VERSATERM

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June 28, 2019

Ms. Peggy Joyner
Purchasing Director
1117 Eisenhower Drive Suite C
Savannah, Georgia 31406
Solicitation No. 19-0062

Re: **REQUEST FOR INFORMATION CAD/RMS SYSTEM Solicitation No. 19-0062**

Dear Ms. Joyner,

On behalf of Versaterm, I am pleased to present our response to your Request for Information for a Computer Aided Dispatch, Records Management and Jail Management System. As requested we have provided as detailed a response as possible to your RFI. As you will see Versaterm has over 40 years of successful experience in providing the solutions you are seeking.

Versaterm has a long and successful track record replacing large, multi-jurisdictional and multi-class CAD, Mobile Data and Law Enforcement Records Management Systems. Much of our success, and more important, that of our customers; comes from Versaterm's unique business approach toward meeting your needs. Rather than merely acting as a good vendor, we work in partnership with you to achieve long-term success.

Our response includes the following sections:

Section 1 will provide an introduction to Versaterm, our solutions, their technical architecture and the professional services we provide.
Section 2 includes a detailed description of our Computer Aided Dispatch System and Mobile;
Section 3 includes a detailed description of our Law Enforcement Records Management System
Section 4 includes a detailed description of our Data Analytic solution and
Section 5 will provide you with a biography of each of our customers.

We look forward to having the opportunity of meeting with you and other County representatives so that we can provide you with any additional information that you might require as you prepare to undertake this significant process. Please feel free to contact me at the number email listed below.

Sincerely,

James Mortimer

James Mortimer
Business Development Manage
Versaterm
Jim.mortimer@versaetrm.com
(480) 225-0316

The **Versaterm Law Enforcement Records Management System-vRMS** is a future-proof system that provides a true *operational* management system supporting all facets of a Police department. Traditionally, the RMS has been thought of as an administrative system that is simply report collection and statistical reporting with a module for case management. The vRMS, however, is designed to be the operational system that supports report creation, investigations, workflow, analytics as well as statistical reporting.

The vRMS as part of an enterprise solution is also tightly integrated to our vCAD so that it has become a key component in any 9-1-1 response as it makes all of the department's relevant knowledge available to every field officer at the touch of the screen on the CAD's mobile client. While CAD provides the real-time command and control, it's the RMS that provides situational awareness. For example, when dispatched to a call, an officer, by simply touching the address displayed on the screen, can query the RMS for all activity and situations relative to the incident's location. This includes not only premise history and warnings, but also an account of all activity and persons connected to the location.

Single Entry

One of the foundational concepts of the Versaterm solution set is single entry – single entry across the entire suite of Versaterm products. Data entered into CAD and Mobile is reused, not reentered when it encounters Field Reporting and RMS. To the end user then, the CAD-RMS-Mobile operates as a single solution. That is, the user is not the integrator between various components as the information flows naturally – collected once and augmented and/or re-used many times. The RMS is then an extension to the CAD as it provides the investigative and analytics portion of the enterprise solution.

RMS *is* Workflow

vRMS supports an advanced, integrated workflow for a wide-range of business processes. These aren't simply limited to routing cases because vRMS's workflow is a fundamental architecture of the RMS and the Versaterm solution as a whole. As a result, Workflow is a strategic function of vRMS that yields much of the efficiency gains experienced by our customers making vRMS a system that pays for itself.

Workflow begins as soon as the call-for-service arrives, as this is where interaction between CAD, the mobile and RMS begins. For example, if the call requires immediate action it can be immediately dispatched to a first responder via the Mobile System and here is where the interaction between RMS (and optional CAD) as described above comes into play. Alternatively, if the call is of a less urgent nature where a response can be handled over the phone or by a scheduled appointment it can be queued for an alternative response.

This ability to divide emergency responses from non-emergency responses provides efficiencies in non-emergency reporting while also streamlining front-counter workload. This is because the call can be initiated from within the RMS session and streamline the process of taking a front-counter report while relieving some of the load on first responders.

From the time a report is written in the field, it too becomes part of workflow as it travels through the report approval processes; from completion, to submission, to approval and on to the master indices within the RMS. All the while dashboards provide quick and manageable views of the current state of the report(s).

Workflow routing rules provide a configurable layer so that reports are routed/distributed efficiently based upon the data attributes within the report (e.g. district, type of crime(s), involvements, etc.). Information is efficiently disseminated to those users who need to be informed and those who will have work to do – it is delivered through their workflow dashboards.

Workflow is also fundamental to the property disposal process where the RMS can calculate the disposal review dates and notify the officers/detectives when they have property to be disposed. The user can, through the dashboard, select and digitally sign the disposal authorization or request an extension.

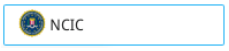
Workflow is even designed to incorporate subpoena tracking so that subpoenas can be electronically distributed and monitored.

Unlike many systems where users have to initiate the searches to find what work they need to do, vRMS's auto-routing efficiently distributes (pushes) cases to the various users' dashboards that automatically present information, cases and tasks.

Fully Integrated NCIC/State Crime Information Systems (SCIC)

The vRMS supports integrated NCIC/SCIC queries; however, we take this a step further. vRMS incorporates integrated transactions that are automatically spawned as a result of entering information into the RMS. For example, the system can be configured to automatically generate the appropriate EV transaction to the Georgia Crime Information Center (GCIC) when a user adds a stolen vehicle. The resulting numbers (e.g. NIC) are automatically stamped on the source RMS record so that, should it be recovered, the appropriate "clear" transactions can be generated and sent to GCIC. This level of integration provides accuracy and timeliness. This feature is also available for Stolen Property, and Missing Persons.

Security roles control whether the user may generate the appropriate transaction. Should the user not have the appropriate security role, the benefit is not lost as the transaction will then be routed, (through vRMS workflow), to a user with the appropriate credentials so that it can be verified and released to GCIC/NCIC.

Additionally, all of the GCIC masks can be available within vRMS via a button 

so that the agencies have a comprehensive NCIC/GCIC user interface without requiring a 3rd party application. The vRMS also delivers a NCIC form painter, which provides the Department with the ability to maintain the forms and the corresponding transactions. It should be noted that we currently don't' have an operational GCIC interface as described above but have successfully implemented the same functionality in the States of Washington, Oregon, California, Arizona, Texas, Utah, Pennsylvania, and Florida. We will provide a similar interface with GCIC.

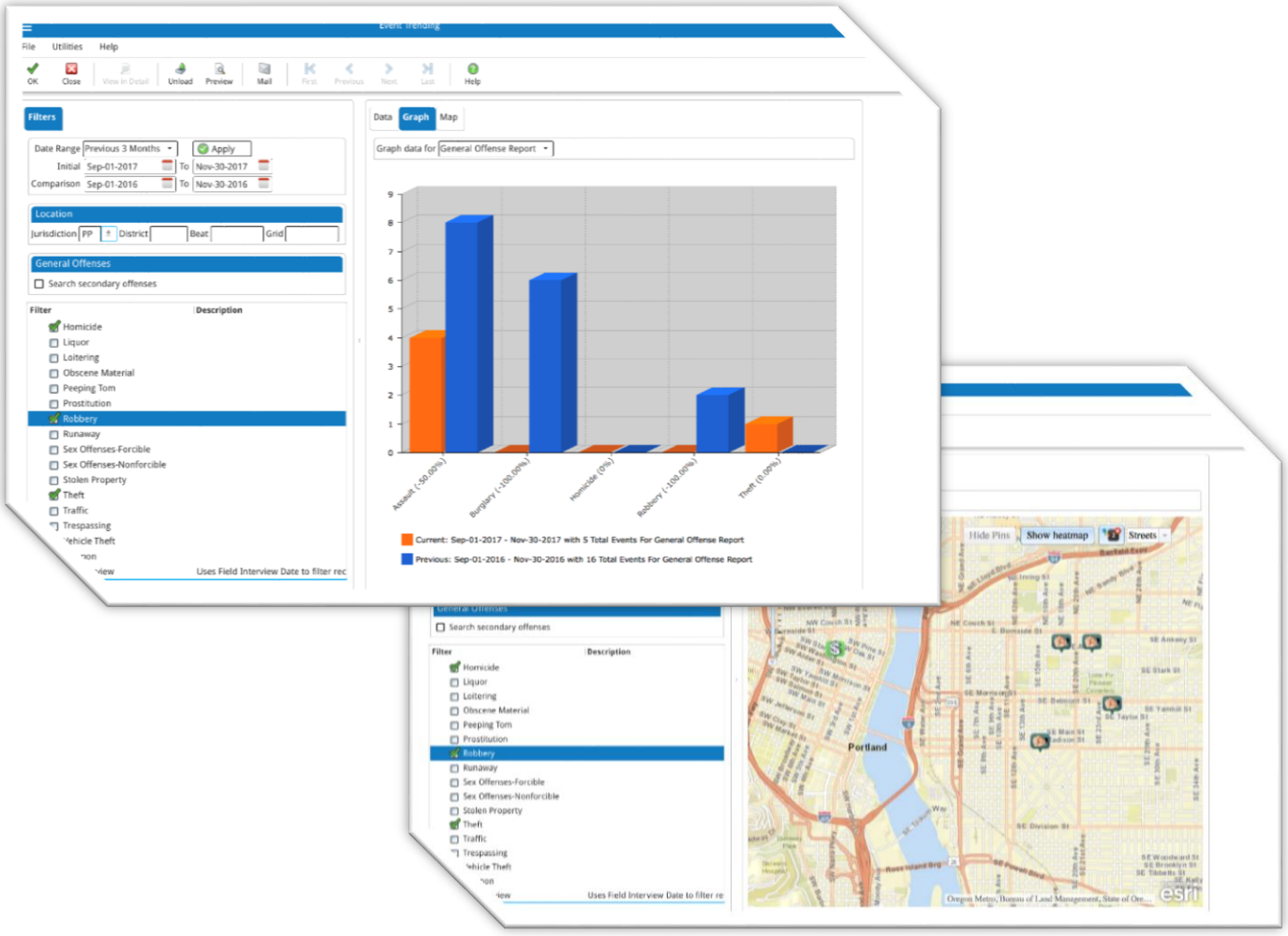
Powerful Searching and built-in Analytics

It's your data – your information. This is why search and analytical functions, like workflow, are part of the architectural foundation of vRMS. Because of this, everything from a simple search to extensive research is at the fingertips of all users, not just crime analysts and/or super users using third party products. The following are a few examples:

The vRMS supports powerful searching using special algorithms that are much more robust than simple sound-alike/Soundex features. These algorithms greatly increase the odds of finding what you need on the first search. vRMS also supports full blown ad-hoc searching so that users can search all information entered into any data field including narrative text.

Creating searches is simple because the same forms used to collect data are used to search data. Then results can be viewed, printed, unloaded and, in many cases, viewed on the integrated map.

Event Trending provides a similar search tool but provides quick view of trends comparing crimes over a time period where the user can visualize in a graph and/or on a map.



Key Features

- *General RMS – CAD events*

  vRMS incorporates all CAD calls initiated by the CAD system – in detail, not just summary form. Therefore, all data from all CAD calls is stored in the RMS as a complete and separate CAD event, which is then available to all the searching and analytical tools. All CAD events are also automatically transformed into the vDataMart and are thus available for very advanced analytics using tools such as Tableau, Crystal Reports or any other industry standard system.

  Officer/unit activity, generated on the CAD, is also transferred to the vRMS and vDataMart. This enables advanced reporting and analytics of officer's time (often replacing the log book).

