date/Time, 8/16/2010, 12:10:14; Organization, All; System, All.

To the right of the images all the information that can be seen under the Images tab of Capture Results can be found. Lane refers to what lane the car was in when the plate was captured, and Lat and Long are short for Latitude and Longitude, thus giving you the exact location where the plate was captured. Again, only those aspects for which information is available are filled in, (notice Lane is not filled in, but Hotlist is).
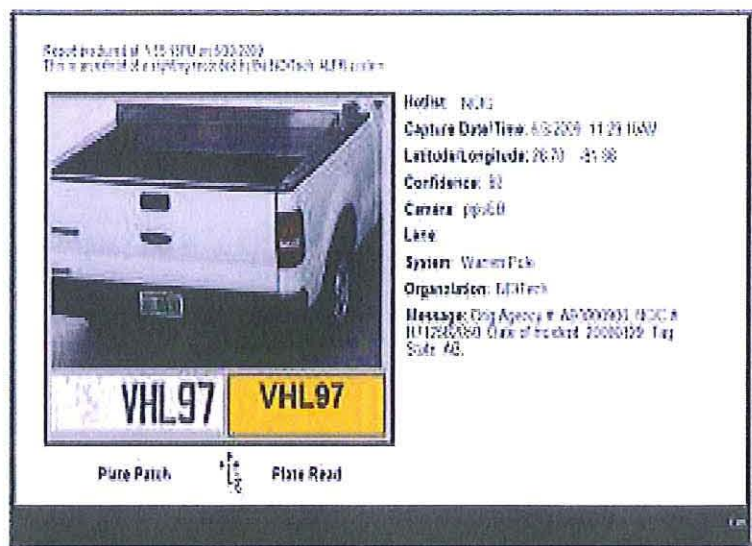
The information listed here is the same as what would be found under the Alert tab of Capture Details. A slight difference here is Confidence. The Camera that captured this plate used PIPS to read the plate image. Therefore, a confidence level has been given; 92, the program is 92% certain the plate has been read correctly.

Summary Report

A summary report has numerous parts to it. In general, it summarizes activity over a period of time and is most useful to show activity over long periods of time. As with the other reports, the Date/Time will automatically be filled in with today's date and time. Notice that there are only 3 parameter variables here; the rest of the aspects are listed in the report. The Group Tree option is available here.
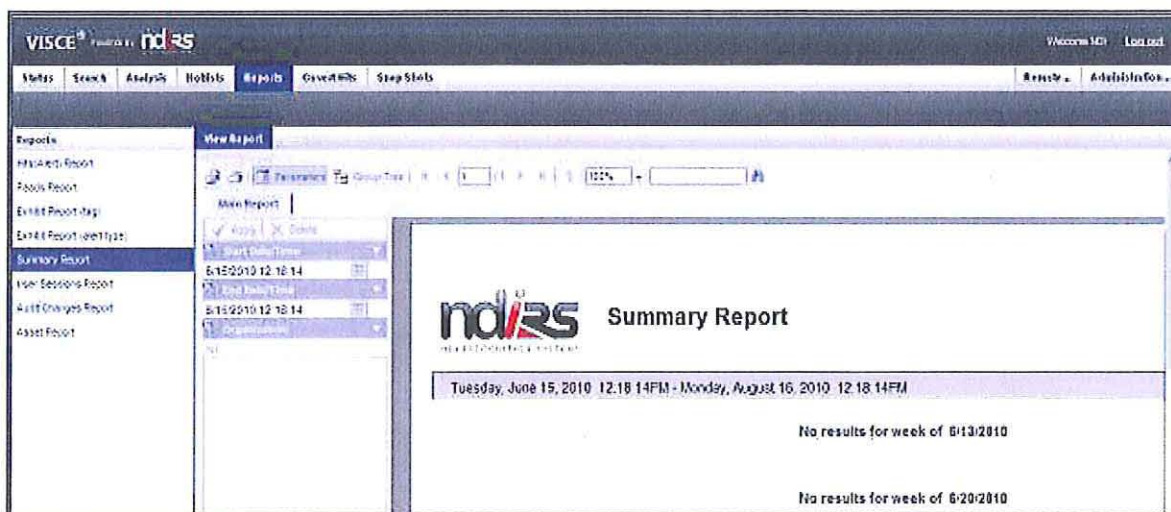
Once parameters have been entered, the program will take a few seconds to gather and organize the data. A counter will appear in the middle of your screen to tell you the program is working. Should this not appear, try hitting **Apply** again.

Reading a Summary Report

There are many parts to a summary report; a Title Section listing all the number of Vehicles scanned, the total number of alerts out of these scans and all the Hit Types and a Graph section. The Graph section has a graph for the number of plate scanned over that period of time and one for each of the Hit Types over that period of time. If there was a Hit Type with no results, (for example over that period of time, there were no hits on Stolen Plates), then there will be no graph for it.

Reading a Summary Report Continued

The Date/Time parameters for this report were; 1/1/2009, 00:00:00 to 6/30/2009, 12:00:00 and can be seen in the grey bar along the top of the report. This six month period is broken into weeks on the Title Section of the reports. These weeks and dates are along the left side, (outlined in blue). The Hit Types are listed along the top, (outlined in red).

This shows one of the pages of the Graph section, specifically that of the number of plate scans. The beginning date of each week is listed at the base of each bar of the graph. The scale of your graph will be decided by the program based on the volume of plates, (or Hits) and the length of the time period.

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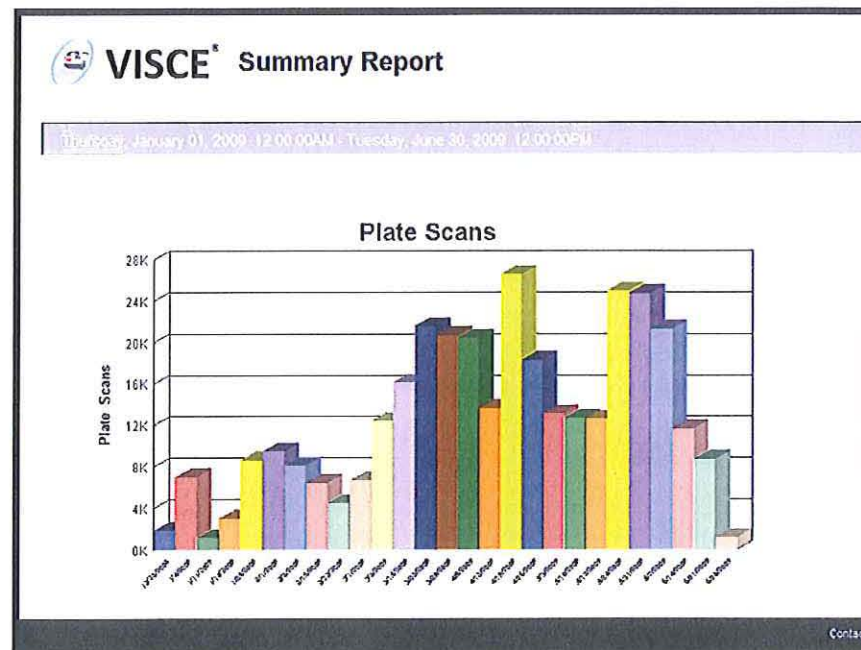
User Session Report

This report lists all the Users, (anyone who can log on and use the program), over a period of time set by you in the parameters section. The report will list the Event, (action performed by the User), Date and Time of the Event and IP Address the User was using. The Group Tree Option is available here.

Unless you set the parameters to read only a single User Name, then the report will automatically break itself up into events by User Name. The example below shows the first page of a report with multiple User Names, (highlighted in aqua), over a period of one month.

Audit Changes Report

This is a new addition to Reports. This report helps the user to audit any changes made to any of the vehicles.

For example, if a user has changed the Tag numbers or deleted any reads, all those changes are displayed in this report along with the corresponding Date/Time.

Assets Report

This report also is a new addition. This report is useful in getting the information of the number of plates scanned and alerts within a given period of time. It also provides a graph of the plates scanned and Hits.

Enter a Start Time and an End Time and chose the Time parameter from the following options – Hourly, Daily, Weekly, Monthly or Yearly.

Plates Scanned by Day
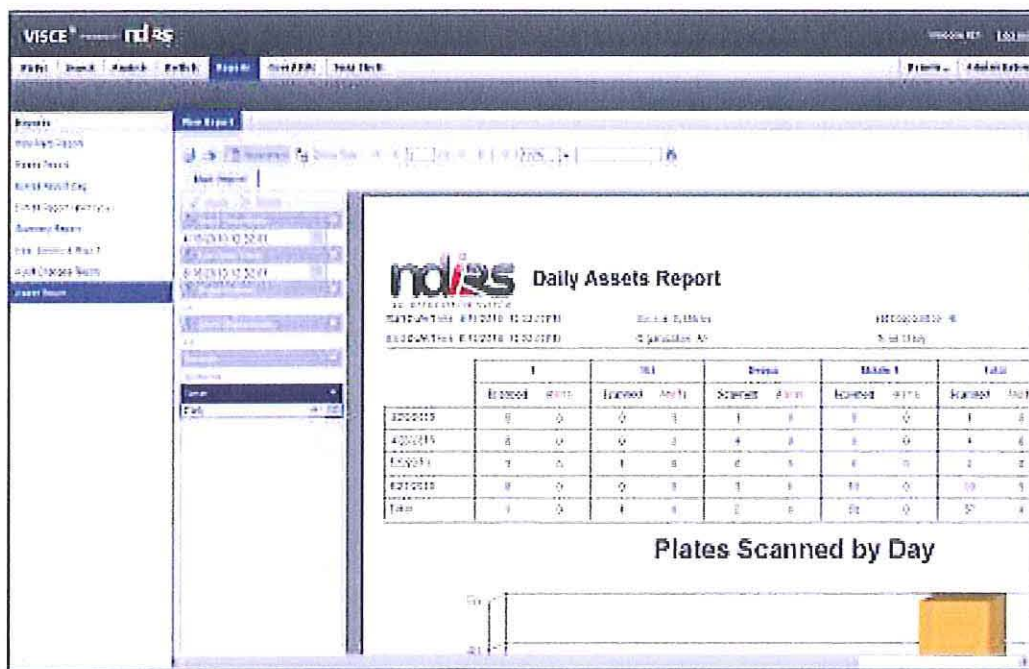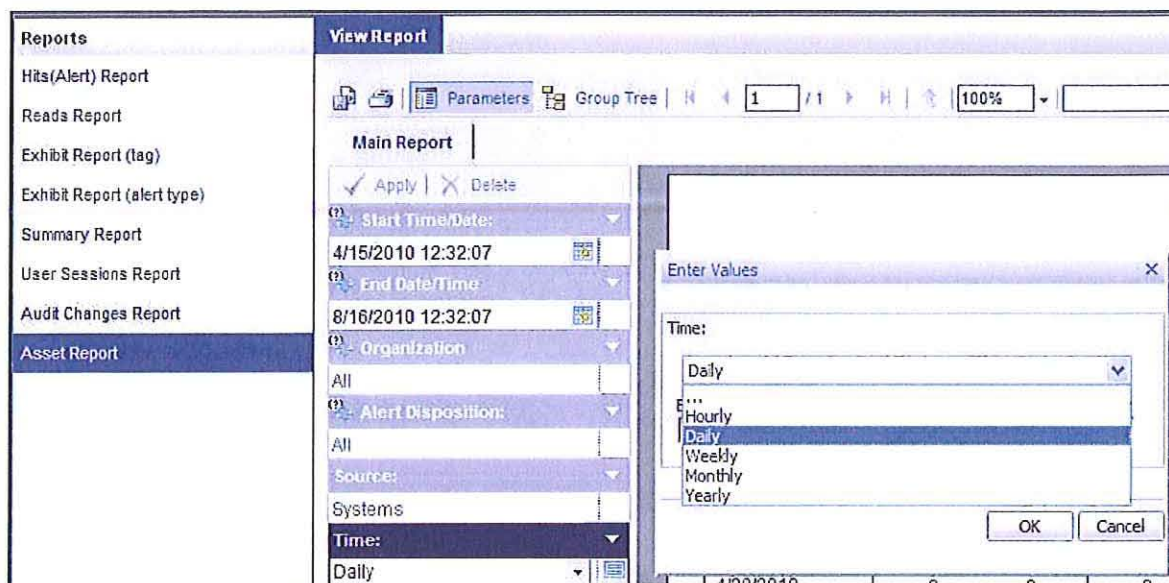
Administration

'Administration' tab is present on the upper right hand corner of the menu bar. Click on this button to access Users and their permissions.

There are 4 tabs in the Administration window – Users, Roles, Reports and Audit and Review.