- *Field reporting*

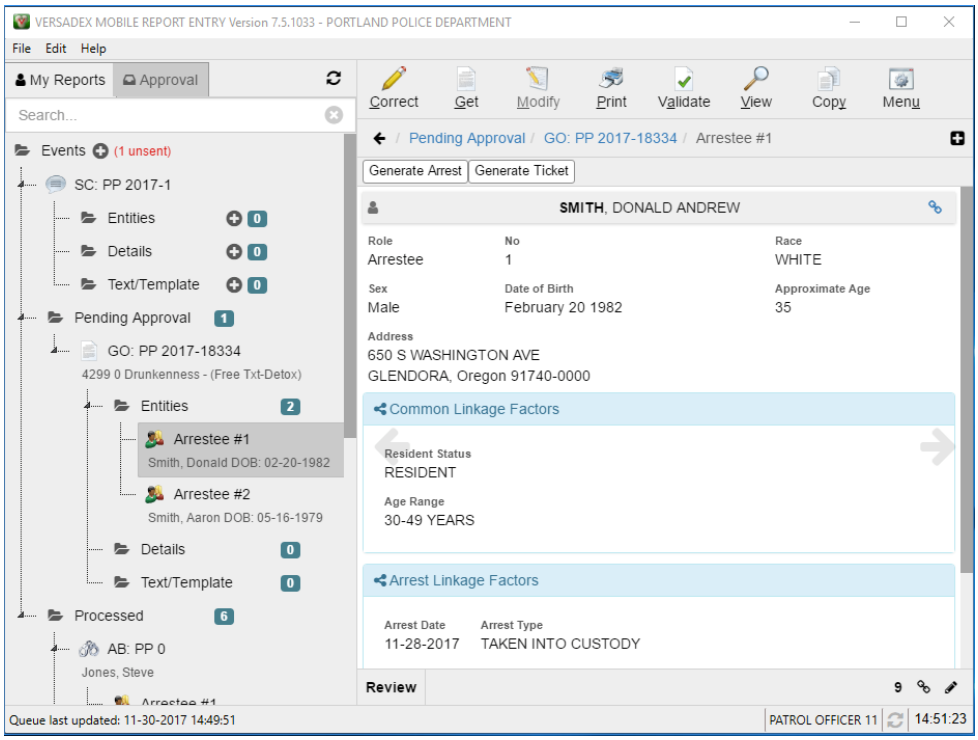
  Versaterm was the pioneer in delivering successful and fully integrated field reporting with operational systems installed in the early 1990s. Today, most Versaterm installations include Versaterm Mobile Report Entry (vMRE as the product is named).

  Officers are able to generate a wide range of reports for the following report types:

  - General Offense Reports
  - Motor Vehicle Accident Reporting
  - Property/Evidence Report
  - Supplemental Reports
  - Follow-up Reports
  - Street Checks/Field Contacts
  - Arrest Report
  - Traffic Citation including in-vehicle printing
  - Criminal Citations including in-vehicle printing
  - Tow/Impound Reports

  The Versaterm Field Reporting System offers a user interface that makes report entry not just possible, but very easy. Its design is fully touch-based and enables the officer to easily re-use known information – never needing to retype. If information is not known, it can be easily collected with tools like queries of remote databases (RMS, GCIC, DMV, etc.) and a quick scan of a driver's license. Of course, the call-for-service information provided by CAD is used to begin the report.

The theme of the Field Reporting System's design is "Natural Use". That is, the screen's layout and the system's operation is intuitive to the user and does not require extensive training. This is very important as it greatly reduces officer training time while it overcomes initial resistance to using a new system.



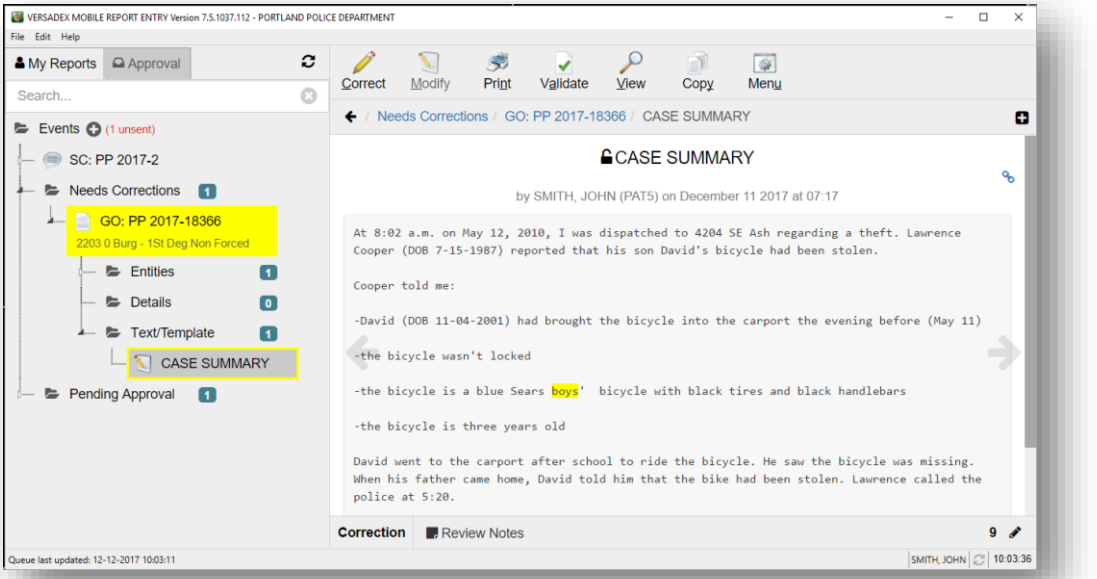
Versaterm's Mobile Report Entry (vMRE) supports true off-line report entry so that you never lose work due to a connectivity issue. vMRE supports all types of reports while also supporting report type customization. This means that the Agency can configure various report types and the "rules" for collecting the necessary data (e.g. specify required fields, hide fields that are not necessary, set defaults and record Standard Operating Procedures (SOPs) for the report. This provides a simpler report taking experience for the officer while ensuring the necessary information is collected. Again, this is a result of our "Natural Use" approach.

Integrated validation 

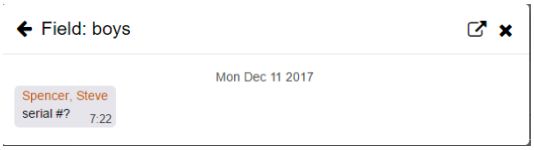
verifies the report for completeness based upon NIBRS/UCR and local rules. If completeness errors are found, the user can simply navigate to the error by touching a button.

As presented above, reports enter the workflow for approval and routing to the vRMS. Supervisors can highlight and embed comments in the report providing feedback and instructions to the officer (similar to Comments in Microsoft Word). These report approval notes provide concise directions to the report's author and can be used to navigate to the location of the report with the issue. Comments can be entered for any

part of the report including words and phrases within the narrative text. The following illustrates a report that contains a supervisor's comment in the narrative text.



By clicking/pressing on either the highlighted word(s) or the Review Notes notes button, the comment from the supervisor will be displayed. For example, the supervisor is asking the officer to get the serial number.



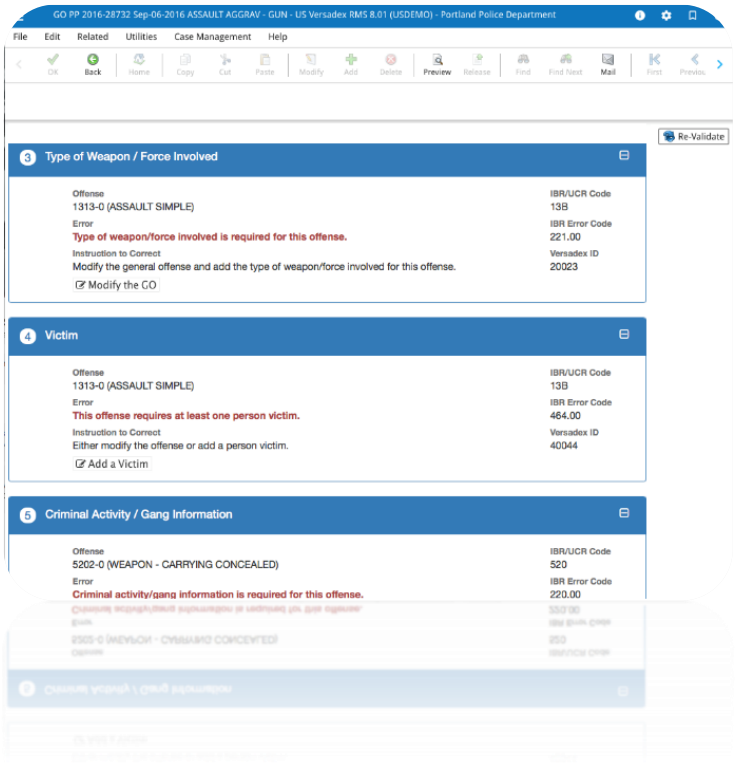
Incomplete reports can be sent to the server and recalled later, even on another device, for completion.

Versaterm's vMobile, our integrated smartphone and tablet solution, enhances mobility. vMobile supports full access to the vRMS system for data base queries. It can also support CAD functionality acting much like a CAD Mobile. This will be covered in detail in our description of our optional CAD later in this response. We mention vMobile here because it is also used to capture information that can be used in a report. For example, the officer, using vMobile, can use a smartphone camera to read the driver's license, run the name and have that information ready. Then, when creating the report on vMRE, that information is reused as it prefills data fields in the report being prepared.

Versaterm's R&D is also working on vRMSapp which provides full RMS report taking capability through a smartphone/tablet device. The vRMSapp is not simply an HTML5 representation of the RMS on a small form factor device, but is designed to deliver a native user interface experience based on the Android or iOS device.

- *NIBRS Reporting*

Versaterm currently supports NIBRS Reporting for Colorado, Washington, Oregon, Kansas, Texas and Pennsylvanian and are working with our customers in California, Arizona, and Florida as they transition to NIBRS reporting. We don't currently have a Georgia customer but we would provide NIBRS reporting in compliance with Georgia requirements. vRMS has always supported integrated rules for collecting UCR/NIBRS data elements but in the latest releases of the Versaterm products we now support the concept of *interactive edits.* With the new interactive edits, a user simply presses the Validate Report button to validate the report based on KIBRS validation requirements. The resulting list is illustrated below. Then the user simply presses the appropriate action button (e.g. Modify the Victim) to navigate to the area of the report that needs correction. The following illustrates a sample validation report error list:

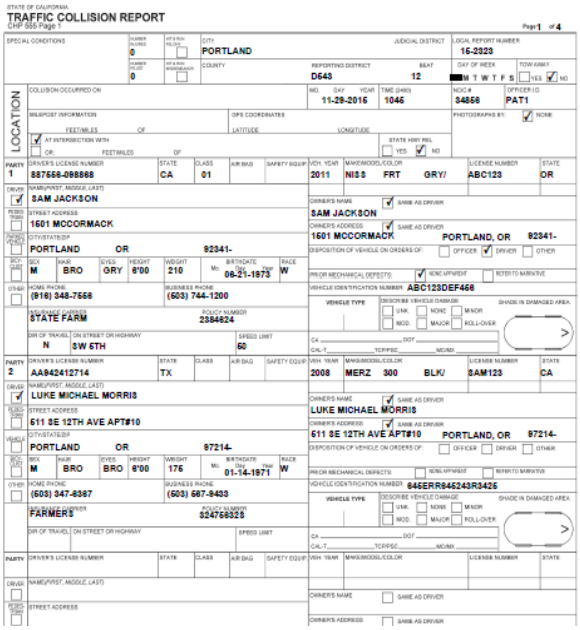


Notice the "Instructions to Correct" section as this can be configured by the Agency providing further feedback to the officer on how to correct the information. These edits are available for the officer during report creation and at any time prior to submission within the vRMS solution. Electronic submission can also be supported.

- *Accident and Citation Reporting*

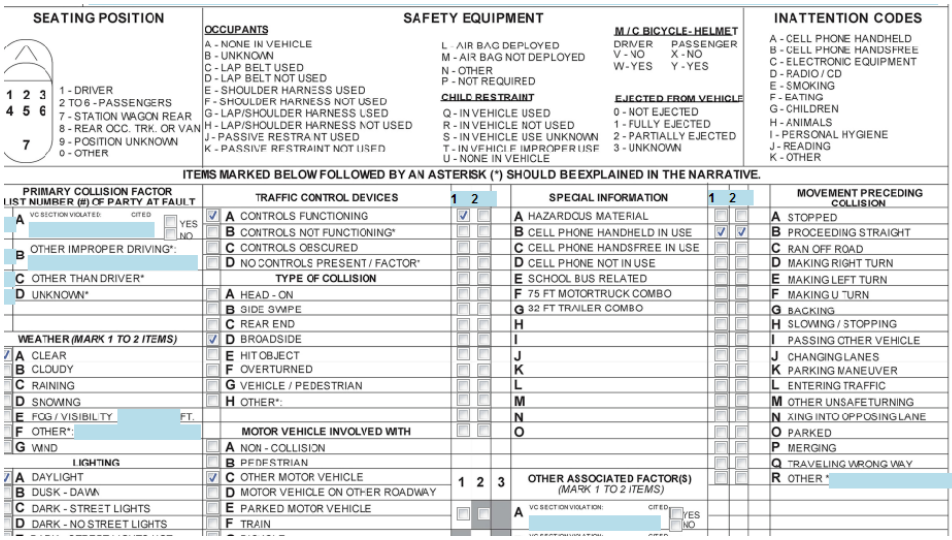
The Versaterm vRMS and vMRE supports the capture and creation of State Motor Vehicle Accident Reports and traffic/criminal citations. Traffic Accident reports are treated as an extension of a General Offense (GO) report within the Versadex RMS. Specifically by using our customizable Motor Vehicle Accident (MVA) Detail Page, reporting officers can enter all the data elements mandated by your State Traffic Accident Forms. We have provided state specific accident reports for California and Colorado.