Two more tabs Remote Agencies and Remote Regions are grayed out and are for future release.
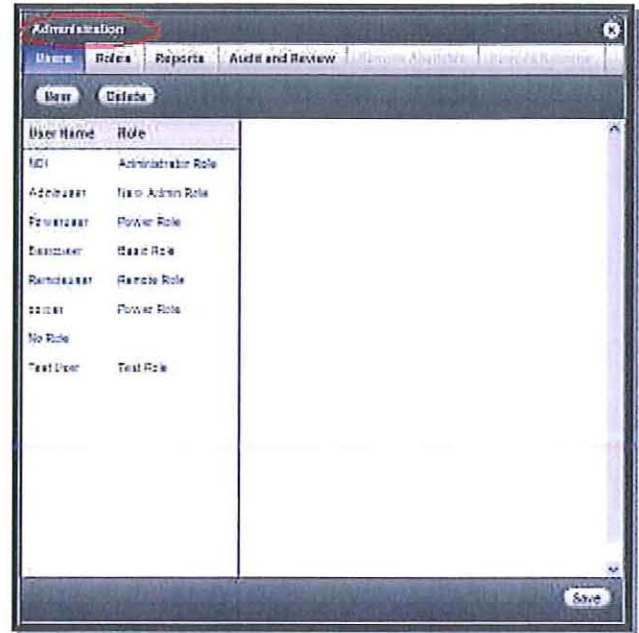
Users
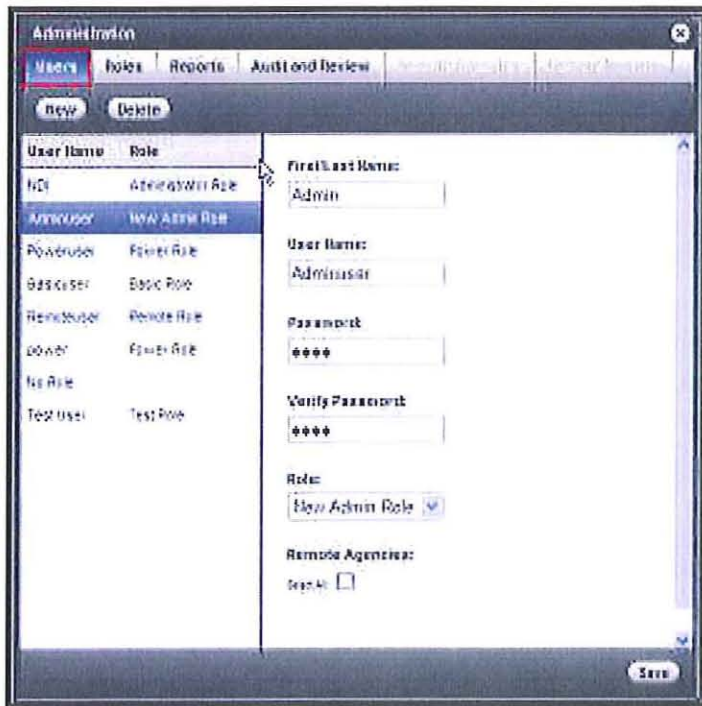
Click on Users tab. All Usernames and the roles they are attached to are displayed under User Name and Role column. Two buttons 'New' and 'Delete' are used to create and delete the users respectively.

Create User

An admin user can create users and assign the users different permissions or rights by creating roles.

Click on New under Users tab to create a new user. Enter First/Last Name, User Name, Password, Verify Password, select a role (explained in detail below in the 'Role' topic) and click on Save.

A user is created successfully with that username.

Delete User

To delete any user, simply click on the Delete button under Users. A popup window is displayed asking for confirmation before deleting the user. Click on Ok to delete the user and the username is not displayed in the Username column.

Click on Cancel if you choose not to delete the user.

Roles

A role is a set of permissions or access rights given to a user. A role is created with certain permissions and then can be assigned to a user who will have access to only those permissions mentioned in the role.

For example a role can be created with permissions to Search Vehicles. So when a user is attached to this role, the user will have permission only to Search Vehicles and nothing more.

Like wise, a role can be created with access to all permissions or a few permissions or none.

Click on Roles tab to see all Role names and User Counts. Two buttons 'New' and 'Delete' are present to create and delete the roles.

Create Role

Click on the 'New' button. To the right side of the window you can enter the Role Name. Select an organization from the Organization drop down list. There are two sets of permissions - 'Local Role Actions' and 'Cameras'

Click on the 'Local Role Actions' to expand the different access rights or permissions. Select the required permissions by checking the appropriate permissions.

Click on the 'Cameras' to expand the different Camera Systems. You can select all the cameras listed or select a few of them only based on your requirement.

Click on Save button to save the Role.

The new role is saved and displayed under 'Role Name' column. The user count will be 0 as none of the users are attached to this role yet.

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Attaching users to roles
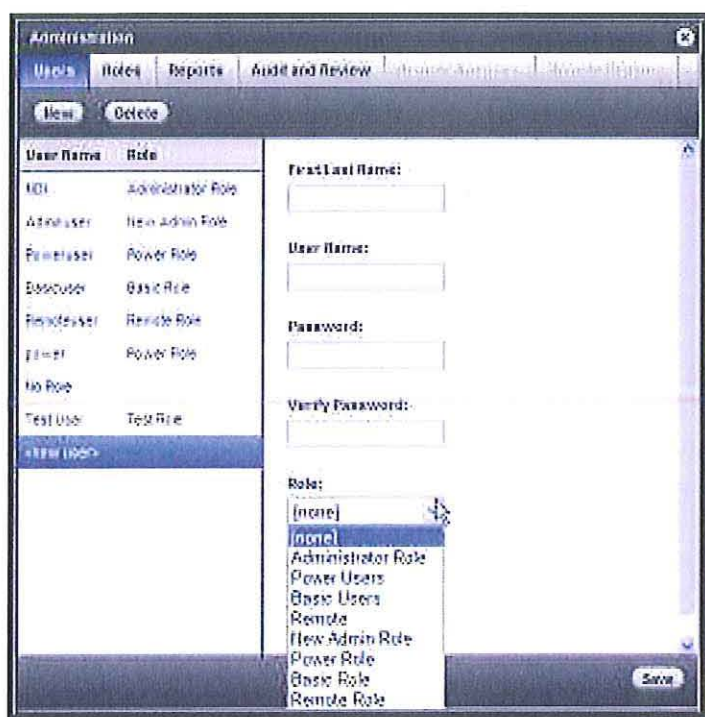
After creating the user and role successfully, click on the Users tab again. Click on the user you just created and select the role from the 'Role' drop down list in the right side of the window.

Click on 'Save'. The user is now successfully attached to the new role.

Similarly any user who has already a role attached to him can also be changed to any of the roles listed in the drop down list. Simply click on the user name on the left and then select the role from the role drop down list in the right and click on Save.

Reports

Access can be granted to different reports for different user roles under this tab in Administration.

Click on Reports tab. A list of all the reports is displayed under the 'Report Name' column. Select a report and notice that all the roles are displayed in the right side of the window with check boxes.

Check the boxes for only those roles to which you would like to grant access to that particular report and click on Save.

For example – Select the Hits Report. Check the box for the new role created in the above steps and click on Save. The user who is attached to this role will have access to Hits Report now. Similarly you can select all the reports or only few of them and give access rights to roles.

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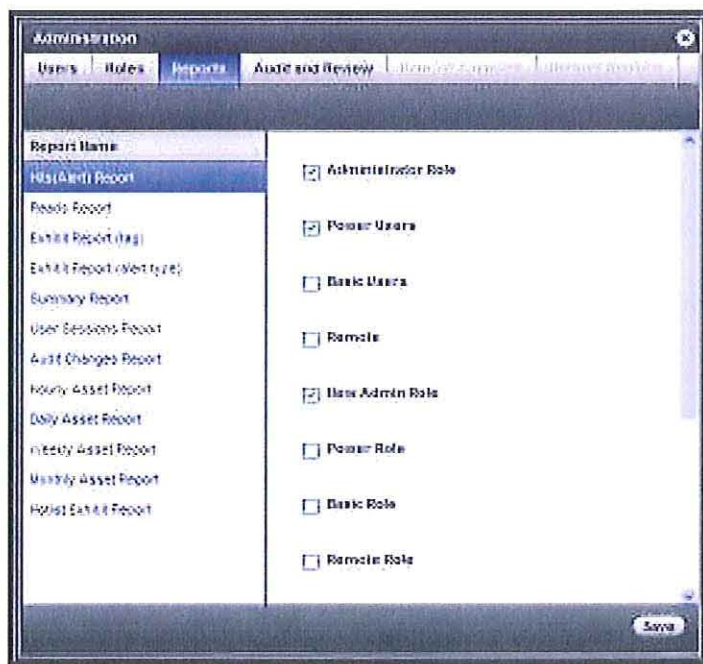
Covert Hits

Covert Hits are hits which appear as regular reads to users in the mobile system and client interfaces, but appear as Alerts to authorized back office users. For example, a gang analyst may create a covert hotlist with a list of known gang members to keep track of. When the ALPR system scans one of the tags, it will show as a regular read. The gang analyst when logged in will see the read as an alert and it will be displayed in the Covert Hits tab.

All covert hits are displayed under this tab. This tab is present in the upper menu bar next to the Reports tab. When the check box for any covert hit is checked, the read is no longer displayed in this page upon log out. It will still be searchable in the Search tab.

Select any Hit to display the captured image to the right of the screen. Capture Details, Map it! and Delete Vehicle options can be used the same way as mentioned earlier in the Search topic.

> **Note:** If you are visiting the **Support** section of our Web site for the first time, you will need to obtain a username and password by telephoning our Support Desk.
>
> When calling the Support Desk, please be ready to provide the following information: Company contact details, a valid e-mail address and (where applicable) a purchase order/works order number or Software Support and Maintenance Agreement number.

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veriplate
Version 3.0

VeriPlate ALPR System
User Manual

ndiRS
NDI RECOGNITION SYSTEMS

385 Commerce Way, Longwood, Florida 32750 USA

Table of Contents

<u>VeriPlate System Description</u>

What is VeriPlate?

VeriPlate is a proven mechanism that automatically reads license plate numbers on stationary or moving vehicles. Using advanced camera, recognition, and database technology, VeriPlate automatically captures images of vehicle license plate numbers and instantly checks those numbers against a variety of vehicle "hotlists" held in target vehicle databases. Alarms can be triggered when a "hit" is detected on any given database giving the system operator the opportunity to take immediate action.

Automated License Plate Recognition (ALPR):
While ALPR is fairly new to the United States, it has been in use in Europe since the early 1980's. First developed in the United Kingdom in the late 1970's, the first ALPR-assisted arrest was made for a stolen vehicle in 1981.

Interconnection of Components
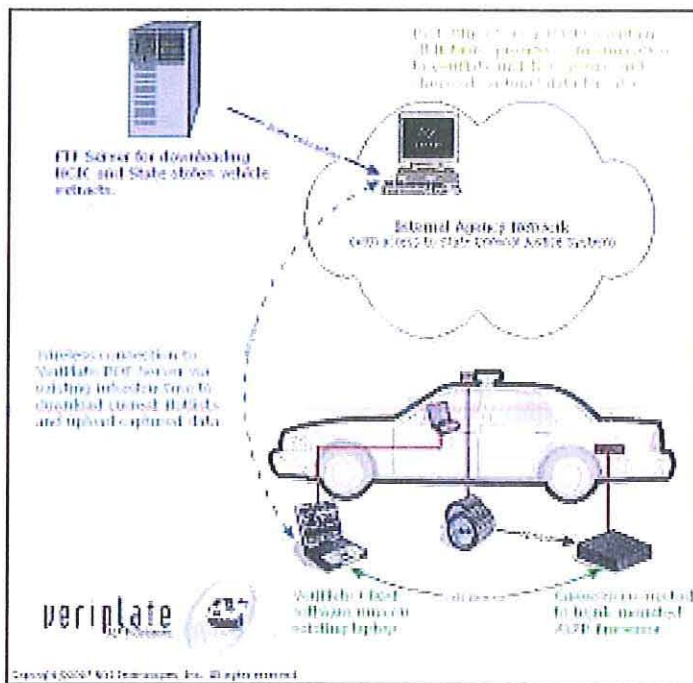
Cameras and Processor

The VeriPlate cameras are connected to the ALPR processor and power break out box in the trunk of the vehicle.

Processor and Laptop

The laptop in the cab of the vehicle is connected to the ALPR processor via an Ethernet (Cat5) cross-over cable. This allows the VeriPlate Client on the laptop to access the cameras and captured data on the processor.

Laptop and VISCE Server

The laptop can exchange Hotlist and Capture data with the VISCE Server in one of two ways:
1. Wireless- Using the laptops existing wireless connectivity, the VeriPlate Mobile Data Client can communicate with the VISCE Server directly.
2. USB Drive- The system operator can use a USB "Thumb Drive" to exchange Hotlist and Capture data between the laptop and the VISCE Server.

VISCE Server and State Network

The Back Office Server receives NCIC and State Hotlist updates via an FTP connection. This connection can be made either through the internet or through the State's criminal justice network, depending on the agencies connectivity and policies.

Starting the Application

To start the VeriPlate ALPR System, double click on the desktop icon ![icon] or from the Windows Start Menu, select *All Programs > NDI Technologies > VeriPlate*.

VeriPlate can also be configured to run automatically, when Windows starts, by copying the VeriPlate desktop icon to the Startup menu.

Logging In

Once VeriPlate has started, you will see the Login screen, as below:

Type in a valid username and password and click the "OK" button. The username of the previous user will be displayed by default, but will still require a password.

VeriPlate Application
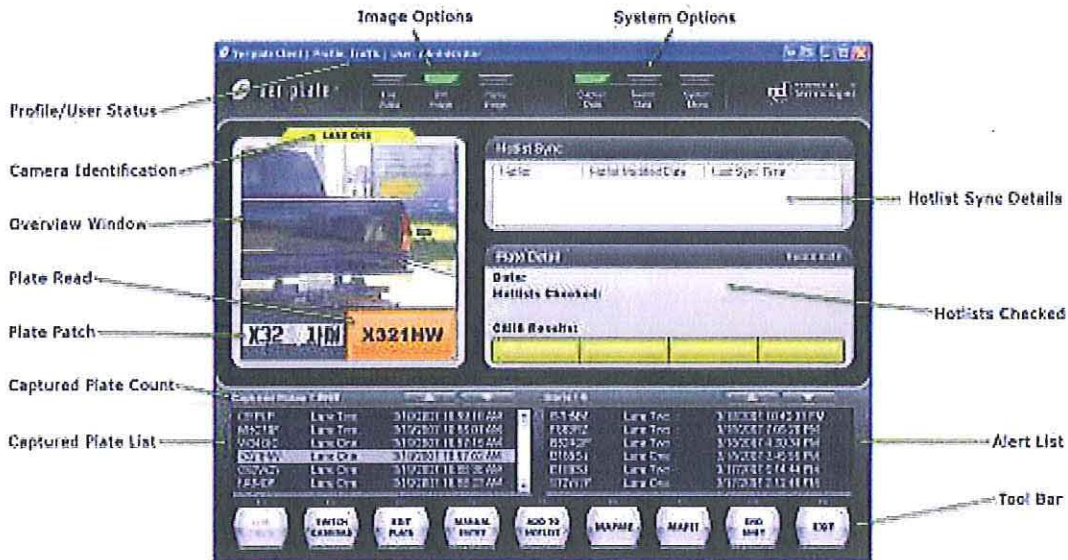
Image Options

Live Video

To view live video from any of the configured cameras in the currently running profile, press the "Live Video" button. After pressing the button, the following dialog box will ask you to select a camera to view:

After selecting a camera, the live video feed from that camera will appear in the "Overview Window".

⊘ **For your safety, live video should never be used while the vehicle is in motion.**

> **Note:**
> By using the live video feature and selecting an IR (black & white) camera, the operator can verify that license plates are moving through the camera's field of view.

Still Image

Each time the application opens, the "Still Image" option is enabled by default. With this enabled, a still color photograph of the last vehicle captured will appear in the Overview Window. The window will remain blank until a license plate is captured.

Each time a new license plate is captured, the overview image from that capture will be displayed.

Pause Image

The "Pause Image" feature will prevent the still image in the Overview Window from changing as new license plates are captured. Newly captured images will not appear until the "Pause Image" button is clicked again to disable it.

> **NOTE:**
> The "Pause Image" feature is most often used when an operator needs extra time in examining an image. This feature will not pause live video.
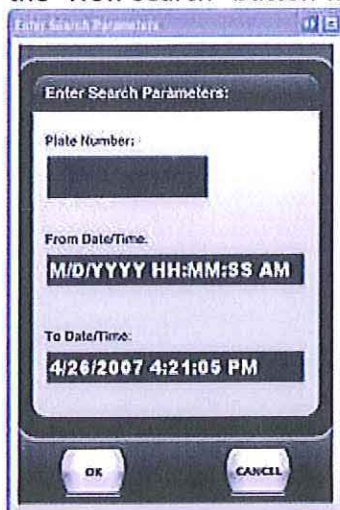
System Options

Capture Data

This is the default state of the VeriPlate system. In this state, VeriPlate captures license plates using the cameras in the selected profile and searches the enabled hotlists for matches.

Search Data

The "Search Data" system state is used to search through the Captured Plate List. Clicking on the "New Search" button will bring up the following "Search Parameter" dialog box:

Using this dialog box, you can search the data in your Captured Plate List based on plate number and/or a range of dates and times.

NOTE: Only data currently held in the system can be searched. Once data has cleared in the "End Shift" process, it is no longer available.

System Menu

Clicking on the "System Menu" button will open a list options for configuring your VeriPlate system. These options are discussed in detail in the "System Configuration" portion of this guide.

Profile/User Status

The Windows Title Bar of the VeriPlate application also contains the Profile and User status. This identifies which camera profile is currently enabled and which user account is currently logged in.

Camera Identification

This area identifies which camera captured the currently displayed image. The frame around the Overview Window will "light up" to indicate from which direction the picture was taken.

Overview Window

The Overview Window will display either the color overview picture of the last vehicle captured or the live video feed. When VeriPlate first opens, the Overview Window will be blank and will remain blank until either a plate is captured or the "Live Video" button is selected.

Plate Read

The text in this box represents how the VeriPlate system has read the captured license plate.

Plate Patch

The picture displayed here is the cropped picture of the license plate that was digitally read by the VeriPlate system. This picture was taken using the Infra Red camera.

Captured Plate Count

This is a tally of the total number of license plates that have been captured and read. Some license plates may have been captured more than once if they have been passed several times or if VeriPlate has read them differently.

Captured Plate List

The Captured Plate List contains a listing of every license plate that has been captured since the last "end shift". The list contains the "plate read", the camera identifier, and the date/time stamp. You can scroll through the list by using the scroll bar to the right or you can move through the list, page by page, using the up and down arrow buttons just above the list.

Selecting any "plate read" in the list will cause the corresponding plate details and still images to appear.

Plate Details

This area displays the information pertaining to the current license plate, including a date/time stamp and whether an alert was found. If an alert was made on the current plate read, the details of the alert are displayed in this area. Those alert details include hotlist name, alert type, and other identifying information (i.e. NCIC number, agency ID, etc.)

Hotlists Checked

This identifies the hotlists that are currently enabled and being checked. Hotlists can be enabled or disabled from the "Configure Hotlists" option in the System Menu.

Alert List

The Alert List contains a listing of each alert since the last "end shift". The list contains the "plate read", the camera identifier, and the date/time stamp of the alert. You can scroll through the list by using the scroll bar to the right or you can move through the list, page by page, using the up and down arrow buttons just above the list. You can bring up the original "Alert" screen by double-clicking on any "plate read" in the Alert List.

Tool Bar

Live Check

When the Live Check button is pushed, the currently selected license plate will be checked against live databases (FCIC, NCIC, etc.) using your existing wireless connection to your state criminal justice network.

NOTE: Live Check is only available as part of the "Predator" upgrade package.

Switch Cameras

This button allows you to switch between camera profiles.

Select the camera profile you wish to activate from those listed and then click on OK. Only one profile may be active at any time; however profiles may contain multiple cameras. New camera profiles can be created from the "Configure Profiles" option in the System Menu.

Edit Plate

In the event that the VeriPlate system has misread a captured plate, the "plate read" may be edited by clicking the "Edit Plate" button.
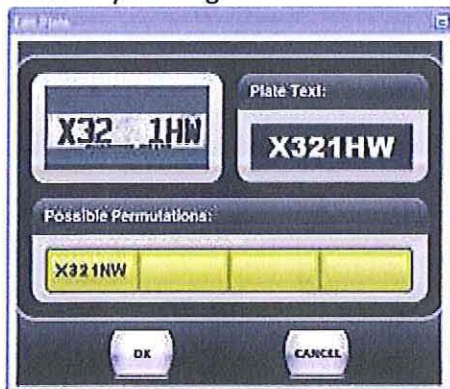
The plate patch is shown along with VeriPlate's plate read. The text of the read can be directly edited and saved by clicking on OK. VeriPlate also provides "Possible Permutations" of the plate read which can be easily selected by clicking on the yellow box.

Manual Entry

To manually enter a license plate, without it being captured by a camera, click on the "Manual Entry" button.

Simply type the plate number into the text box (without any spaces) and press OK. This entry will be treated just as if it had been captured using a camera. The overview image and plate patch will both be identified as "Manual Entry".

Add to Hotlist

The "Add to Hotlist" button is used to quickly add a plate number to en existing Hotlist. Plate number added using this method *will not* be replicated to the VISCE Server.
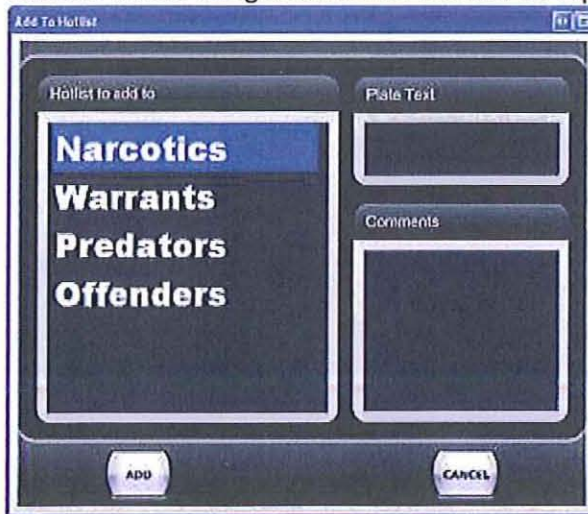
Select the Hotlist that you want to add to from the list on the left. Then type the plate number (without spaces) into the "Plate Text" box and enter any comments into the "Comments" box. Click on the "Add" button to add this plate number to the selected Hotlist.

> **NOTE:**
> Federal and State Hotlists are *Read-Only* and can not be modified. Complete Hotlist management is available from the "Configure Hotlists" option in the System Menu.

MapMe

Clicking on the "MapMe" button allows you to easily and instantly see your exact physical location (on GPS enabled systems) on a map. From this map, you can zoom in, zoom out, or get a route from your location to an address.
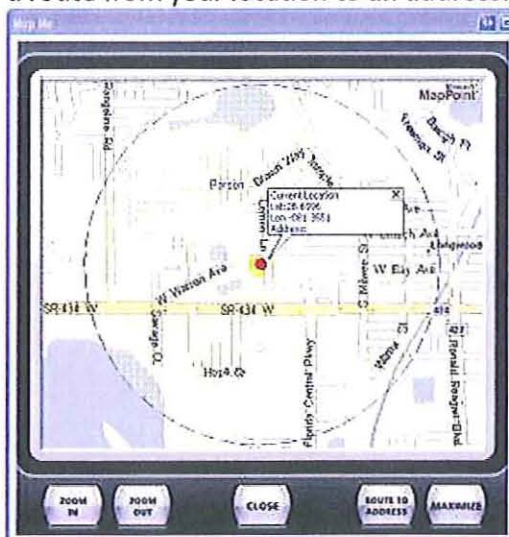
MapIt

The "MapIt" button shows you the exact location at which you captured the currently selected license plate.

End Shift

The "End Shift" button will clear the contents of the Captured Plates list. After ending your shift, you will be required to log back in to the VeriPlate System.

Exit

Clicking on the "Exit" button will close the VeriPlate Application *without* clearing the list of captured plates, list of alerts, or uploading data to the VISCE Server.

Alerts

Alerts are triggered when a captured vehicle's plate number matches a plate number stored in a Hotlist. When this happens, the "Hotlist Hit Notification" screen appears, almost instantly, along with an audible alert (as selected in the Configure Hotlists screen).

Alerts can be set as "Critical" when immediate action is required or as "Information" when the alert is less urgent.
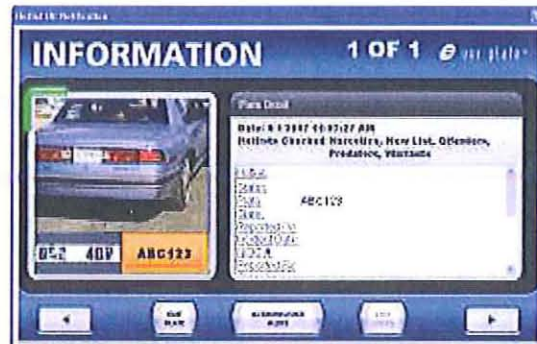
Critical Alert   *Information Alert*

When an Alert appears, the operator has several options. From left to right, they are:
1. Left Arrow- View previous Alert (if there are multiple Alerts).
2. Edit Plate- Allows you to edit the "read" if it is incorrect.
3. Acknowledge Alert- Clears the Alert from the screen. (This can be reopened by double-clicking on the plate number in the Alert List on the main screen.
4. *Live Check- Runs the plate through live databases (i.e. NCIC, State, etc.) **Note: This feature is only available as part of the "Predator" upgrade package.***
5. Right Arrow- View next Alert (if there are multiple Alerts).

> **NOTE:**
> Because Hotlists, by their very nature, contain information that may be outdated, the VeriPlate System Operator *must* verify any Alert information before taking action!

System Configuration

System Menu Bar

Most of VeriPlate's configuration options are accessed through the System Menu Bar by clicking on the "System Menu" button at the top of the VeriPlate application:

After clicking on the "System Menu" button, the System Menu Bar will appear as below:
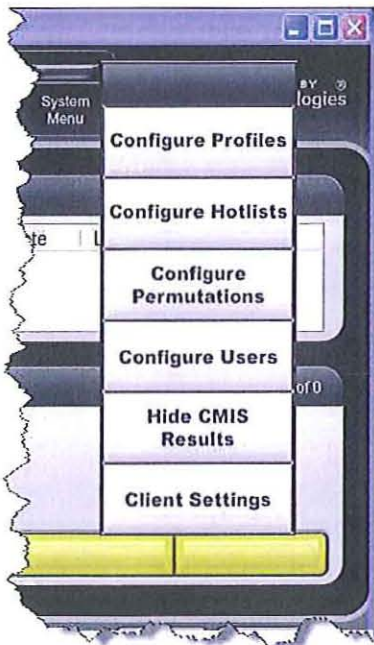
Click on any button to configure that item.