Using the MRE, the officer will typically begin by completing the basic data on the report including date, time, location, people and vehicles involved. Collecting Collision report information is in many ways the same as any other report however using the MRE customization tools; agencies can make certain fields mandatory (such as DL number) to increase accuracy.

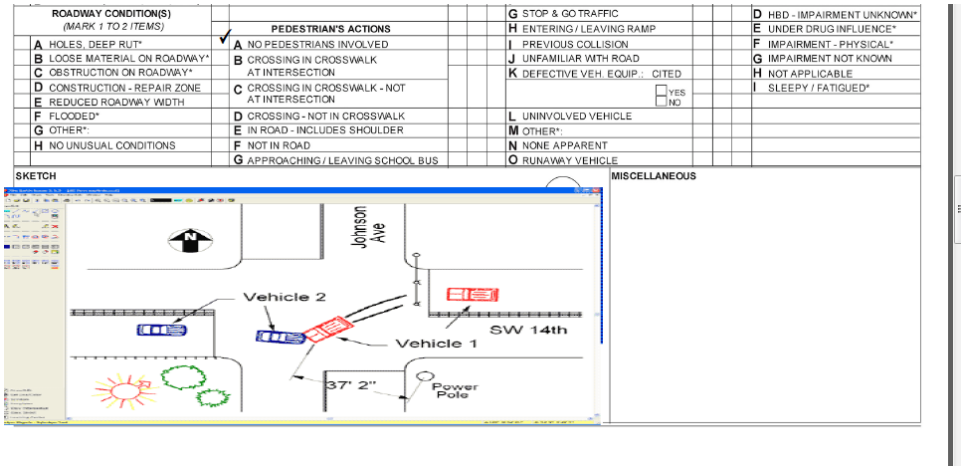

TRAFFIC COLLISION REPORT

The MRE uses an electronic form approach to completing these reports. Using a simple button, the MRE will open up the base report and the officer is able to select driver/vehicle/passenger information to be prefilled into the form. The following California CHP 555 report is one example:

The completion of the form (see the CHP 555 example below) is done using an electronic view of the form where the officer is checking the boxes that apply.



This is also where they would transfer the collision diagram to the electronic form.



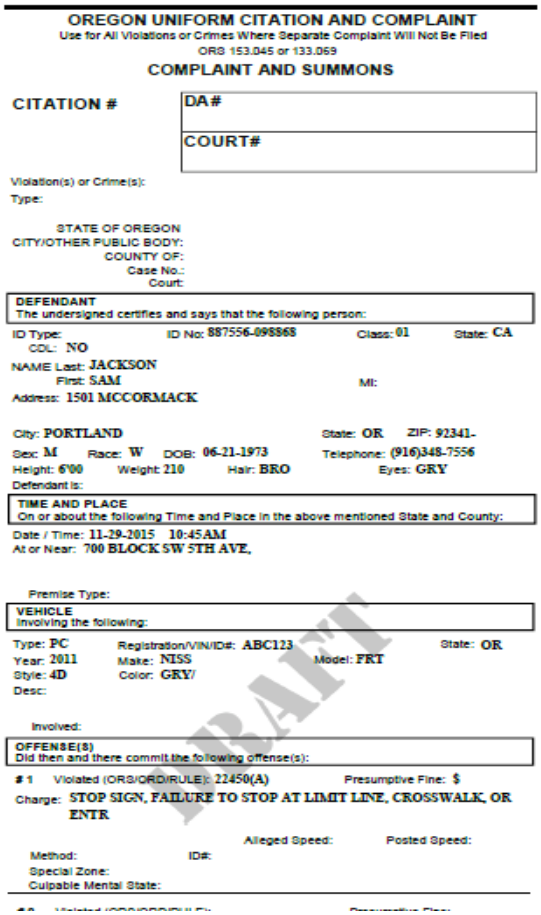
Regarding collision diagraming/drawing tools, Versaterm can recommend a number of commercially available products that specialize in this type of image capture and Versaterm has successfully interfaced with them in many locations. Our preference is to allow the customer to select a tool that meet their needs rather than make a specific recommendation. The officer simply uses the tool to complete the drawing and the MRE is programmed to look on the officer's workstation for the output. The officer easily accomplishes all of this by simply pressing a button on the MRE.

The MRE can support the ability to provide in-car printing and in the past we have developed Driver Exchange forms that contain a subset of the report data. Typically, after

the officer collects the base collision information, they will print this Exchange form for the involved parties and complete the detailed portion of the report at a later time.

Once completed, the officer will submit their Collision report through the approval process. This type of report is like any other where it can be approved or kicked back to the officer for corrections. Like with all reports if additional Officers have participated the system will allow the creation of Supplemental Reports which will then be incorporated into the primary report.

The vMRE can also include a Citation module. If the Citation being issued is related to an Accident the officer will not have to re-key any information if they need to issue citations. The MRE Citation module will prefill all of the location, date, time, person information and related vehicle right into the ticket.



OREGON UNIFORM CITATION AND COMPLAINT
Use for All Violations or Crimes Where Separate Complaint Will Not Be Filed
ORS 153.045 or 133.069

COMPLAINT AND SUMMONS

CITATION # | DA# | COURT#

Violation(s) or Crime(s):
Type:

STATE OF OREGON
CITY/OTHER PUBLIC BODY:
COUNTY OF:
Case No.:
Court:

DEFENDANT
The undersigned certifies and says that the following person:

ID Type: | ID No: 887556-098868 | Class: 01 | State: CA
CDL: NO
NAME Last: JACKSON
First: SAM | MI:
Address: 1501 MCCORMACK

City: PORTLAND | State: OR | ZIP: 92341-
Sex: M | Race: W | DOB: 06-21-1973 | Telephone: (916)348-7556
Height: 6'00 | Weight: 210 | Hair: BRO | Eyes: GRY
Defendant is:

TIME AND PLACE
On or about the following Time and Place in the above mentioned State and County:

Date / Time: 11-29-2015 10:45AM
At or Near: 700 BLOCK SW 5TH AVE,

Premise Type:

VEHICLE
Involving the following:

Type: PC | Registration/VIN/ID#: ABC123 | State: OR
Year: 2011 | Make: NISS | Model: FRT
Style: 4D | Color: GRY/
Desc:

Involved:

OFFENSE(S)
Did then and there commit the following offense(s):

1 Violated (ORS/ORD/RULE): 22450(A) | Presumptive Fine: $
Charge: STOP SIGN, FAILURE TO STOP AT LIMIT LINE, CROSSWALK, OR ENTR

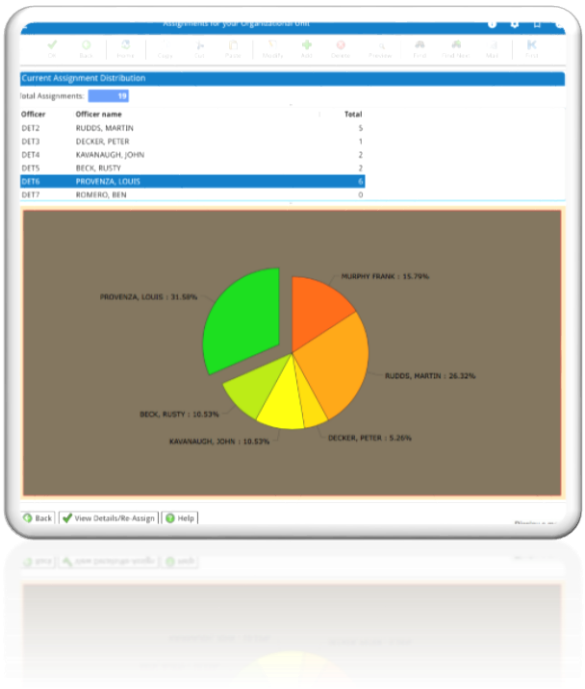
Alleged Speed: | Posted Speed:
Method: | ID#:
Special Zone:
Culpable Mental State:

DRAFT

We also have the ability to integrate our vRMS with other 3rd party E-Crash and E-citations system to ingest these records directly into the RMS. If the department decides to keep your Lexis Nexus solutions we have in the past successfully integrated with these systems.

- *Case management*

vRMS supports advanced case management as part of the integrated Workflow. Cases are first routed via workflow to supervisors where they can then assign cases and follow-up tasks to the individual detectives/officers. Before assigning, the supervisor can view the workload of each detective through an integrated workload dashboard. Once assigned, the case/assignment appears in the detective's case management dashboard indicating a new entry (the supervisor can even see if the detective read the assignment). The screen shot below shows the workload for a detective.



At any point in time during the investigation, the supervisor can review progress by viewing the summary of the changes made during the investigation or by reading the supplemental. When the detective completes the assignment, they submit the supplemental to the review process and the case/assignment moves to the top of the supervisor's dashboard (waiting for approval). At this point, the supervisor can approve or reject the report. Should the report be rejected, it is returned to the detective's dashboard with a "needs correction" status. The supervisor can optionally add notes/instructions of what needs to be corrected.

All activity performed during case management is logged while a quick view will help the user identify who else may be working the case.

- *Configurable workflow*

  As identified previously, the Versaterm vRMS contains a powerful workflow engine that isn't restricted simply to investigations/case reports but can also be used for various department workflows including property disposal and subpoena tracking.

  At the heart of vRMS workflow is its agile configurability. The department, on its own, can configure and reconfigure (as the need arises) the routing rules based on changing needs.

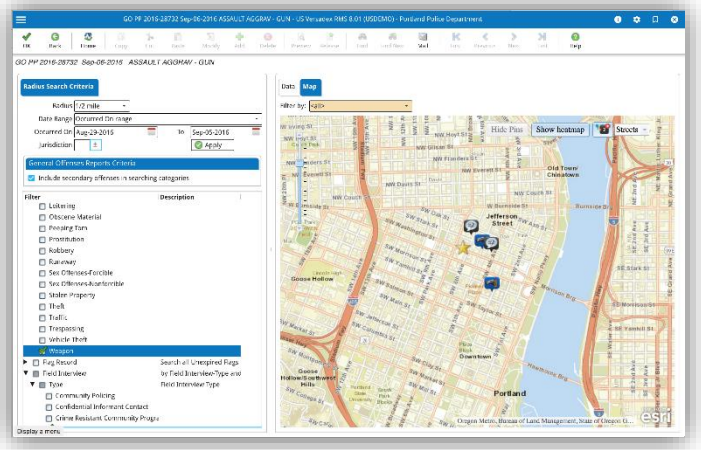
  Workflow Routing can be configured to use various types of report attributes to trigger where the case case/information goes. Attributes that trigger routing include: type of report, offense classification, involvement and various other information classifications and study values. Moreover, routing can be configured geographically so that geographic location is taken into account as well as the other attributes mentioned above. Similar rules are configured for routing a variety of field-level reports for supervisory approval.

  When a report is entered into vRMS, the routing rules are examined to suggest the correct departmental areas (auto-theft, burglary, major crime, etc.) that should receive the report based on the Department's rules.

  Workflow in vRMS uses a concept that we refer to as "handle". For example, Instead of routing a case or a report to an individual who may be out on vacation, the case is routed to a handle that can be manned by any appropriate user thus insuring that all routing "destinations" are constantly manned.

- *Investigations*

  The Investigation process is managed through the vRMS case management/workflow function. However, the entire system provides tools to solve investigations. Trends can be easily analyzed and identified through the Event Trending dashboard while a "Search Nearby" gives the investigator a powerful tool to spatially search an area around a crime for other events containing similar attributes (e.g. weapon involved). The maps are interactive so the user can click on the icon to view the detail of the report.