Configure Profiles

Using multiple camera profiles allows you to preset cameras for various functions and easily switch between these settings. For example, in the box below, the system is configured to easily switch between the Parking camera and the two forward facing Traffic cameras.
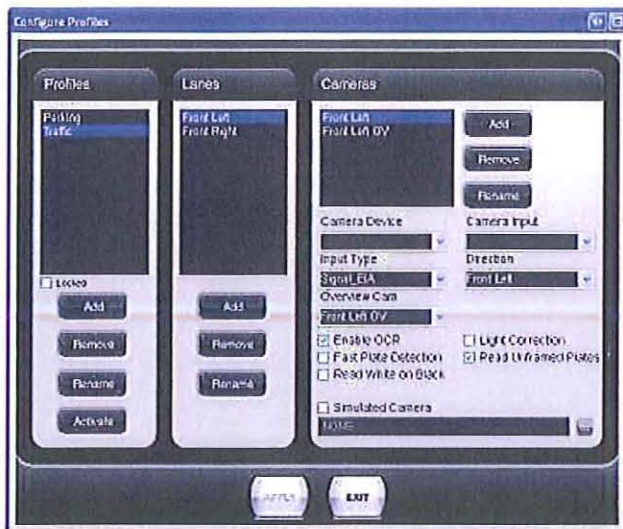
To create a new profile:
1. Click the "Add" button on the "Profiles" column, type the name of your new profile and click the "OK button.
2. Make sure that your new profile is selected in the "Profiles" column and then click the "Add" button in the "Lanes" column. In this column, you will need to add one lane for every actual lane of traffic that you will be capturing. (i.e. if you are using the left traffic *AND* right traffic cameras, that would be two lanes.)
3. With the appropriate "Lane" selected, click on "Add" in the "Cameras" column to add your first camera. Keep in mind that you will actually be adding two cameras for every P362 "camera pod", one Infrared and one Color Overview.
4. Add the Overview Camera first and then add the IR Camera.
5. Starting with the Overview Camera selected, set your configurations options:
    a. Camera Device- Select the Video Capture Card that is installed in your system. (usually Euresys Picolo Tetra)
    b. Camera Input- Select the Video Input from the selected card (Input_0, Input_1, Input_2, or Input_3)
    c. Input Type: The video signal type for this camera (**note- overview cameras use "Signal_NTSC" while IR cameras use "Signal_EIA"**)
    d. Direction: the direction of the vehicle that the camera is facing.
    e. Overview Cam: If you are setting up the Overview Cameras itself, then select "-No Overview-". If you are setting up the IR Camera, then select the Overview Camera that you have already setup.
    f. Enable OCR- ONLY check this for the IR Camera.
    g. Light Correction- Leave unchecked unless instructed by support.
    h. Fast Plate Detection- Leave unchecked unless instructed by support.

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i. Read Unframed Plates- Check on BOTH Overview and IR Cameras.
j. Read White on Black- Only check if the primary plate in your state has white text on a dark colored plate.
k. Simulated Camera- Only check when running a prerecorded .AVI file through the system to be processed.

Configure Hotlists

The "Configure Hotlists" dialog box allows you to create, delete and manage the local hotlists on your system.

Because NCIC and State Hotlists are *read-only*, they can not be modified.

> **NOTE:**
> Hotlists that are "pushed" from the VISCE Server will be over-written each time an update is made from the VISCE. Because of this, it is recommended that system operators create their own "personal" hotlists and only make changes to that data.
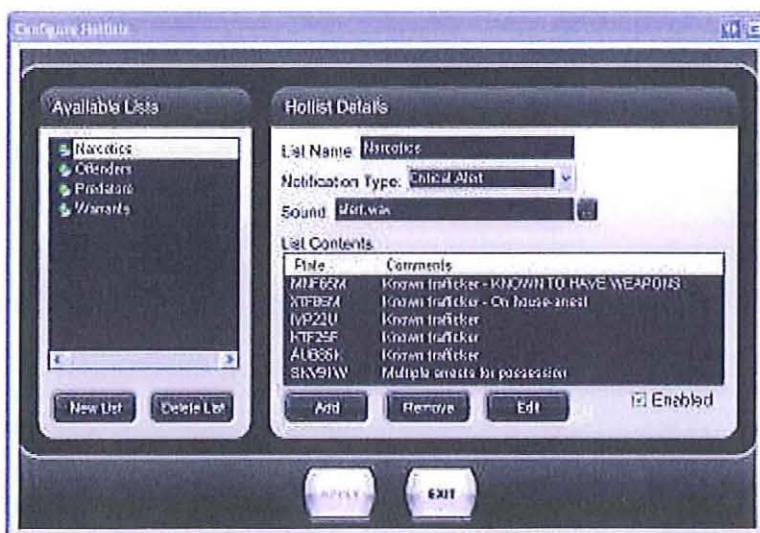
To create a new Hotlist:
1. Click the "New List" button from the bottom of the "Available Lists" column.
2. Enter a name for your new hotlist in the dialog box and click "OK".
3. From the "Hotlist Details" column, configure the following:
    a. Notification Type- "Critical Alerts" will bring up a bright red "Alert" screen whenever there is a match. These are typically reserved for alerts that require immediate attention. "Informational Alerts" bring up a less obtrusive blue window and are usually used for alerts containing non-urgent information.
    b. Sound- This is the audio that is sounded when an alert is made. This can be set to any standard .WAV file.

c. List Contents- Click on the "Add" button to add plates to this hotlist. From "Hotlist Item" dialog box, you can add as much or a little information about a plate as you want. The plate number itself is the only required information.

d. Enabled- The "Enabled" box MUST be checked in order for a hotlist to be actively checked. Enabled hotlists are indicated by a green ball to the left of the hotlist name in the "Available Hotlists" column. Disabled hotlists are indicated by a red ball.

4. Click on the "Apply" button to save any changes that you have made and then the "Exit" button to close the Configure Hotlists window.

Configure Permutations

Permutations allow the VeriPlate to check plate numbers for commonly misread characters. In Florida for example, when the fourth character in a plate is an "8" (IVP84R) it appears very similar to a "B" and can sometimes be misread as such. To compensate for this, you can configure the Permutation File to always check hotlists for both an "8" and a "B" whenever it detects one of those characters in the fourth place of a plate number. While this increases the chance of getting an Alert that *doesn't* match the actual plate number, it also increases the likelihood of getting an Alert that could have otherwise been missed.
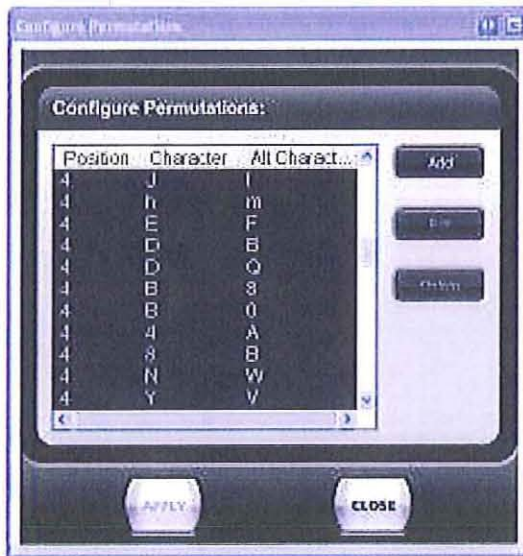
To add a new Permutation:

1. Click on the "Add" button.
2. In the Add Permutation Window, populate the following text boxes:
   a. At Position- The character number (from the left) in the plate number.
   b. Character- How the character is being incorrectly read.
   c. Should Be- What the character should be read as.
   d. Click the "OK" button to accept this new permutation.
3. Click on the "Apply" button to save your changes and click on the "Close" button to exit the Configure Permutations Window.

Configure Users

Multiple users can be configured to use the same VeriPlate system. By using multiple usernames, you can search historical data based on the user who was capturing data at the time.
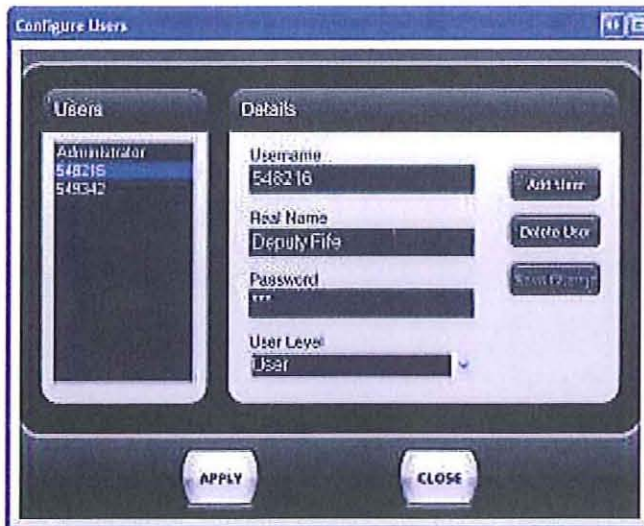
To add a new user:
1. Click on the "Add User" button.
2. In the Add User Window, fill in the text boxes as follows:
    a. Username- The username for this user to login to the VeriPlate system.
    b. Real Name- The operator's proper name.
    c. Password- The password that the operator will use.
    d. Verify Password- Confirmation of the password.
    e. User Level- Select the users permission level:
        i. User- Can *not* add, modify or delete other users.
        ii. Administrator- Can add, modify or delete other users
3. Click on the "Apply" button to save your changes and then on the "Close" button to exit the Configure Users Window.

Show/Hide CMIS Results

This button will toggle between showing the CMIS Results (Permutations) and hiding them. When shown, they will appear at the bottom of the"Plate Detail" window as shown below.
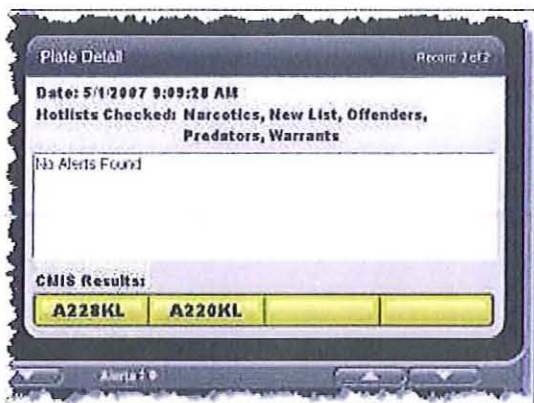
Permutations are constantly being checked, regardless of whether the CMIS Results are being shown or not.

NOTE:

If an entry in the CMIS Results is in fact the correct read for the plate captured, simply click on the yellow box containing the correct read and that will replace the incorrect read.

Client Settings

The settings in this dialog box are the basis of the VeriPlate system. Items in this box should NOT be changed without first consulting an NDI Technologies support representative.

⊘ **Any changes made to this configuration could disrupt the operation of your VeriPlate System.**
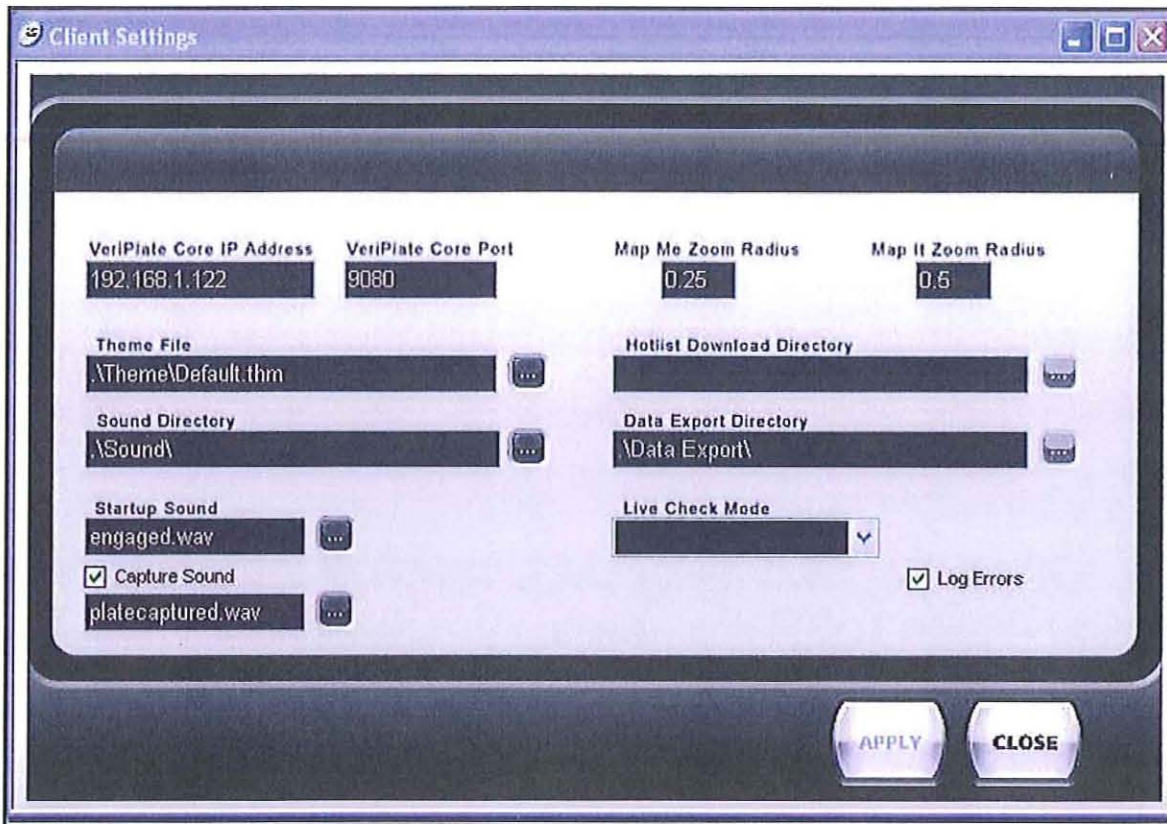
NOTE:
The most commonly user configured options in the Client Settings Window are:
1. Capture Sound Enabled- Plays a sound every time a plate is captured.
2. Capture Sound Selection- Assigns a sound to be played every time a plate is captured. (This should generally be a short, quick sound.)