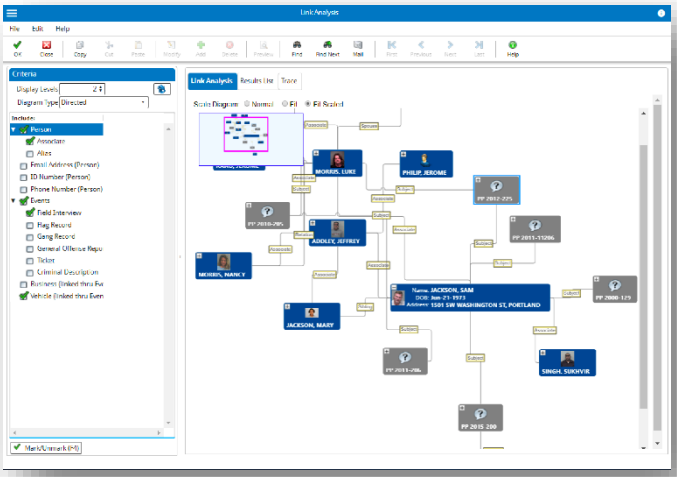
Investigations can be managed to segregate, identify, and record the elements of a crime and modus operandi of the case so that investigators can easily "connect the dots". The powerful search tools enable the detectives to search for similar cases or search the narratives across cases.

The advanced design of vRMS allows detectives to easily link information together and then represent it through the powerful query tool, link analysis, or view on the integrated map.

For example, the Versaterm vRMS inherently supports a master name index (MNI) and the tools to help effectively manage the MNI through security rights and tools to notify an administrator if a possible duplicate was added to the MNI.

The MNI is designed to hold the latest details on the person while the information collected at the time of the event, is retained on the event/report.

From the MNI, a user can quickly view address history, involvements, alias and associate names along with an easy-to-use visualization through Link Analysis (as illustrated).



The MNI, a central linking instrument, enables the user to quickly view and navigate to and through the related information including all forms of reports, associate names and much more.

- *Property and Evidence Tracking*

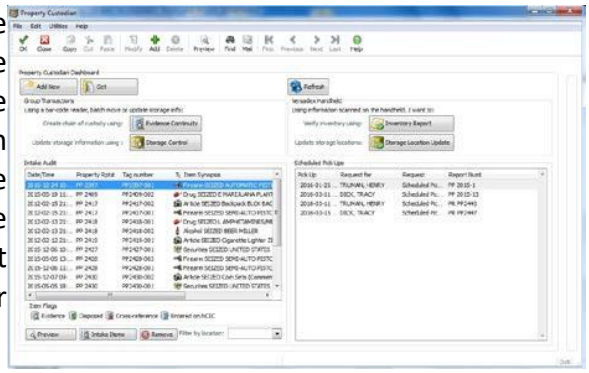
The vRMS system includes a very sophisticated and fully featured Property Evidence subsystem that enables an agency to retain comprehensive information on several different property "types":

- In-custody property
- Evidence
- Found
- Seized
- Stolen/lost property (not in police custody)
- Pawned property

The system supports the generation of Bar Codes to track location and movement of in custody property. It also supports hand-held inventory control devices and electronic signature pads.

The property module also can support the electronic uploading of pawned property data from pawnshops and interface with a Laboratory Management System.

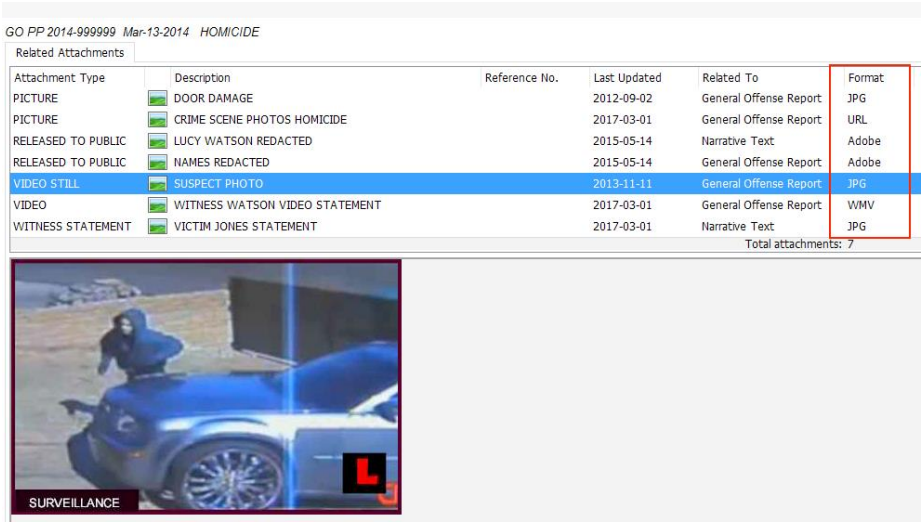
The property system also uses the system workflow processes. It can be configured to automatically send Property Disposal Notices to an Officers/Investigators work queue in the Case Management System. The notification is sent to whoever has the authority to authorize the disposal of the case related items. They are presented with a list of indexed property that needs to be review for either disposal or extension of the disposal review. Their response is then sent electronically to the Property Room for update and action.



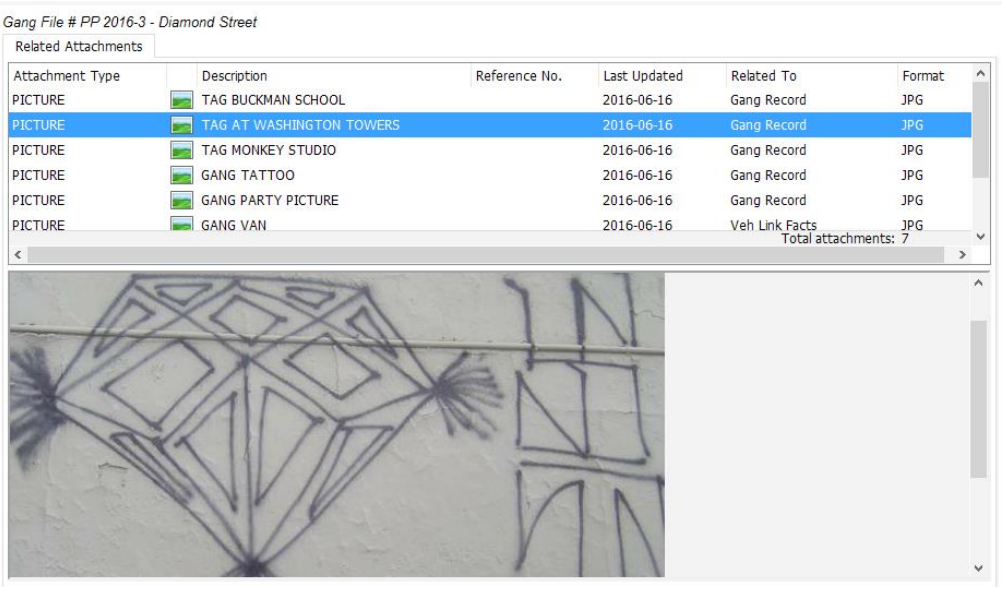
- *Digital File Attachment*

There are a number of ways to collect and associate digital evidence to a case. The evidence can be natively digital (like a picture or video recording) or transformed into digital such as a scanned image.

The RMS provides an Attachment tool where any digital file can be associated to a case. Attachments are very flexible in that they can accept any format of digital file or path to a file (e.g. URL). For example, the screenshot below shows a synopsis of all of the Attachments to a case. On the right side, there is a Format column indicating the type of files. Some are JPG, Adobe (PDF) or WMV while another is a URL. Clicking on the URL will open the files.

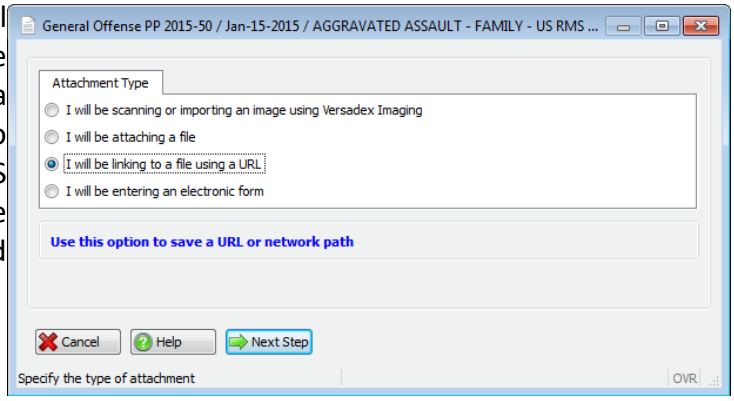


Attachments are available in all event types including Field Interviews, Citations, Flag and Gang Records. For example, the following is a synopsis list of digital gang files such as tags, tattoos, vehicles.



When creating an attachment, the user can record meta-data of the type and reference number as the “true” Meta data is contained on the parent data record. Any form of digital attachment can be attached to a case record. Please note that there must be a corresponding player or viewer available, on the desktop or through the web browser, to view the attachment. The digital content is embedded in the appropriate locations of the case, not a separate system, so it provides context to the data portion of the case.

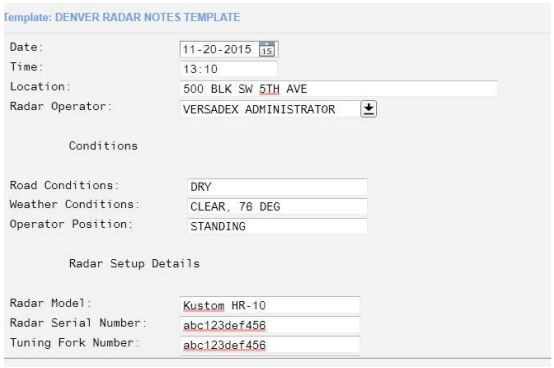
Should you decide to store digital media in a system external to the Versadex RMS (i.e. body camera images), the process used to attach digital media to an RMS report also supports linking the data by means of a URL pointed at the external source.



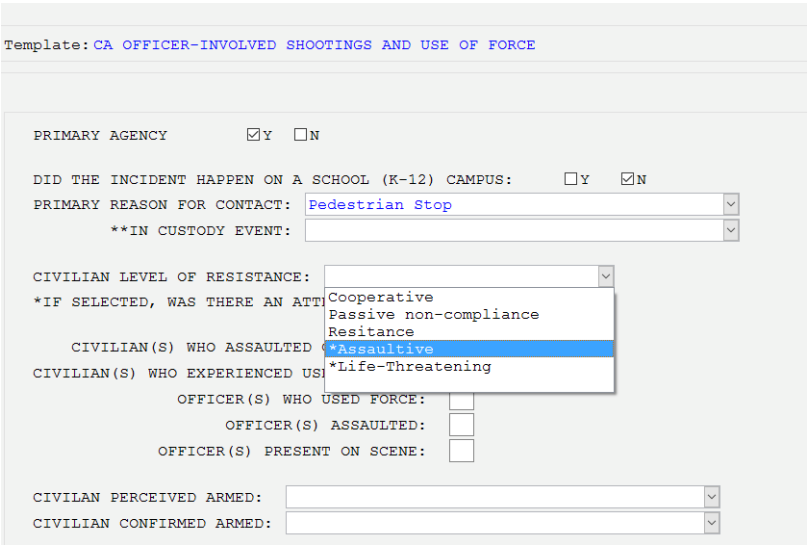
- *Text Template Forms*

  Text Template forms are used in the vRMS to both guide officers in the preparation of a specific type of report (by filling in the blanks) as well as to collect additional information. Versaterm customers makes extensive use of text templates to create their own forms with their own fields for many purposes. Not only are these forms and fields customizable but they also can utilize code tables and look ups to provide consistent data collection in the RMS and Mobile Report Entry. As noted in the RFI they can be used to generate Affidavits, Search Warrant Applications, and Case Clearance Reports.

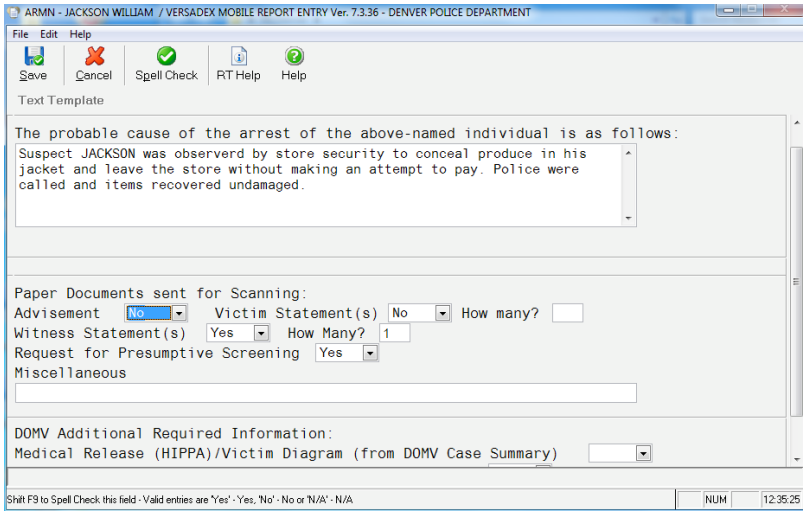
  Here are a few examples. You will find below a template that was created by the Denver PD for a Case Report that they generate when running a "radar trap" for traffic enforcement.



Here is another example of a Use of Force Text Template



A Probable Cause Affidavit



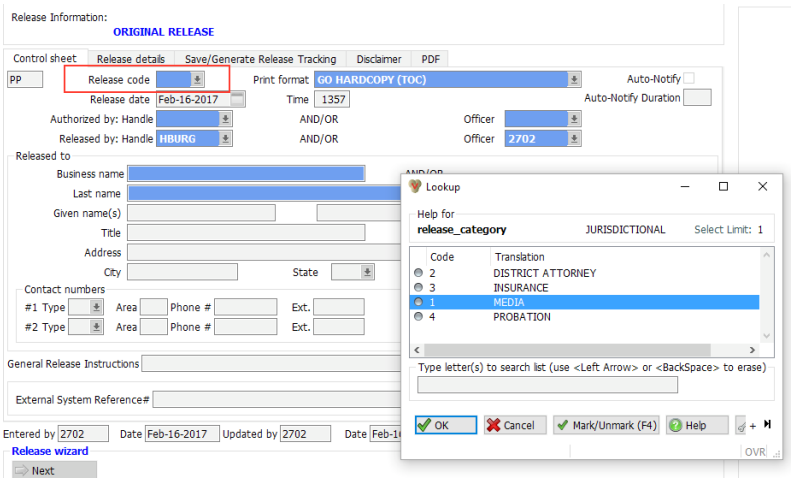
- *Information Release Tracking*

The Versaterm vRMS supports a built-in Release Tracking mechanism. Release Tracking enables you to create release templates so that you can include/exclude information as is appropriate. You can create individual templates for each purpose such as media, insurance companies, prosecutors, etc. A well-formatted output, which includes an interactive table of contents, is sent in XML and in PDF, including attachments such as images.

Once information is released, the tracking system records the release date and version. When new information is added, such as new testimony or evidence, the system notifies a user (or group of users). Should the changes warrant another release, Release Tracking can either generate a supplemental release of only the information that has changed, or the user may choose to re-release the entire package.

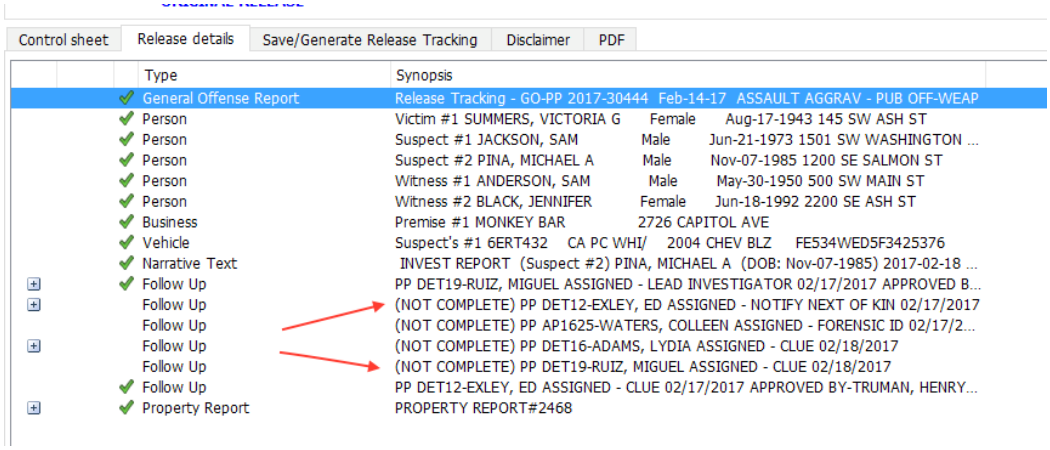
For example:

The tool is configured to create 'Release Categories'. There can be an unlimited number of categories and some might include Insurance, Media, Probation, etc. The purpose of the category is to define what type of information is eligible for release based on state required rules.



An agency can control the level of detail included in each release such as including victims, juveniles, narrative reports, etc. The RMS will then automatically compile only the eligible information suitable for the selected release. To further control the output, an agency will be able to design release-specific templates that will format the data even further. For example, a request might allow for the release of an Arrestee but prohibit including the Social Security or DL numbers or prohibit the release of individuals based on their role code (police officer, government employees, etc.). The Template can be configured to suppress any unwanted information.

A summary of the information that is eligible will be presented to the user. This will act as a checklist to ensure the proper information is included. For example, in the screen shot below, which is depicting the release of information to the District Attorney notice that there are a number of incomplete Follow Up assignments that do not have the corresponding green checkmark indicating that they will be included in the release.



In this it was determined that incomplete reports would not hinder the release of the rest of a Case to the DA. When available these additional report can then be released to the District Attorney.

If the users is satisfied with the release template the Release Tracking Wizard can create any or all of the file type below:

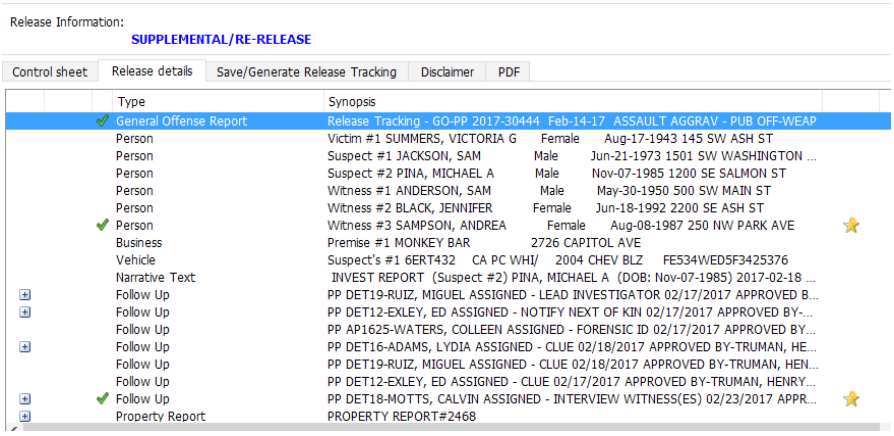
- A PDF copy of the report including a customizable disclaimer.
- An XML output of the file
- The electronic attachments are linked back to the case

Our electronic interface to a District Attorney/Prosecutor or Court Management System is often time linked to Release Tracking. Once a user reaches this point an interface is used to deliver the contents listed above to the remote systems. Within the RMS Release Tracking record will be an exact copy of what was released including the PDF.

The Release Tracking module has a very useful feature that can detect any changes to a report once it has been released or filed with the DA. For example, if a new witness were identified on a case and added by an Investigator, Release Tracking will send an email to the user responsible (Step 1 above) to get them to review the case and determine if the update requires a new release to the DA.

The RMS logs will easily identify what new items were added or modified on the case.

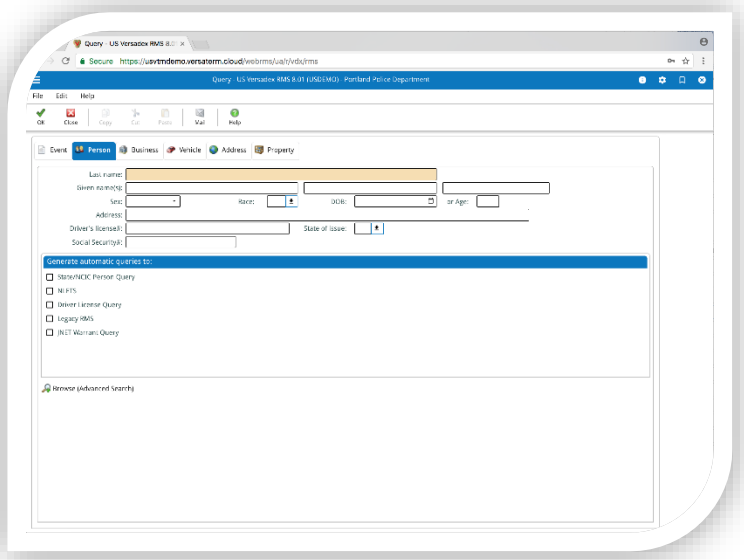
In the example of a new witness being added, a new release is required. Release Tracking logic can identify the parts that have changed and release only those portions. This feature is appreciated by the DA as they do not have to re-read the entire case, they can simply see what is new. In the screenshot below, there are yellow stars indicating what has been added to the case since it was last released.



Once completed, the Release Tracking tool will save the output in a PDF format so that there is a record of exactly what was released, by whom, and under what authority.

- *Master search*

All master indices can be searched using powerful algorithms to help the user find the desired entity. As illustrated in the screenshot (below), the user can search Persons, Businesses, Vehicles, Address (Locations) and Property. There is even a shortcut to search by Event number.



Master name searches use an advanced scoring algorithm that is significantly more sophisticated than a simple Soundex/sound-a-like scoring. Scoring the possible matches will take into account the sex, age and even address along with hyphenated names and name-diminutives (Elizabeth and Becky may not sound-alike but are the same name).

Other remote systems such as NCIC/GCIC may also be searched as a by-product of searching the RMS.

An advanced search is also available when the user may not have the name. In this case the user can search on descriptive details such as age, height, weight, telephone number, etc.

- *Personnel*

  The Versaterm RMS contains a comprehensive personnel system that not only tracks employees, security, and assignments but contains the details on secondary employment, commendations, skills, memberships, next of kin, training courses and much more.

- *Training tracking and reporting*

  The Versaterm vRMS tracks training for individual employees and upcoming training.

- *Gangs*

  The vRMS supports a comprehensive Gang module that enables the Department to collect and manage gang information including the criteria identifying the individual as a gang member.

  Gang membership, locations and hierarchy are collected and maintained within the vRMS Gang module while the information can be made confidential and with silent hit notifications (should a gang member be queried or included in a report).

- *Warrants*

  The vRMS supports a Warrants module that enables an agency to store information on outstanding warrants, and warrant status. This module also enables the agency to collect "due diligence" service attempt information. Service attempt information is integrated with our mobile workstation software so that Officers can document all service attempts.

- *CompStat and general crime reporting*

  Versaterm provides vAnalytics which provides users with advanced analytics and reporting capabilities using industry leading business intelligence tools from Tableau. vAnalytics allows you to explore, analyze and visualize your data. Users can create powerful dashboards that communicate complex ideas in a simple way. Versaterm has had great success providing CompStat crime reports for various agencies and provide the training so that the Department can modify and create their own, as needed.

- *Crime analytics*

  Crime analytics is built-in to the RMS through special features such as "search-nearby" (a map-based spatial search), and Event Trending (highlights trends across various crime categories). Further, vAnalytics provides advanced analytics using business intelligence (BI) tools and the standard Versaterm DataMart (VDM) is augmented with CAD data as well providing a comprehensive view of not only crime data, but the calls-for-service as well. The data-lake created by Versaterm's vRMS and vCAD will allow the

agency to examine all aspects of their operations and provide advanced statistical reporting.