Other configuration items in the Client Setting Window should **NOT** be modified.

Synchronizing to the VISCE Server

VISCE Connectivity

If your VeriPlate unit is configured to access a VISCE Server, the synchronization of hotlists and captured data will happen automatically.

When the VeriPlate software starts, a small "satellite dish" icon appears in the Windows Task Bar. This shows status of connectivity to a VISCE Server. When connected, the icon will glow green and communication between the system and the server is established and open. When the icon is grey, there is no connectivity to a VISCE Server.

The status of synchronizations can be determined by double-clicking on the icon. This will open the Sync Event Log for viewing.

Notes

Contacts

> **Note:** If you are visiting the **Support** section of our Web site for the first time, you will need to obtain a username and password by telephoning our Support Desk.
>
> When calling the Support Desk, please be ready to provide the following information: Company contact details, a valid e-mail address and (where applicable) a purchase order/works order number or Software Support and Maintenance Agreement number.

UNITED STATES

NDI Recognition Systems

ALPR Solutions

- Cameras
- Hardware
- Software

U.S. Headquarters

385 Commerce Way
Longwood, FL 32750
Tel: (1) 866-458-0426
Fax: (1) 321-441-1801
Support Email: support@ndi-rs.net
Sales Email: sales@ndi-rs.net

Charlotte, North Carolina Office

9700 Research Drive Suite 136
Charlotte, NC 28262
Tel: (1) 866-458-0426
Fax: (1) 321-441-1801
Support Email: support@ndi-rs.net
Sales Email: sales@ndi-rs.net

UNITED KINGDOM

NDI Recognition Systems Ltd

ANPR Solutions

- Cameras
- Hardware
- Software

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SL6 8AQ
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Helpdesk: +44(0)1628 513 499
Fax: +44 (0)1628 513 481
Support Email: support@ndi-rs.net
Sales Email: sales@ndi-rs.net

NDI Technologies, Ltd.

PNC Solutions

- Desktop Access
- Mobile Access
- Training
- Integration
-

NDI House
Barony Court
Nantwich
Cheshire
CW5 5RD
United Kingdom
Tel: +44 (0) 1270 613780
Fax: +44 (0) 1270 625285
Support Email: support@ndi-rs.net
Sales Email: sales@ndi-rs.net

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POLICE

CHARLOTTE-MECKLENBURG

Strategic Partnership LPR Expansion Project:
Charlotte-Mecklenburg Police Department
601 Trade Street
Charlotte, North Carolina 28202

Existing Vendor/Partner:

NDI Technologies, Inc.
385 Commerce Way
Longwood, FL 32750

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NDI RECOGNITION SYSTEMS

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TABLE OF CONTENTS

Warranty and maintenance documentation follow separately.

SECTION 1

STATEMENT OF WORK

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NDI RECOGNITION SYSTEMS

STATEMENT OF WORK

Charlotte-Mecklenburg License Plate Reader (LPR) Deployment

STATEMENT OF WORK: NDI Technologies, Inc.

Introduction and Background:

The purpose of this project is to procure the add-on installation of LPR systems and services in designated locations in the Charlotte-Mecklenburg area in order to capture, store and share information from license plates transiting roadways where the LPR systems are installed. This is to be considered an add-on to the existing ALPR system currently deployed with CMPD. These proposed additional cameras are to feed the existing VISCE back-office that is currently in place. The goals of the project are as follows:

- To contribute to the prevention of terrorist attacks and mitigate against man-made and natural hazards;
- To protect the people of Charlotte-Mecklenburg, their critical infrastructure and key resources;
- To prepare to respond to and recover from both man-made and natural disasters.
- To strengthen counterterrorism and law enforcement capabilities of North Carolina with an emphasis in the area of the 2012 Democratic National Convention (DNC) through enhanced information sharing, collaboration and intelligence analysis.

Location of Work:

On-site work related to this engagement will be performed at designated offices and outdoor locations in (but not limited to) the Charlotte-Mecklenburg area in North Carolina. Specifically the below approved and surveyed site locations:

Copy of CMPD
INSTALL SITES (FINA

ndiʀs
NDI RECOGNITION SYSTEMS
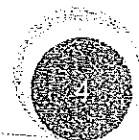
Deliverables:

The deliverables for this Statement of Work are as follows:

1. . Assessment

As directed by CMPD, NDI will gather information from the selected sites in order to assess the cameras, hardware, equipment and security needed to successfully operate NDI LPRs properly and at optimal operating efficiency and effectiveness.

2. Project Design

NDI will provide CMPD with a physical and virtual project design for each LPR including equipment placement drawings and network configuration information.

3. Project Planning

NDI will provide CMPD with a high level plan with project milestones for each LPR installation as prioritized by CMPD. The Project Plan will be updated weekly by NDI.

4. Single Point of Contact – NDI

NDI will name a Project Manager for the CMPD project. The project manager will be fully informed of the project status and details at all times and will be authorized to address any CMPD concerns and issues in a timely fashion.

5. Single Point of Contact – Charlotte-Mecklenburg

The CMPD Project Manager is requested to be named prior to project kickoff. NDI will provide all documentation, change requests, and communications to the Project Manager as identified by CMPD.

6. Installation

NDI will install and configure NDI LPR equipment, cameras, communications, software, including setting up interfaces to all included systems and will deliver:
   a) Fully functional LPR equipment and cameras at each designated field location, accurately capturing 90% or more of readable license plates passing through the field of view of each camera.
   b) Fully functional communications from the LPR field site to the central server. NDI is not responsible for the performance of the cellular carrier service or other transport service.
   c) Automatic download of LPR data from LPR camera to the central server, to be designated by CMPD.

7. Data Migration Services: (No-Charge)
NDI will migrate existing data from the old server to the new servers, provided that CMPD provide access to the physical database files in order for them to be copied and attached onto the new servers. CMPD will facilitate the copying of the MDF and LDF database files for both the NDI_VBOF_SYNC and BOF_CLIENTS databases to the new SQL server.

CMPD is required to provide the following:

SQL Server 2008 RS

Windows Server 2008 R2

.Net Framework 4.0

IIS 7

8. Cellular Modems

As requested by CMPD, NDI will supply Sierra Wireless AirLink GX400 cellular modems with antennas for each site required for the total LPR Expansion Project, currently totaling 46 devices.

NDI shall provide/be responsible for:

- 46 factory new GX400 modems equipped for use on Verizon Wireless Cellular Network
- DC power connectors for each modem
- Antennae attached to back of modem
- Transfer of 5-year factory warranty to CMPD
- List of all EIN and Serial Numbers provided to CMPD for provisioning with Verizon Wireless
- Basic configuration of each modem to secure and allow for port forwarding as needed.
- Detailed information and requirements regarding the port forwarding configuration.

CMPD shall provide/be responsible for:

- Provisioning of all modems on the Verizon Wireless Cellular Network
- Providing list of each device's assigned phone number to NDI
- Providing list of each device's assigned static IP address to NDI
- All charges/contracts associated with the provisioning of devices
- All charges/contracts associated with operating devices, including all monthly service charges
- Ensuring all data connectivity from the wireless device, through the agency firewall and to the required server(s)

The wireless devices are property of CMPD and are covered under the manufacturer's warranty. These devices are not covered under any support agreements with NDI.

Communications between devices and the server is the sole responsibility of CMPD and the wireless carrier. Any communications related support issues should be raised directly with Verizon Wireless.

Sites Requiring Cellular Modems:

1. Independence Blvd (2 processors on same modem) - Westbound
2. Independence Blvd (2 processors on same modem) - Eastbound
3. E 6th Ave / N McDowell St
4. N Kings Dr / Elizabeth Ave - Westbound
5. N Kings Dr / Elizabeth Ave - Eastbound
6. E 4th St / I-277 Exit Ramp - Lanes 1 & 2
7. E 4th St / I-277 Exit Ramp - Lanes 3 & 4
8. S Caldwell St / E Stonewall St - Southbound
9. S Caldwell St / E Stonewall St - Northbound
10. S Tryon St - Northbound (@ Carson)
11. S Tryon St - Southbound (@ Stonewall)
12. S College St / E Stonewall St
13. W 3rd St / S Mint St

14. W Sugar Creek Rd / Reagan Dr - Northbound
15. W Sugar Creek Rd / Reagan Dr - Southbound
16. N Tryon St / N College St - Northbound
17. N Tryon St / N College St - Southbound
18. E 12th St / N Caldwell St
19. Ballantyne Commons/Wynhollow Downs Lane
20. Johnston Rd / John Delaney Dr - Northbound
21. Johnston Rd / John Delaney Dr - Southbound
22. Tyvola Rd / Seventy Seven Dr
23. Tyvola Rd / Westpark Dr
24. Billy Graham Pk - Westbound (@ Westmont)
25. Billy Graham Pk - Eastbound (@Morris Field)
26. Scott Futrell Dr / Billy Graham Pk - Northbound (@ Scott Futrell)
27. Scott Futrell Dr / Billy Graham Pk - Eastbound (@ Bridge)
28. Tuckaseegee Rd / Little Rock Rd - Southbound
29. Tuckaseegee Rd / Little Rock Rd - Eastbound
30. Wilkinson DvWilkinson Bv / Little Rock Rd
31. N Tryon St / W WT Harris Bv - Tryon St NB (@ Ken Hoffman)
32. N Tryon St / W WT Harris Bv - Tryon St Southbound
33. N Tryon St / W WT Harris Bv - WT Harris Eastbound
34. N Tryon St / W WT Harris Bv - WT Harris Westbound
35. Fairview Rd / Sharon Rd - Sharon Rd Northbound
36. Fairview Rd / Sharon Rd - Sharon Rd Southbound
37. Fairview Rd / Sharon Rd - Fairview Rd Eastbound
38. Fairview Rd / Sharon Rd - Fairview Rd Westbound
39. RoadWarrior Trailer #1
40. RoadWarrior Trailer #2
41. RoadWarrior Trailer #3
42. RoadWarrior Trailer #4
43. RoadWarrior Trailer #5
44. RoadWarrior Trailer #6
45. RoadWarrior Trailer #7
46. RoadWarrior Trailer #8

9. Documentation

NDI will provide to CMPD one set of built drawings of the system and network, both physical and virtual upon completion of the installation.

10. Consulting

NDI, in performing and completing the services required to be perform shall:

a. Submit completed background check forms for any employee or contractor to CMPD at least 48 hours before said person is to arrive on site.
b. Furnish employees who have skills required for the job and furnish CMPD with employees' resumes upon request.
c. Furnish employees the specific address and name of the person to whom they report at CMPD designated premises.
d. Ensure that its employees comply with the rules, regulations, policies and procedures of the local premises, including but not limited to fire protection, safety and security.

e. Schedule its employees to work in coordination with the business needs of CMPD.
f. Remove any employee from assignment to DCJS for any reason upon CMPD request.
g. If approved by CMPD, NDI, with reasonable notice, will provide additional consulting personnel in support of the CMPD priorities and time constraints.

11. Warranty

For products, goods and services other than software delivered under the terms of this agreement or for products, goods and services delivered as the result of any purchase order placed by CMPD which incorporates the terms hereof NDI warrants that all products, goods and services provided and work performed under this Agreement will be substantially free from defects, performed in good and workmanlike manner and in accordance with the best practices of Contractor's trade or business. NDI warrants that all parts and labor furnished hereunder will perform as originally designed for a period of one year (365 days) after installation, servicing and/or repair, unless warranted for a longer period of time by the original manufacturer, in which case the longer warranty term shall apply.

12. Acceptance

NDI will complete the work required as specified in the attached hereto. All LPR systems and software will be fully operational and released for full-time operational and productive use by the end users and end users have received training. Upon completion of work under this contract or attached addenda NDI shall notify CMPD that the work has been completed. CMPD shall accept the work done or notify Vendor of any outstanding issues with incomplete or improper functioning services within five business days of phase completion. . Vendor will resolve all Priority 1 and Priority 2 issues within 15 days of delivery with all outstanding issues resolved within a reasonable time period not to exceed 180 days   CMPD may withhold approval until outstanding issues are cured. Acceptance of work shall not be unreasonably withheld by CMPD.

13. Training

NDI shall provide training to the end user intelligence analysts and other personnel as designated by CMPD within 15 business days from the completion of the installation.