- *Arrest/Booking and Jail Management*

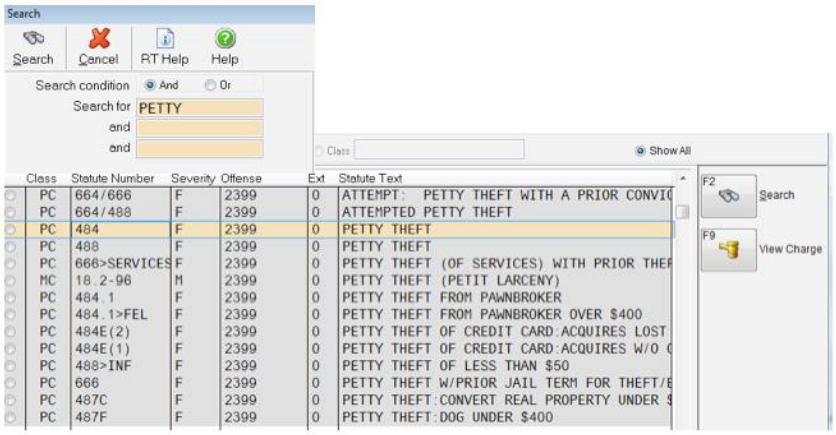
The Versaterm vRMS has always provided the capability to generate and process Arrest Reports and provide for the initial "Booking" of arrestee's into either a temporary holding facility or jail utilizing our "Cell Management" functions. We have recently enhanced this module to include a custodial Jail Management System for our customers that operate large jails (3000+ beds, long term housing, work programs). The following will provide you with a brief description of the Arrest/Booking functionality and the features of the new Jail System.

Versaterm's field reporting module, Mobile Report Entry (MRE), has been designed to accommodate the myriad of Arrest scenarios that an officer will likely encounter. Some of the features available in the MRE relating to Arrests include:

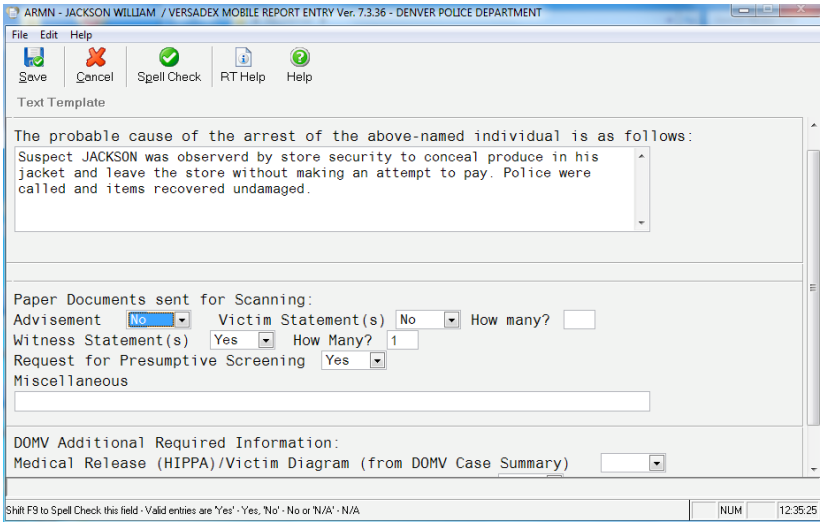
- The MRE's Arrest module and the General Offense module (Incident Reporting) are highly integrated with each other to eliminate redundant or duplicate entry. This means that an officer can re-use known information when completing a report and never has to re-key it across multiple forms. If an arrestee has previous police involvements, the officer can pre-fill the person particulars into the Arrest report and only update new information. Shortcuts such as CAD details, GPS location and DL scanning are all supported.
- The MRE can be configured to guide an officer through the completion of a report to ensure accuracy. Although it is possible to specify required fields, the MRE will enable Officers to identify requirements by Arrest type. It is even possible to create a wizard-like approach that verifies an officer has completed all of the required details before submitting the report. The following is an example of how an agency created 'Report Types' that ensure compliance to local policies.

What the Agency will find when using this approach is that it takes less time for the officer to complete the report, less time for the supervisor to approve it and there are a significantly fewer rejections of the information as the report travels externally (i.e. Investigations, D.A, Court, etc.).

- There are search facilities throughout the Arrest module to assist the officer in completing the charge areas quickly and accurately. For example, they can type in the word "PETTY" and get a list of all of the charges with a word match.



- Within the Arrest report, an agency can create custom Templates of structured information an officer needs to complete.

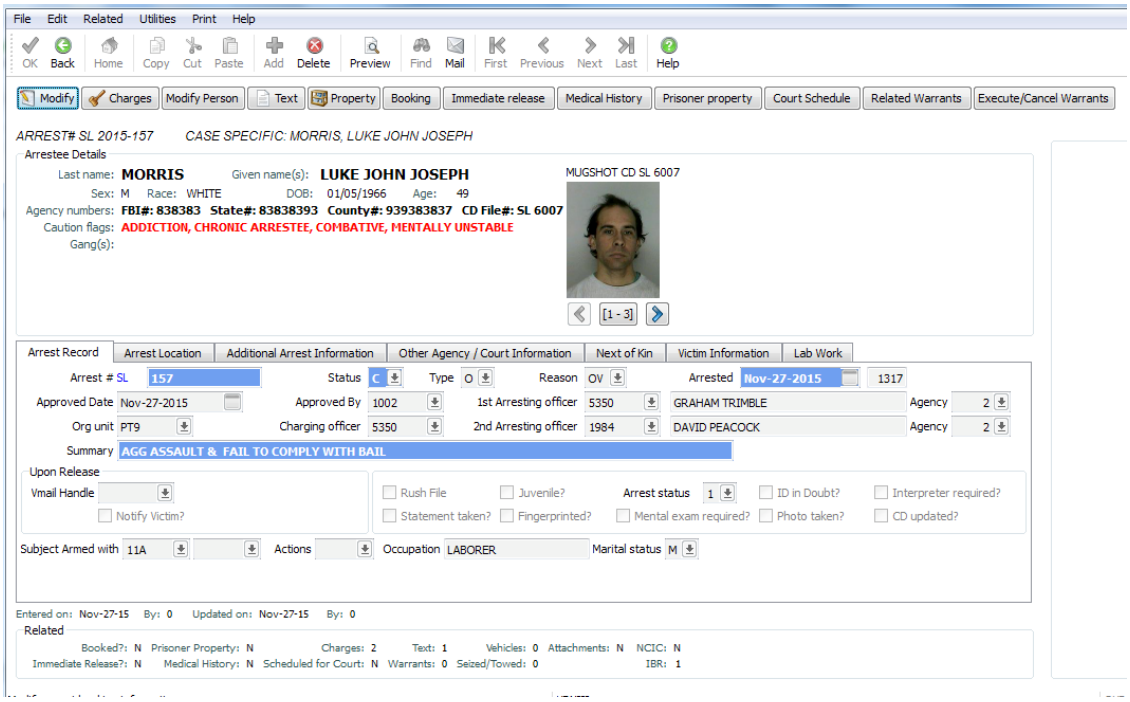


- The MRE has a built-in Approval module to manage the approval/kickback of Arrest reports. A notes feature is provided so that officer and supervisor(s) may add comments for review purposes.

Once the Arrest Report has been completed and approved the process of Booking the prisoner into the Jail can begin.

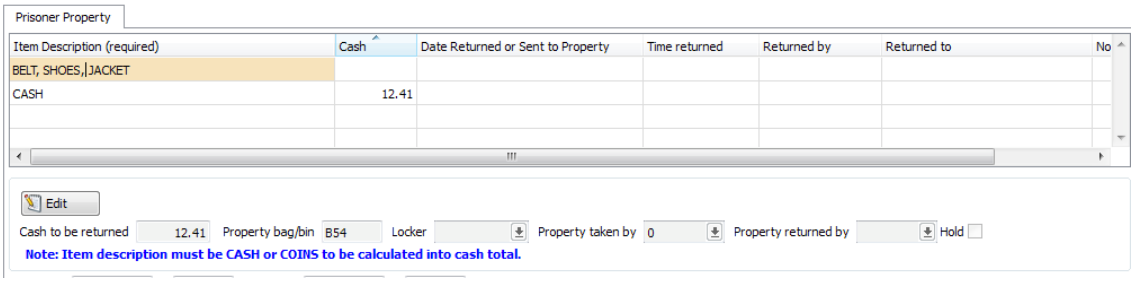
Using the RMS, the Booking staff will be able to perform an initial comparison of the arrested person to known offenders already in the system. Automated tools will assist in this initial identification including name matching with similar or alias names as well as recent mugshots.

Booking will then be able to view all of this information entered by the initial officer (as well as any historical information that might be pertinent to the intake of this person such as Caution Flags.



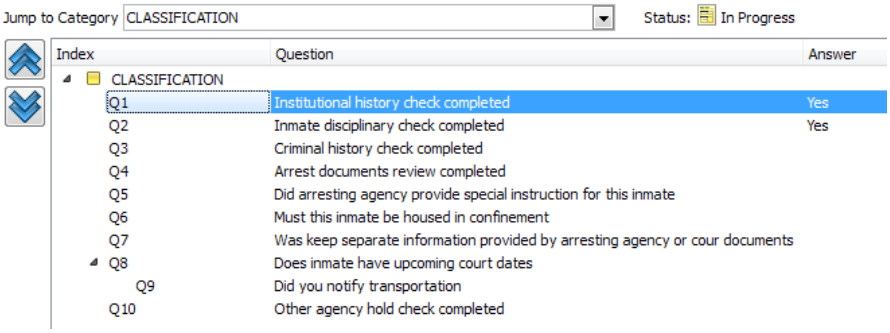
Booking will continue the initial intake by performing secondary identification via the Livescan. Versaterm has provided an interface to several different Livescan devices so that the RMS can send person data from the RMS to the Livescan to eliminate re-keying the information. We have also just completed an interface for the Denver Police to the Morpho Mobile Print device that enables the officer to initiate a two finger search against local, state, and Federal AFIS systems during the process of Arrest. This process will provide a much more efficient positive identification of the arrested individual that will help streamline the booking process.

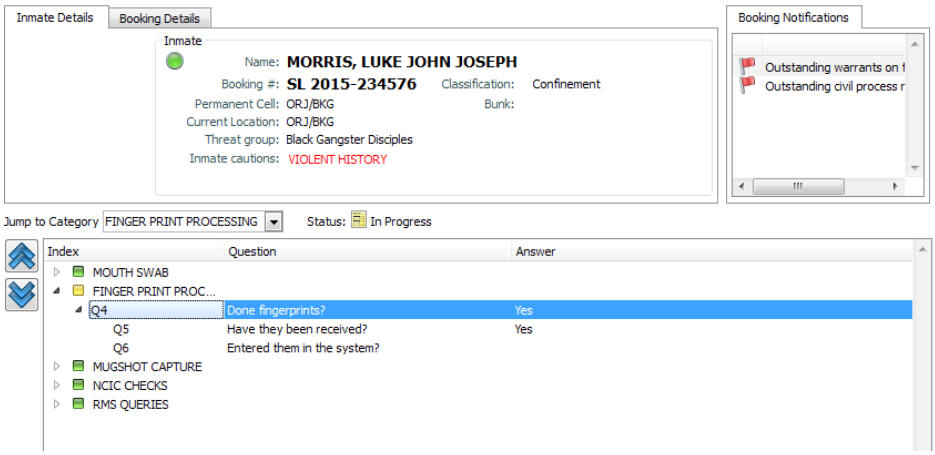
The RMS will also permit Booking to document any property related to the booking including personal property remaining with the arrested person, evidence or excess personal property that will be held for pickup.



Property that is going to be held for pickup will take advantage of the RMS Property module than can create bar codes, track movement and storage location, record disposal/pickup information and can even generate letters for owners to pick up property.

As part of the continued intake process, Booking staff will complete secondary screening such as medical questionnaires, NCIC and RMS checks and housing classification. The RMS Arrest/Cell Management modules have a number of methods to track this intake process that range from simple checklists to a thorough customized intake workflow.

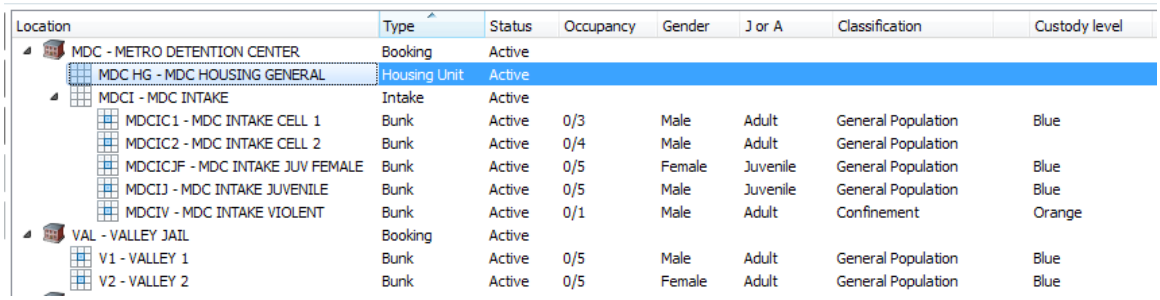




Once the Arrest/Booking process is complete the arrestee can now be admitted to the jail facility for further processing. The following is brief discussion on Facility Management, Classification, Housing, Movement and Inmate Activity.

Facility Management

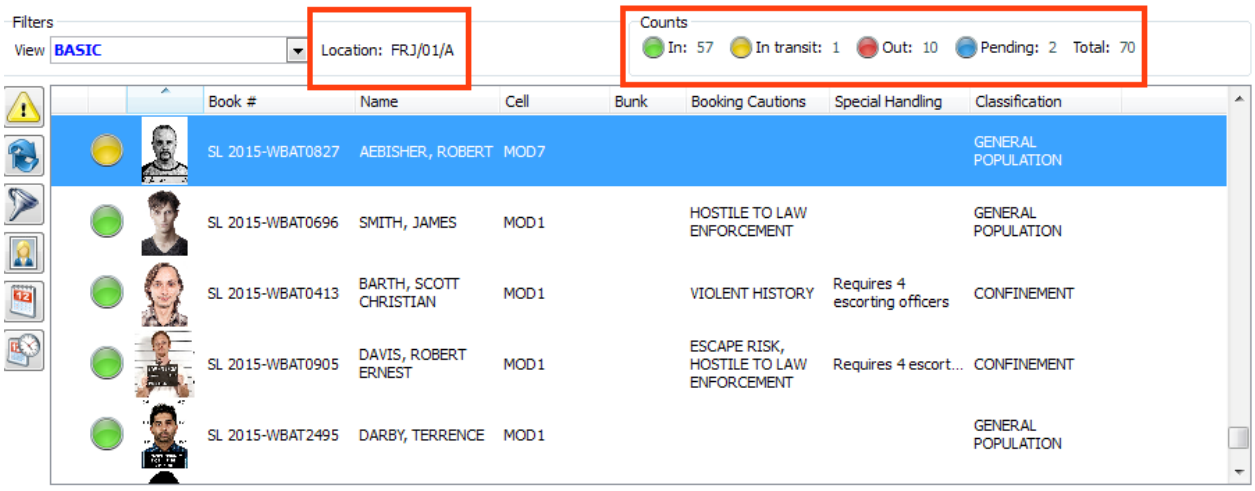
As part of the system implementation the Agency will configure Versadex with details of the various jail facilities in operation. In the screen shot below, there is a sample high-level view of some how the system is configured.



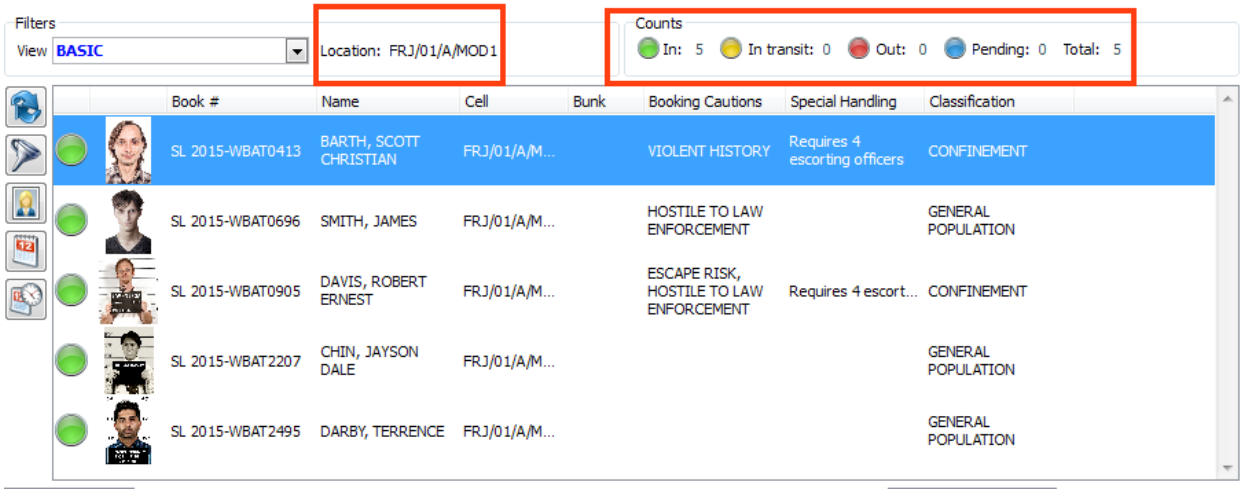
Location	Type	Status	Occupancy	Gender	J or A	Classification	Custody level
MDC - METRO DETENTION CENTER	Booking	Active					
MDC HG - MDC HOUSING GENERAL	Housing Unit	Active					
MDCI - MDC INTAKE	Intake	Active					
MDCIC1 - MDC INTAKE CELL 1	Bunk	Active	0/3	Male	Adult	General Population	Blue
MDCIC2 - MDC INTAKE CELL 2	Bunk	Active	0/4	Male	Adult	General Population	
MDCICJF - MDC INTAKE JUV FEMALE	Bunk	Active	0/5	Female	Juvenile	General Population	Blue
MDCIJ - MDC INTAKE JUVENILE	Bunk	Active	0/5	Male	Juvenile	General Population	Blue
MDCIV - MDC INTAKE VIOLENT	Bunk	Active	0/1	Male	Adult	Confinement	Orange
VAL - VALLEY JAIL	Booking	Active					
V1 - VALLEY 1	Bunk	Active	0/5	Male	Adult	General Population	Blue
V2 - VALLEY 2	Bunk	Active	0/5	Female	Adult	General Population	Blue

For example, we assume the Agency Jail intake has dedicated areas for housing juveniles/adults and male/female in separate areas. Each area would be given attributes to assist the Booking officer in selecting the proper housing assignment. For example, you would know if you were about to move a person into a cell that had reached its maximum occupancy.

Organizing the facilities in this manner will also provide real-time operational information about current in-custody arrestees. The Cell Management view can filter by any facility and will display summary information of totals and their status. In this example, this is a screenshot of a Cell Management view of a general area (the Counts are on the upper right corner).

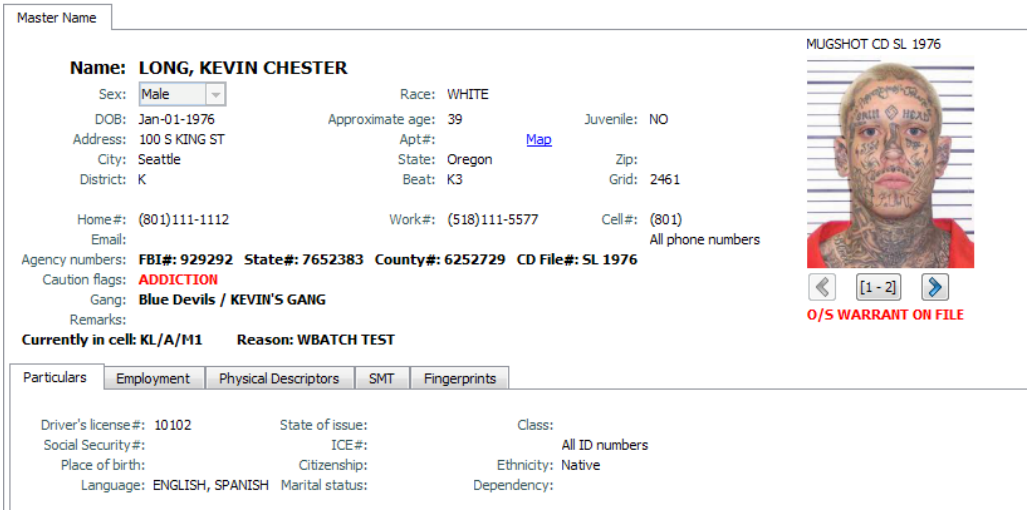


One could drill down into one of the sub-areas and the Cell Management view will change to show only that section of the jail.

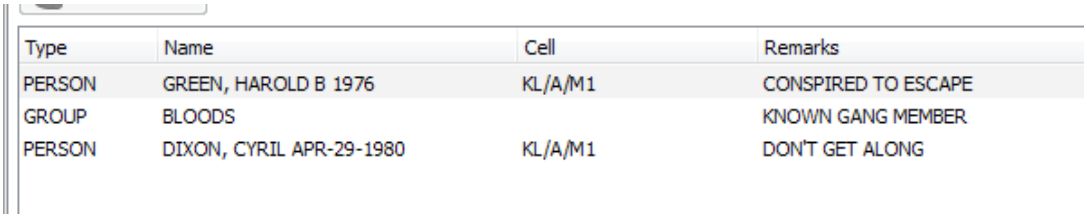


Classification

During initial intake you can include a checklist of tasks that need to be performed when a person is booked. As part of this process, we assume there is going to be a classification related to safety. To assist in this effort, Versadex will prominently and automatically display safety cautions as well as known gang membership from any previous arrests.

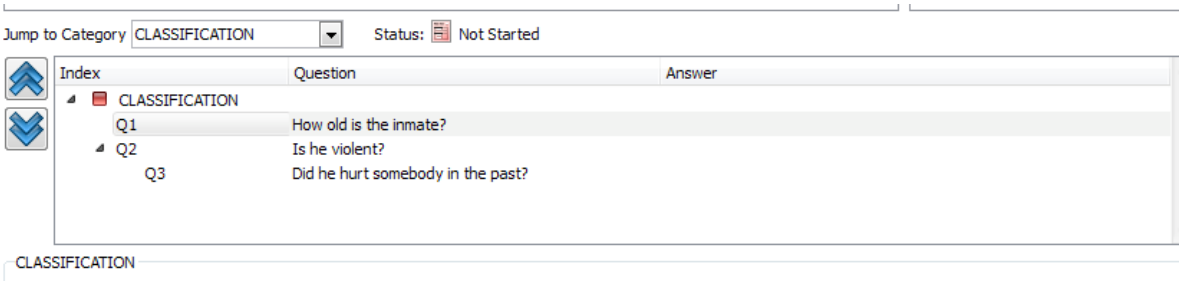


Versadex will also show any historical 'Keep Separate' notifications. The 'Keep Separate' will identify any Person(s) or Groups (i.e. other Gangs) that may cause a conflict in housing. That means that if there were any 'Keep Separate' instructions from a previous booking, they will automatically be applied in a new booking.



Type	Name	Cell	Remarks
PERSON	GREEN, HAROLD B 1976	KL/A/M1	CONSPIRED TO ESCAPE
GROUP	BLOODS		KNOWN GANG MEMBER
PERSON	DIXON, CYRIL APR-29-1980	KL/A/M1	DON'T GET ALONG

The Agency will be able to configure additional classification questionnaire templates as required.



Housing Movement

As described above, Versadex will be configured so that all 'housing' locations are given attributes to ensure compliance with Agency policies. For example, when booking a female juvenile, only locations that are designated for female juveniles will come up in the options for the Detention Officer as open.

If an arrestee is being moved, the system will perform a 'Conflict' check to identify if the change will break any of the 'Keep Separate' rules. For example, if a gang member is being moved to the medical assessment area and there is currently a rival gang member in the same location, the 'Conflict' warning will appear indicating the problem.

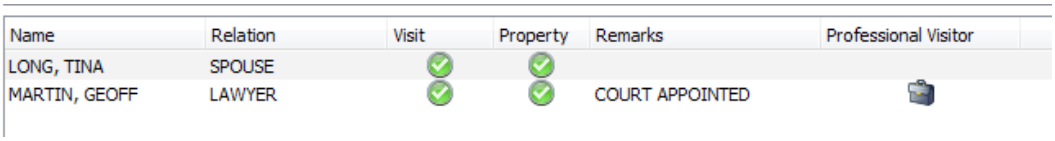
All historical movements are logged in the system and can be referred to for auditing or management reporting purposes.