14. Help Desk

NDI will provide Help Desk support.

15. Maintenance

NDI will provide CMPD with the highest level of maintenance and support available to any customer.

Standard support and maintenance benefits:
  a) 24/7 Web Support (call logging and knowledge base)
  b) All bug fixes & patches within the current version
  c) All software upgrades within the current version
  d) Access to NDI's engineers and analysts for consultations

16. On-site Maintenance

As detailed in Section 3, Pricing, NDI is proposing a 3 year on on-site fix or replace support term.

Roles and Responsibilities of NDI:

1. NDI will provide an appropriate staff resource for the project.

2. NDI will deal directly with the CMPD Project Manager as the primary point of contact.

3. NDI consultant assigned to work with CMPD on this project will be subject to approval by CMPD.

Roles and Responsibilities of CMPD:

1. Provide an individual as the point of contact for NDI consultant.CMPD or authorized third party contractor will obtain all permits required by local governments for this project.

2. Provide permissions from the utility companies and other third parties as may be required and arrange for a power appearance to be available at each installation site in accordance with the mutually agreed installation schedules.

3. Provide a suitable workspace, office supplies, furniture, and other facilities for the NDI consultant to use when on-site during the term of this engagement. NDI will provide a workstation and cell phone for employees to use and will provide all of these items and facilities for all off-site work (i.e., work performed at NDI facilities).

4. Provide appropriate facility and software access at the engagement start consistent with the duties that will be performed. NDI will safeguard all security passes and passwords, and return them at engagement completion.

5. Provide guidance and direction in the specific tasks to be performed.

6. Provide appropriate staff resources to work with the consultant as required and directed by CMPD management.

7. CMPD to provide 120v A/C Power at each processor location. Each processor will be directly wired into the NDI supplied breakout box for continuous power service. CDOT will provide use of existing surge suppression in the traffic control cabinets.

8. CMPD to provide a properly permitted site location as well as an approved surveyed mounting pole/platform to which cameras and processors are to be affixed to. CMPD to also provide bucket truck(s) as required as well as traffic control to assist during installations and mounting which may require temporary lane closures.

9. CMPD to provide required Ethernet connectivity to the VISCE server located back at the Agency.
    a). Direct Ethernet connection via CAT6 patch cable to existing server switch.

Schedules and Time Frames:

1. The expected timeframe to complete the project outlined in this Statement of Work is approximately 60 working days from the execution of an agreement. NDI and Charlotte Mecklenburg, through an executed contract addendum 2, have agreed to have the system operational no later than July 15, 2012. This is highly dependent upon the receipt of an official order or purchase order in a timely manner.

2. Changes to the scope, deliverables, timeframes, will be addressed through a Change Request Form and must be agreed to by both CMPD and NDI, subject to approval by any applicable control agency, if required. Both parties agree that both parties will be held harmless regarding the impact of harsh weather conditions on the installation, scheduling and project plan.NDI agrees to make every reasonable effort to make up lost time due to harsh weather or other conditions to maintain the timeline.

3. CMPD and NDI will determine the detailed schedule of tasks and deliverables for this project.

CMPD has directly contracted the Charlotte Department of Transportation (CDOT) to provide infrastructure services for this project, including, but not limited to:
1. Permits/Permissions/Agreements between CMPD, CDOT, NCDOT and Duke Energy
2. Engineering Drawings as required
3. Electrical connection to existing or new metered service
4. Ethernet connectivity to existing fiber network (where available as agreed between CMPD and CDOT). For Phase 1 and 2, the connectivity will be wireless. This connectivity may change at a later date to utilize the CDOT Fiber network based on agreement between CMPD and CDOT.
5. Pulling cables as needed through existing or new conduit/raceways
6. CMPD will purchase new extension arms for camera mounting for CDOT's use in equipment mounting/installation.
7. Mounting of camera/processor hardware to existing or new structures
8. Lift truck and traffic control for installation

As the existing infrastructure is jointly owned by CDOT and Duke Energy and in accordance with the agreements between the two entities, NDI cannot be responsible for any structural changes to the poles, mastarms or gantries, including drilling, cutting or mounting materials to the structures.

NDI will provide technician(s) on site with CDOT during each installation to provision each system, including, but not limited to:
1. Ensuring that hardware components are "field ready" to be installed
2. Connecting hardware components
3. Aiming/focusing each camera on the intended lane of traffic
4. Verifying that cameras are capturing the intended license plates
5. Configuring data connectivity on the LPR Processor(s)
6. Confirming that LPR "reads" are being transmitted from the processor to CMPD's server

In order to minimize impact on traffic flow and to maximize work crew safety, NDI will perform work as scheduled by CDOT in a timetable to be provided to all parties.

NDI Technologies is relying on the arrangements between CMPD and CDOT for a timely installation. NDI cannot be held responsible for delays beyond our control, including, but not limited to:

1. Delays caused by CMPD, CDOT, NCDOT or Duke Energy
2. Acts of God, including weather related or other disasters
3. Non-availability of infrastructure, server resources

Confidentiality Issues:

NDI agrees to maintain the confidentiality of all information concerning CMPD operations, procedures, policies, and systems. In addition to this Statement of Work, NDI and the individuals assigned to work on this project, agree to sign a Non-Disclosure agreement with CMPD and to abide by all of the requirements therein.

1. Cost: Total Cost of Ownership

    a. Total cost of ownership.

    The total cost of 3 year project ownership is calculated as $821,682.00 and is based on initial project implementation including all software, cameras, processors and all installation services including project management and full project support for the 3 year period. SEE SECTION 3 PRICING and QUOTATION.

    b. Software and hardware updates.
    As set out in the support and maintenance section, all software and hardware updates will be provided as and when required and delivered either by remote connections for software updates or by site-visit as required for hardware. SEE SECTION 5 Support and Maintenance.

    c. Training

    General System Administration Training (two days)

        a) *Hardware trouble shooting, camera maintenance /configuration, spares configuration / replacement (entire system)*
        b) *Software trouble shooting, TALON recognition engine, RCS (Remote Communications Server)*
        c) *Installation (software)*

2. Support

    a. Coverage detail and duration for warranty.

    All hardware provided by NDI Technologies shall be warranted for 365 days from installation as described in the attached Hardware Warranty Services Agreement.

    b. Coverage detail and duration for maintenance.

    Software and hardware shall be covered under the attached Software & Hardware Maintenance Agreement for a period of 1 year. The attached

agreement will detail all covered equipment, software and coverage periods.

c. Procedures for trouble reporting.

As outlined in the attached Software & Hardware Maintenance Agreement, support issues may be reported via:
Phone- 866-803-2638 x2
E-mail- support@nditech.net
Web- http://helpdesk.ndi-rs.net

d. Response time for trouble reporting (in hours).

Every effort is made to ensure that all trouble tickets are acknowledged within one hour of receipt during normal business hours.

e. Proposal for onsite support.

NDI will use remote diagnostic and troubleshooting methods to determine the cause of the problem and attempt to resolve it. If necessary, NDI will dispatch a repair technician to your location to repair the Equipment.

During the period of August 31, 2012 through September 7, 2012, NDI will make a technician available to provide on-site support within 30 minutes of a reported Priority 1 or Priority 2 issue. After this period, the regular onsite support criteria will apply.

3. Timeframe for Deployment

a. Proposed time table for deployment from May 31, 2012 receipt of purchase order.

Project is expected to be completed within approximately 60 days of receipt of purchase Order. See attached time table under "CMPD Project Timeline"

4. Training plan and documentation.

a. Training proposal.

Customized training shall be provided in three different areas:

1) *Basic System Administration (2 Days)*
   Troubleshooting of Hardware Components
   Hardware Configuration
   Troubleshooting of Software Components
   Software Configuration
   Troubleshooting Plate Reads
   Confirming Communications Connectivity

2) *VISCE Server Administration (1/2 Day)*
   User/Role Management
   Hotlist Management
   Configuration of VISCE Components

CONFIDENTIAL MATERIAL

3) _VISCE User Training (1/2 Day)_
   Searches
   Reporting
   Live Reads
   Analysis Tools

b. Available Online help resources.

   All product documentation is available in digital format and can be accessed online.

   Individualized online assistance is provided on an as needed basis utilizing an in-house remote desktop communications server with secured web access.

5. Security & Backups

   a. Procedures for secure data backup and transmission procedures in the event of a power failure or loss of communications.

      I. _In the event of a loss of communications, data will remain on the remote system until communications are restored. Once restored, data will automatically be transmitted to the server._

6. Vendor Stability

   a. References

      NDI Technologies, Inc. is based in Orlando Florida with additional support offices in Charlotte NC. The Company has an installed customer base of over 100 Law Enforcement Customers in the US. The majority of sales in the US to this point have been mobile installations. For this reason we introduce a few significant International sites as references for fixed camera installations to accompany the US references.

      Metropolitan Police (UK) (London Ring of Steel)
      Peter Foulser
      ANPR Programme Manager
      peter.foulser@met.police.uk

      Department of Criminal Justice Services (NY)
      Les Hoffman
      Program Director
      Les.hoffman@dcjs.state.ny.us
      (716) 847-3895

      Greater Manchester Police (UK) (Manchester Ring of Steel)
      Mike George
      ANPR Project Manager
      Michael.George@gmp.pnn.police.uk

      Lighthouse Point Police Department (Florida US) 26 C320 fixed camera city wide (25 million reads 18 months + VISCE and Static clients)

Chief Ross Licata
rlicata@lighthousepoint.com
(954) 784-3425

South Carolina Division of Law Enforcement (SLED) C320 Fixed and
Mobile Systems. VISCE is the State wide Back Office accepting PIPS and
ELSAG data.
Special Agent Sigrid Phinney
sphinney@sled.sc.gov
(803) 737-9000

Westchester Intelligence Center (NY) (C320 fixed site + VISCE)
Robert Kelly
Executive Director
rkelly@westchesterda.net
914-995-8821 (office)

Additional information

Bulgaria

NDI installed 143 cameras in the city of Sofia (capital of Bulgaria). This is
a city centre wide installation and records more than 150,000 vehicles per
day. NDI provide TALON recognition engine, in-station PRU's and ANPR
cameras.

Kabul, Afghanistan

NDI provide the 'Green Zone' ANPR system in Kabul. This is a US military
funded project and uses C320 cameras; TALON, roadside PRU's and a
VISCE back office. Used for the detection of IED devices (intelligence led
activation on hotlist alerts).

Dubai, UAE

NDI provide the largest ANPR system into Dubai. Over 100 cameras in 7
different fixed site locations at the Jumeirah Group premises including the
Burj Al Arab, Madinat Jumeirah and the Emirates Towers - all iconic
symbols in Dubai. This is fixed site capture; extreme weather conditions
and use TALON recognition, VeriPlate static / VISCE.....(roll out).

b. Local (Charlotte, NC) availability of support/service

*Currently we have one representative in the state of NC (Jed Hammond)
who is based in Charlotte and is within minutes of CMPD. If successful
with this project, we would consider additional technical support should
that become a requirement.*

c. Size

NDI Technologies, Inc. NDI Technologies Ltd. and NDI Recognition Systems Ltd. are subsidiary companies of the Dacoll Group Ltd. a privately held entity in Scotland (UK).

NDI Technologies, Inc. has offices in Orlando FL and Charlotte NC and employs a full time staff of 23.

NDI Technologies, Ltd. has offices in Nantwich (UK) and employs a full time staff of 20.

NDI Recognition Systems Ltd. has offices in Maidenhead (London UK) and employs a full time staff of 24.

The Dacoll Group is made up of the three NDI companies (all software and all Law Enforcement specific), Dacoll Ltd., a service based IT company www.dacoll.co.uk with offices in Edinburgh (HQ), Birmingham and London (UK) and employs a full time staff of 145. KMF Precision Sheet Metal Fabrication (50% share holding) www.kmf.co.uk employing a full time staff of 250 and is the largest sheet metal fabrication plant in the UK.

Dacoll Ltd. was founded in 1969 by Brian Colling who remains the Group Chairman.

NDI Technologies Ltd. was founded in 2001.
NDI Technologies Inc. was incorporated in Florida in late 2003.
NDI Recognition Systems was formed from the acquisition of Appian Technology PLC and re-named NDI Recognition Systems in December 2008.

NDI Technologies Inc. is funded as required by NDI Technologies Ltd and Dacoll Group in the UK. The company has no external debt, no VC or bank funding and is a strategic Dacoll Group investment in the License Plate Recognition and "Intelligence" market in the US and 23 other countries.

d. Years in business

NDI Technologies Inc. 8 years
NDI Technologies Ltd. 10 years
NDI Recognition Systems Ltd. 2 ½ years (Appian 12 years prior)
Dacoll Ltd. 42 years
Dacoll Group Ltd. 13 years

ndi≳s
NOI RECOGNITION SYSTEMS

SECTION 2

PROJECT PLAN

- 1460 -

Project Plan

The following explains how NDI would deliver the project:

> NDI will provide two engineers at the Task Force HQ prior to installation for final test and configuration. Two more NDI representatives will arrive to assist when on-site installations begin to ensure speedy and efficient commissioning of each system.

> System training will be made available as the installations get underway and at the convenience of CMPD.

Initial "DRAFT" project Gant chart

CMPD Project Plan - 11MAY2012.pdf

SECTION 3

PRICING

ndiRS
NDI RECOGNITION SYSTEMS
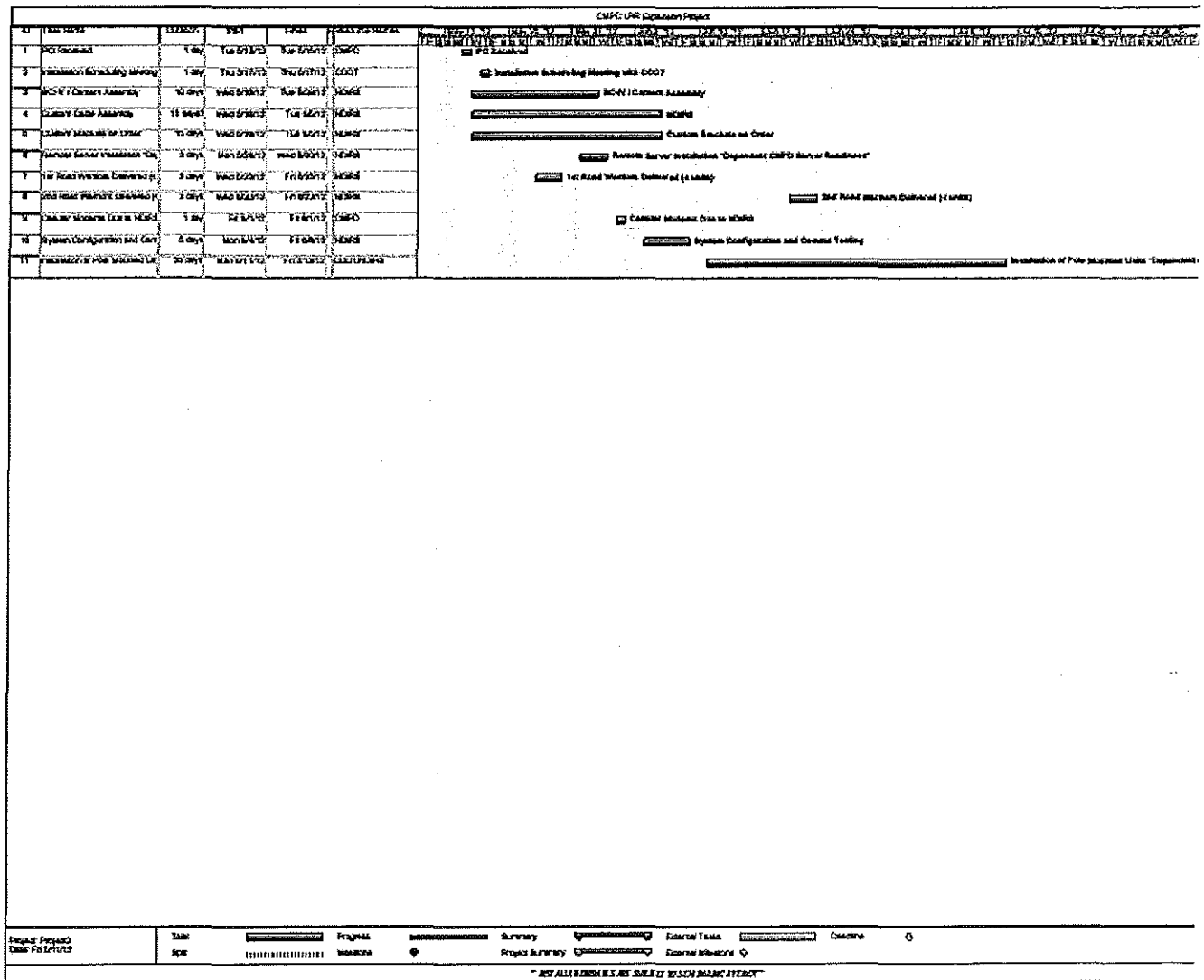
Quotation

Comprising: (87 ALPR Cameras on 38 Poles at 19 Locations)

- 97 NDI ALPR Cameras (87 @ $4,500.00/each) $436,500.00

- 40 NDI ALPR Processors (40 @ $6,000./each) $240,000.00

- 97 Custom ALPR Cables (10 Meters @ $450.00 each) $43,650.00

- Camera/Processor Brackets and Mounts Approximately $38,800.00

- VISCE Back-Office End User "SITE LICENSE" $10,000.00

- Engineering & Installation Services: (10 days @ $1,800./day) $18,000.00

- On-Site Pre & Post Go-Live Project Management: $18,000.00

- No-Charge Mobile "Strategic Partnership" Upgrades   "No-Charge"

- 3 Years "On-Site Fix or Replace" Annual Support Agreement $120,232.00

> NOTE: Annual On-Site Fix/Replace is 16% of Capital Investment.
> Years 2 & 3 are being included/provided at "No-Charge".

Strategic Partnership Upgrade DISCOUNT: *(Less) -$50,000.00*

*Optional: (Not Included in above Proposal) 4 Road Warrior ALPR Outfitted Combined Mobile Information Board Trailers / Mobile Speed Trailers. All Traffic Solutions Speed Alert 24 Radar Message Sign / RMS including Bluetooth & shipping to Charlotte, NC. ($127,080./ 4 trailers and $59,000./ ALPR Kits installed) *Total Option: $186,080.00

*Optional: (Not included in above proposal) 2 (2 Camera) Rapid Deployment Systems (RDS Units) $9,995. Each with annual maintenance and support $1,599. Each. Total for 2 RDS Systems $23,188.00 which includes the 3 year "On-Site" fix/replace support agreement for both systems.

*Optional: (Not included in above proposal) 46 Sierra Wireless AirLink GX400 modems @ $592. Ea. to facilitate connectivity of processors to centralized database system.

- ✓ Travel & Living Costs are also "Included" within this proposal.

- ✓ NDI will be provided and including 3 (three) years system on-site fix and/or repair support and maintenance (after discounts)

For a total of $821,682.00

Total 3 Year Cost of Ownership $875,182.00

Phase I: Asset Forfeiture Funded

Description	Amount	Cost	Total
Road Warrior Message/Speed Trailers ALPR Equipped	4	$ 46,520.00	$ 186,080.00
"Rapid Deployment" Mobile ALPR	2	$ 11,594.00	$ 23,188.00
Total			$ 209,268.00

Phase II: DNC Grant Funded

DNC Grant Funding			
Description	Amount	Cost	Total
NDI ALPR Processors	35	$ 6,000.00	$ 210,000.00
NDI ALPR Cameras	60	$ 4,500.00	$ 270,000.00
Custom ALPR Cables	60	$ 450.00	$ 27,000.00
Brackets & Mounts (not priced individually)		$ 21,004.00	$ 21,004.00
On Site Pre & Post Go-Live Project Management		$ 9,000.00	$ 9,000.00
Engineering & Installation Services		$ 9,000.00	$ 9,000.00
VISCE Back Office End User Site License		$ 5,000.00	$ 5,000.00
Three-year "On-site Fix or Replace" Support		$ 70,168.00	$ 70,168.00
NDI-Recognitions Systems Strategic Partnership Discount		$ (50,000.00)	$ (50,000.00)
Total			$ 571,172.00

Phase III: UASI Funded

Description	Amount	Cost	Total
UASI Funding			
NDI ALPR Processors	5	$ 6,000.00	$ 30,000.00
NDI ALPR Cameras	37	$ 4,500.00	$ 166,500.00
Custom ALPR Cables	37	$ 450.00	$ 16,650.00
Brackets & Mounts (not priced individually)		$ 15,396.00	$ 15,396.00
On Site Pre & Post Go-Live Project Management		$ 9,000.00	$ 9,000.00
Engineering & Installation Services		$ 9,000.00	$ 9,000.00
VISCE Back Office End User Site License		$ 5,000.00	$ 5,000.00
Three-year "On-site Fix or Replace" Support		$ 52,528.00	$ 52,528.00
Road Warrior Message/Speed Trailers ALPR Equipped	4	$ 46,520.00	$ 186,080.00
Sierra Wireless AirLink GX400 cellular modems	46	$ 529.00	$ 27,232.00
Servers (Application, Web, and Database)	3	$ 7,239.00	$ 21,717.00
Aluminum Poles (CDOT)	38	$ 1783.36	$ 67,768.00
Total			$ 606,871.00
Total minus CMPD servers and poles			$ 517,386

Total of Phase I, II and III (less servers & poles of $89,485.) $1,297,826.00

Payment Terms

NDI will invoice for the hardware / software and installation services based on the following milestone payment structure. All payments are due on receipt of invoice. All Prices are in U.S. Dollars. Fees and prices are exclusive of tariffs, duties or taxes imposed or levied by a government or governmental agency.

Milestone	Total Amount	15% Holdback	Amount to Pay
Phase 1 Equipment delivery	$209,268.00	$31,390.20	$177,877.80
Phase 1 Acceptance -All equipment is installed and operational based on acceptance criteria in Deliverables.12	$31,390.20		$31,390.20
Phase 2 Equipment Delivery	$553,172.00	$82,975.80	$470,196.20
Phase 2 Acceptance -All equipment is installed and operational based on acceptance criteria in Deliverables.12	$82,975.80		$82,975.80
Phase 3 Equipment Delivery	$499,386.00	$74,907.90	$424,478.10
Phase 3 Acceptance - All equipment is installed and operational based on acceptance criteria in Deliverables.12	$74,907.90		$74,907.90
Subtotal	$1, 261,826	191,973.90	$1,261,826
Final Acceptance- All three phases	$36,000		$36,000

Milestone	Total Amount	15% Holdback	Amount to Pay
are complete and accepted. Includes Installation and PM services			
Grand Total	$1,297,826		$1,297,826

SECTION 4

HARDWARE SPECIFICATIONS

1   CMPD Hardware requirement

CMPD agrees to provide the VISCE Server Hardware – SQL DB Software as recommended below.

VISCE – Hardware Requirements:

1) *Application Server (CPS)*
    i)   *DELL R610, dual Xeon E5630 CPU @2.53GHz, 16GB RAM, 160GB local disk*
    ii)   *Windows Server 2008 R2 Standard*

2) *Web Server (VISCE Website)*

    i)   *DELL R410, X5570 @ 2.93 GHz, 8GB RAM, 80GB local disk*
    ii)   *Windows Server 2008 R2 Standard*
    iii)   *IIS 7*

3) *Database Server*

    i)   *DELL R410, X5570 @ 2.93 GHz, 16GB RAM, 500GB local disk with 1 TB data storage.*
    ii)   *Windows Server 2008 RS Standard*
    iii)   *SQL Server 2008 Standard (Or Enterprise if they want to cluster it)*

The above or equivalent to be made available for the Remote VISCE installations

Static Client Screen Shots

The Static clients software is a small Windows application than can be installed on Windows PS's Laptop computers etc. The client connects to the VISCE Server via the LAN, WiFi or Cellular Air-Card and receives all reads from all cameras in real time from the VISCE server.

The application will show up to 4 camera feeds at a time (banks of up to 4 camera feeds) and supports as many banks as required. The User can tab from bank to bank depending on requirement. You can configure cameras to be viewed on different screens if you wish so as to get a WALL of camera activity.

Alerts will be seen as a hit occurs (configurable by user)

Fig 11 shows a Static Client screen at Lighthouse Point PD Florida.

CONFIDENTIAL MATERIAL

FIG 12 Static Client screens in Lighthouse Point P.D Dispatch.
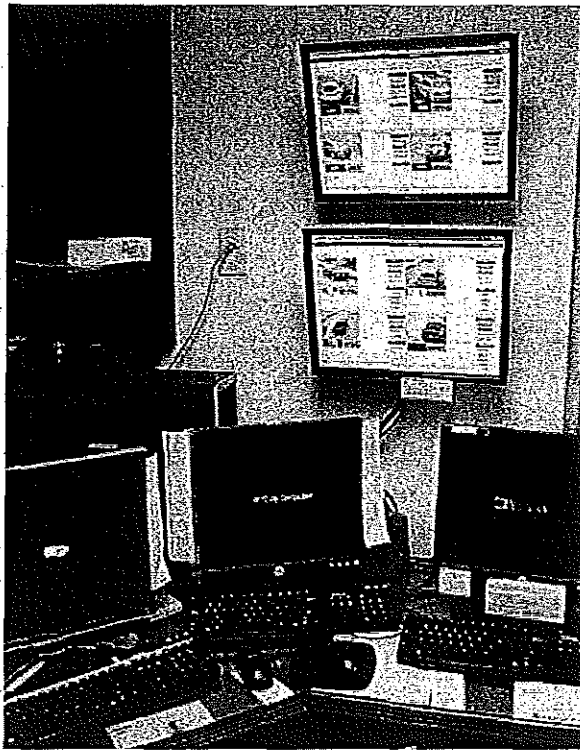
FIG 13 SSP in Mexico City use two screen variants
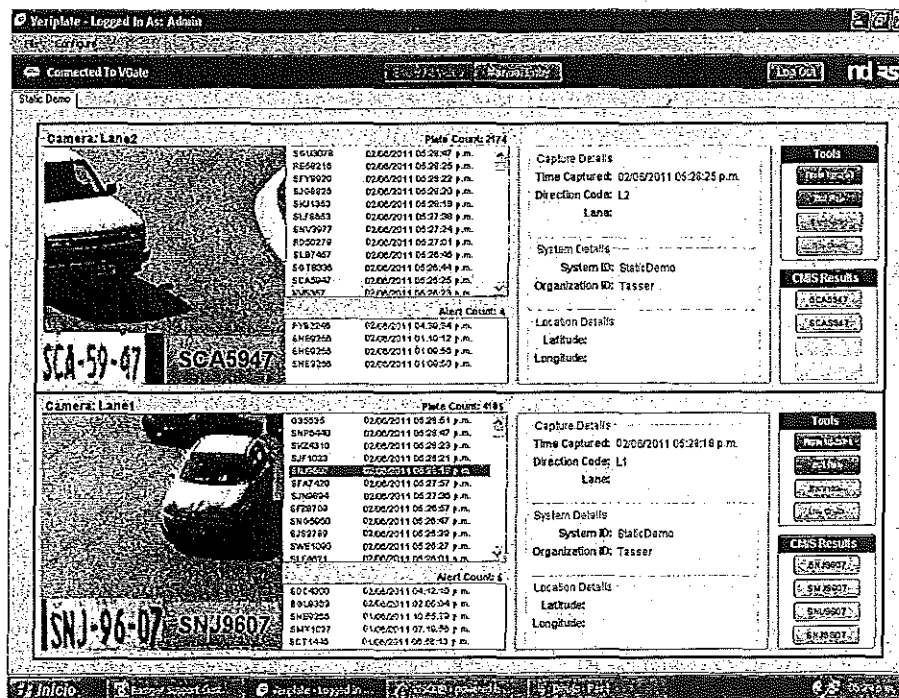
QUOTE

ELSAGNorthAmerica
A Finmeccanica Company
Prepared by: Craig Duncan
Phone: 910-986-0596
Email: craig.duncan@elsag.com

205 - H Creek Ridge Road
Greensboro, NC 27406
Duns # 196140821
FED TAX ID# 800119568
Tel: 1.877-77-ELSAG
(1.877.773.5724)
Fax: 1.336.379.7164

Quote#:	2012-581	Quote Date:	01/09/2012
Funding Source:		Quote Expiry Date:	04/08/2012
Grant Details:		Scheduled Install Date:	
Payment Method:	PO		

Terms: Net 30 days from date of shipment. If installation is required then Net 30 days from the Installation Date. Elsag agrees not to ship equipment until an Installation Date is agreed upon by the Parties. All orders shipped FOB Greensboro.

Comment:

Bill To:	Charlotte-Mecklenburg PD 601 E Trade St Charlotte, NC 28202-2940 United States Attn:Jennings Phone:(704) 432-1605	Ship To:	Charlotte-Mecklenburg PD 601 E Trade St Charlotte, NC 28202 United States

Product Qty	Product /Service	Unit Price	Amount
35	Hi Res Fixed Cam 25/35mm, 810 (421592)	8,950.00	313,250.00
10	ASM POLE MOUNT 2 CAMERA (421218)	295.00	2,950.00
3	ASM, POLE MOUNT, 1 CAMERA (421399)	190.00	570.00
12	FCU Box Asm, 1-4 Camera System (120050)	6,110.00	73,320.00
35	ELSAG Operations Center (EOC) License Fee (410322)	1,275.00	44,625.00
1	Installation Charge for ELSAG Operations Center (EOC) configuration for up to 10 units (210022)	1,250.00	1,250.00
10	TOC- Tactical Operations Center (520108)	975.00	9,750.00
10	Installation requires an onsite visit by trained tech (210020)	1,250.00	12,500.00
1	Cable 150ft FG Pigtail (410395-150)	1,235.00	1,235.00
	10% Discount:		-45,945.00
Upfront	Goods & Services Sub-total (Pre-Tax):		413,505.00
	Tax Exempt		0.00
	Goods & Services Total:		413,505.00

QUOTE

ELSAGNorthAmerica
A Finmeccanica Company

Prepared by: Craig Duncan
Phone: 910-986-0596
Email: craig.duncan@elsag.com

205 - H Creek Ridge Road
Greensboro, NC 27406
Duns # 196140821
FED TAX ID# 800119568
Tel: 1.877-77-ELSAG
(1.877.773.5724)
Fax: 1.336.379.7164

Quote#:	2012-598	Quote Date:	01/16/2012
Funding Source:		Quote Expiry Date:	04/15/2012
Grant Details:		Scheduled Install Date:	
Payment Method:			

Terms: Net 30 days from date of shipment. If installation is required then Net 30 days from the Installation Date. Elsag agrees not to ship equipment until an Installation Date is agreed upon by the Parties. All orders shipped FOB Greensboro.

Comment:

Bill To:	Charlotte-Mecklenburg PD 601 E Trade St Charlotte, NC 28202-2940 United States	Ship To:	Charlotte-Mecklenburg PD 601 E Trade St Charlotte, NC 28202 United States

Product Qty	Product /Service	Unit Price	Amount
2	MPH-900 ADM3 ST2 25/1610ft(110082) ***Transportable ELSAG Mobile ALPR system	16,350.00	32,700.00
2	ELSAG Operations Center (EOC) License Fee (410322) ***ELSAG OPERATION CENTER(EOC) back end server license for Transportables	1,275.00	2,550.00
1	Installation requires an onsite visit by trained tech (210020) ***Installation, networking and training for transportable ALPR systems	1,250.00	1,250.00
1	Radar Trailer-AD3S (110133) ***ELSAG ALPR Radar Speed Trailer	32,000.00	32,000.00
2	ELSAG Operations Center (EOC) License Fee (410322) ***ELSAG OPERATION CENTER(EOC) back end server license for ALPR Speed Trailer and ALPR Message Board Trailer	1,275.00	.2,550.00
1	MPH-900SIGN Speed Monitor Full Matrix Sign Board trailer with RADAR and two(2) camera LPR system, onboard PC, Router, Power and Communications	51,900.00	51,900.00
	10% Discount:		-12,295.00
Upfront	Goods & Services Sub-total (Pre-Tax):		110,655.00
	Tax Exempt		0.00
	Goods & Services Total:		110,655.00

QUOTE

ELSAGNorthAmerica
A Finmeccanica Company

Prepared by: Craig Duncan
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Email: craig.duncan@elsag.com

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Greensboro, NC 27406
Duns # 196140821
FED TAX ID# 800119568
Tel: 1.877-77-ELSAG
(1.877.773.5724)
Fax: 1.336.379.7164

Quote#:	2012-582	Quote Date:	01/09/2012
Funding Source:		Quote Expiry Date:	04/08/2012
Grant Details:		Scheduled Install Date:	
Payment Method:	PO		

Terms: Net 30 days from date of shipment. If installation is required then Net 30 days from the Installation Date. Elsag agrees not to ship equipment until an Installation Date is agreed upon by the Parties. All orders shipped FOB Greensboro.

Comment:

Bill To:	Charlotte-Mecklenburg PD 601 E Trade St Charlotte, NC 28202-2940 United States Attn:Jennings Phone:(704) 432-1605	Ship To:	Charlotte-Mecklenburg PD 601 E Trade St Charlotte, NC 28202 United States

Product Qty	Product /Service	Unit Price	Amount
47	Hi Res Fixed Cam 25/35mm, 810 (421592)	8,950.00	420,650.00
10	ASM POLE MOUNT 2 CAMERA (421218)	295.00	2,950.00
4	ASM, POLE MOUNT, 1 CAMERA (421399)	190.00	760.00
19	FCU Box Asm, 1-4 Camera System (120050)	6,110.00	116,090.00
47	ELSAG Operations Center (EOC) License Fee (410322)	1,275.00	59,925.00
15	Installation requires an onsite visit by trained tech (210020)	1,250.00	18,750.00
5	Cable 150ft FG Pigtail (410395-150)	1,235.00	6,175.00
	10% Discount:		-62,530.00
Upfront	Goods & Services Sub-total (Pre-Tax):		562,770.00
	Tax Exempt		0.00
	Goods & Services Total:		562,770.00

* Training and 24 Hour Telephone Support are included in your purchase at no additional cost and will continue throughout your warranty period.

Sub-Total		$	95,000
ALPR Outfitted Combined Mobile Information Board Trailers / Mobile Speed Trailers.	4 @ $46,520	$	186,080
Two Camera Portable Rapid Deployment System	2 @ $11,594	$	23,188
Sub-Total		$	209,268
Summary			
Fixed ALPRs		$	821,682
Servers		$	21,717
Aluminum Poles		$	95,000
ALPR Equipped Message/Speed Trailers		$	186,080
Two Camera Portable Rapid Deployment System		$	23,188
Total		$	1,147,667

[1] Included in pricing in the event that ALPRs cannot be mounted on CDOT poles

ELSAG North America			
Description	Cost	Total	
Hi Res Fixed Cam 25/35mm, 810	82 @ $8,950	$	733,900
ASM POLE MOUNT 2 CAMERA	20 @ $295	$	5,900
ASM, POLE MOUNT, 1 CAMERA	7 @ $190	$	1,330
FCU Box Asm, 1-4 Camera System	31 @ $6,110	$	189,410
ELSAG Operations Center (EOC) License Fee	82 @ $1,275	$	104,550

Servers		$	21,717
Aluminum Poles		$	95,000
ALPR Equipped Message/Speed Trailers		$	155,612
ELSAG Mobile LPR System		$	32,850
Total		$	**1,281,454**

[1] Included in pricing in the event that ALPRs cannot be mounted on CDOT poles

[2] ELSAG cost provided for two trailers. Computation shown is for CMPD request of four speed/message trailers including 10% discount offered by ELSAG

[3] Includes 10% discount offered by ELSAG

ELSAG Portable ALPR (2)

	$	32,700
	$	2,550
	$	1,250
Sum	$	36,500
With 10% Discount	$	32,850
Each	$	16,425

ELSAG Mobile Speed/Message Trailers

	$	32,000
	$	2,550
	$	51,900
	$	86,450
X 2 to match request for four trailers	$	172,900
With 10% Discount	$	155,610
Each	$	38,903

Comparison					
NDI			ELSAG		
Fixed ALPRs	$	821,682	Fixed ALPRs	$	976,275
Servers	$	21,717	Servers	$	21,717
Aluminum Poles	$	95,000	Aluminum Poles	$	95,000
ALPR Equipped Message/Speed Trailers	$	186,080	ALPR Equipped Message/Speed Trailers	$	155,612
Two Camera Portable Rapid Deployment System	$	23,188	ELSAG Mobile LPR System	$	32,850
Total	$	1,147,667	Total	$	1,281,454

NDI Recognition Systems: Revised 01/19/12 (Uptown and Outlying Locations)		
Description	Cost	Total
Uptown Locations		
38 NDI ALPR Cameras	38 @ $4,500.00/each	$ 171,000
17 NDI ALPR Processors	17 @ $6,000./each	$ 102,000
38 Custom ALPR Cables	38 @ $450.00 each	$ 17,100
Camera/Processor Brackets and Mounts		$ 15,200

VISCE Back-Office End User "SITE LICENSE"		$	5,000
Engineering & Installation Services	5 days @ $1,800./day	$	9,000
On-Site Pre & Post Go-Live Project Management		$	9,000
3 Years "On-Site Fix or Replace Support Agreement		$	52,528
Strategic Partnership Upgrade Discount		$	(25,000)
Sub-Total		**$**	**355,828**
Outlying Locations			
53 NDI ALPR Cameras	53 @ $4,500.00/each	$	238,500
22 NDI ALPR Processors	22 @ $6,000./each	$	132,000
53 Custom ALPR Cables	38 @ $450.00 each	$	23,850
Camera/Processor Brackets and Mounts		$	21,200
VISCE Back-Office End User "SITE LICENSE"		$	5,000
Engineering & Installation Services		$	9,000
On-Site Pre & Post Go-Live Project Management		$	9,000
3 Years "On-Site Fix or Replace Support Agreement		$	70,168
Strategic Partnership Upgrade Discount		$	(25,000)
Sub-Total		**$**	**483,718**
Total Uptown and Outlying Locations		**$**	**839,546**
HP ProLiant DL360 G7 High Performance Server		$	6,646
HP Care Pack, 5 Years, 4 Hours, 24x7 ProLiant DL360		$	1,484
HP ProLiant DL360 G7 Server		$	4,150

HP Care Pack, 5 Years, 4 Hours, 24x7 ProLiant DL360		$	1,484
HP ProLiant DL360 G7 Server		$	6,469
HP Care Pack, 5 Years, 4 Hours, 24x7 ProLiant DL360		$	1,484
Sub-Total		$	**21,717**
Aluminum Poles (installing and connecting an electrical hookup) [1]	38 @ $2,500	$	95,000
Sub-Total		$	**95,000**
ALPR Outfitted Combined Mobile Information Board Trailers / Mobile Speed Trailers.	4 @ $46,520	$	186,080
Two Camera Portable Rapid Deployment System	2 @ $11,594	$	23,188
Sub-Total		$	**209,268**
Summary			
Fixed ALPRs		$	839,546
Servers		$	21,717
Aluminum Poles		$	95,000
ALPR Equipped Message/Speed Trailers		$	186,080
Two Camera Portable Rapid Deployment System		$	23,188
Total		$	**1,165,531**

[1] Included in pricing in the event that ALPRs cannot be mounted on CDOT poles