Inmate Movements

Status	Reason	Date out	Removed by	Out cell	In cell	Date in
Complete	RETURN TO CELL	2015-12-10 12:59	KEVIN LONG (KEV001)	HOSPITAL/BRH	KL/A/M1	2015-12-10 12:59
Complete	HOSPITAL	2015-12-10 10:16	VDXIII (0)	KL/A/M1	HOSPITAL/BRH	2015-12-10 10:17
Complete	RETURN TO CELL	2015-11-19 12:48	KEVIN LONG (KEV001)	KL/B/M1	KL/A/M1	2015-11-19 12:48
Complete	COUNTY COURT	2015-11-19 12:47	KEVIN LONG (KEV001)	KL/A/M1	KL/B/M1	2015-11-19 12:47
Complete	RELOCATE	2015-11-16 16:05	KEVIN LONG (KEV001)	FRJ/02/B	KL/A/M1	2015-11-16 16:05
Complete	RETURN TO CELL	2015-11-16 16:04	KEVIN LONG (KEV001)	FRJ/02/B	FRJ/02/B	2015-11-16 16:04
Complete	RELOCATE	2015-11-10 11:47	DIXON, DEAN (10012)	CT/TC	FRJ/02/B	2015-11-16 16:03
Complete	HOSPITAL	2015-11-05 14:40	KEVIN LONG (KEV001)	KL/A/M1	CT/TC	2015-11-05 14:40
Complete	RETURN TO CELL	2015-10-15 13:15	KEVIN LONG (KEV001)	KL/WORK	KL/A/M1	2015-10-15 13:15
Complete	Work	2015-10-15 13:15		KL/A/M1	KL/WORK	2015-10-15 13:15
Complete	Return to cell	2015-10-15 09:07	KEVIN LONG (KEV001)	KL/WORK	KL/A/M1	2015-10-15 09:07
Complete	Work	2015-10-14 12:24		KL/TW	KL/WORK	2015-10-14 12:24
Complete	Work	2015-10-14 12:22		KL/A/M1	KL/TW	2015-10-14 12:22
Complete	Return to cell	2015-10-14 12:10	KEVIN LONG (KEV001)	HOSPITAL/TGH TEMP	KL/A/M1	2015-10-14 12:10
Complete	Hospital	2015-10-14 12:09	KEVIN LONG (KEV001)	KL/A/M1	HOSPITAL/TGH TEMP	2015-10-14 12:09
Complete	Relocate	2015-10-13 15:26	KEVIN LONG (KEV001)	FRJ/08/A	KL/A/M1	2015-10-13 15:27

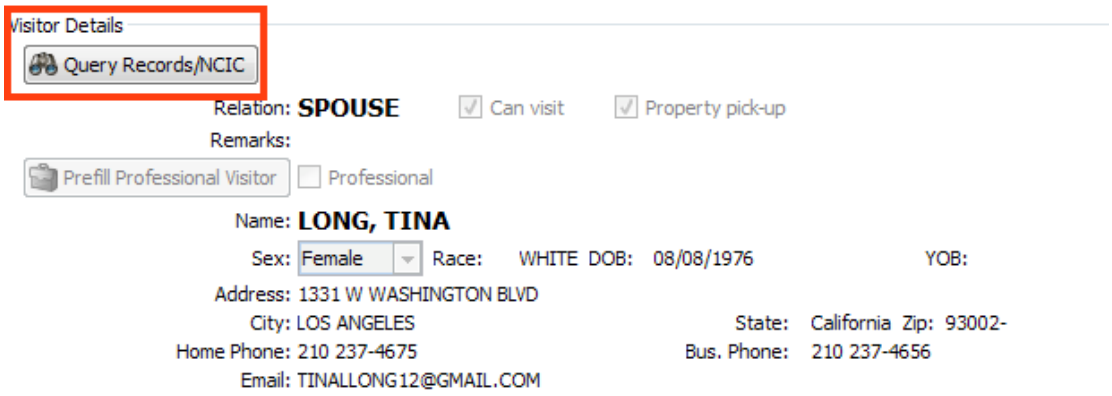
Inmate Activity

There are a number of activities (other than movements) that can be recorded in Versadex. For example, any external visits to an inmate are logged.

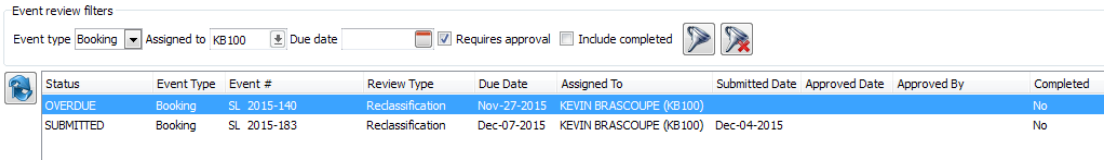


Name	Relation	Visit	Property	Remarks	Professional Visitor
LONG, TINA	SPOUSE	✓	✓		
MARTIN, GEOFF	LAWYER	✓	✓	COURT APPOINTED	

There is even an integrated RMS/NCIC query function right from the visitor log so Detention can perform a background on the visitor.



Booking records can also be marked for Supervisor review.



Status	Event Type	Event #	Review Type	Due Date	Assigned To	Submitted Date	Approved Date	Approved By	Completed
OVERDUE	Booking	SL 2015-140	Reclassification	Nov-27-2015	KEVIN BRASCOUPE (KB100)				No
SUBMITTED	Booking	SL 2015-183	Reclassification	Dec-07-2015	KEVIN BRASCOUPE (KB100)	Dec-04-2015			No

Other internal activities include medical visit/treatments and Incidents (i.e. suicide attempts, fights, escape, theft, etc.). All of the incidents are logged for auditing purposes so you could produce management reports on any of the internal activities.

Customer Configurability

Versaterm also recognizes that although there are many similarities in business process across all public safety agencies, both big and small, there are often differences in how agencies conduct their specific business processes. One size does not fit all situations. In order to maintain the cost effectiveness of a COTS solution, yet enable an individual agency to adapt the solution to their specific business processes the Versadex suite of applications have been designed to permit an agency to "configure" many aspects of the proposed solution. This same standard is also used in the design of all new functionality that is added as part of our solution enhancement process. This configuration capability, especially in a multi-jurisdictional/multi-agency environment is a primary concern of each participating agency and we believe that you will find our approach to be more than satisfactory.

There are many configuration options within the Versadex application solutions, here are a few:

Records Management

System Security Settings

The Versadex security architecture is multi-level providing both agility and flexibility when assigning security rights to users.

First, the user must be registered within Versadex with their user profile. The user profile identifies the user and the type of user (e.g. query only, Administrator, etc.). Then a user can be assigned to a basic group security profile (recommended) or have an individual security profile configured. The security profile is granular to the form-level and field-level, as appropriate, where it identifies the rights to Query, Browse (ad-hoc search & unload), Add new, Modify / Modify-Own and Delete the type of information. There are approximately 150 different information types supported by the security settings. For some information types, there is an extra attribute that governs approval of the information. The following is a partial list:

RMS SECURITY

SECURITY FOR DET2 (DETECTIVE 2)

Record types	Translations	Browse	Query	Add	Update	Delete	Approval
AB	AB-Arrest Booking	Unload	Yes	Yes	Yes	No	
IN	AB-Booking Injuries	Yes	Yes	Yes	Yes	No	
CM	AB-Booking Medication	Yes	Yes	Yes	Yes	No	
PR	AB-Booking Property	Yes	Yes	Yes	Yes	No	
CE	AB-Cell Booking	Yes	Yes	Yes	Yes	No	
DT	AB-Detention	Yes	Yes	Yes	Yes	No	
OC	AB-Out of Cell	Yes	Yes	Yes	Yes	No	
RL	AB-Release	Yes	Yes	Yes	Yes	No	
SM	AB-Summons	Yes	Yes	Yes	Yes	No	
WT	AB-Warrant	Unload	Yes	Yes	Yes	No	
BOLO	BOLO-Be on the Lookout		Yes	Yes	Yes	Yes	
BOLC	BOLO-Comments			Yes			
SO	CD-Career Criminal Status	Yes	Yes	Yes	Yes	No	
CD	CD-Criminal Description	Yes	Yes	Yes	Yes	No	
CHCO	CHCO - Customize Hardcopies			No			
CMRE	CMRE - Customize MRE			No			
CN	CN-Collections	Yes	Yes	Yes	Yes	No	

The Administrator can also configure and assign the user to one or more handles (roles), which can also have a security profile. The handle is often described as a job function or position that the user inherits or functions in, from time to time. When the user assumes that job function, they get the access rights that go with it.

Further, the organizational unit can also specify the handles (role) that are assigned within the particular unit. A user can also belong to more than 1 unit at a time.

This security model provides for flexibility as users move between units and/or job functions. As an added feature, the RMS Administrator can allow a user to delegate their handle to another user (e.g. a 2 I/C while the supervisor is in training). As Workflow and Case Management makes extensive use of handles for routing (i.e. route to a position vs. a user), the access rights for a handle make the system very nimble.

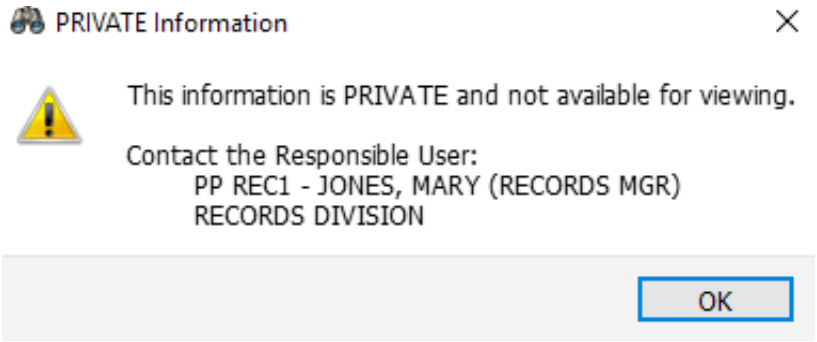
Confidential & Private Cases

Versadex contains a special feature called 'Private' where cases (all or part of) can be made Private (confidential) or Private and Invisible.

When identifying the information as Private, you can define what users, groups, or handles/roles can access/see the Private information.

A key Versadex feature is the ability to use handles/roles so that as detectives/deputies transfer, they not only get the access rights for their role but also receive rights to private info and receive workflow notifications for their role. For example, assume the handle "Human Trafficking" has access to information that is being made private; any user in that role (handle) is automatically able to view it.

When a user who does not have the rights to view Private information attempts to query/access the case or part of the case, they will receive a message that the information is Private and whom to contact.

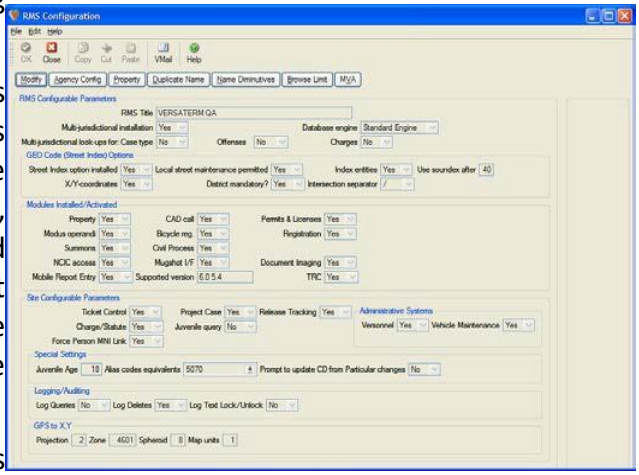


If the information is made 'Private + Invisible', the querying user would receive a message that the information simply does not exist.

System Configuration Settings

Within the RMS there are several system configuration settings that must be established for the RMS. These configuration settings determine how the RMS system will operate. Here are the most important:

- **General RMS Configurations**- the Records Configuration area of the RMS is used to define general and agency specific information which indicates if certain components are installed, activate/deactivate certain features, set up certain parameters, and control certain automated processes. It is composed of the following components:



  - **Site Configuration**- configurations in this section help define the overall system. It is within this component that the system can be defined as a single or multi-jurisdictional, specifies what system modules will be used and a variety of other generalized functions that will be used. These configuration settings are shared and maintained by Versaterm and the Systems Administrator.
  - **Agency Specific Settings-** It is within this configuration component that each participating agency would begin to configure how the system will operate for them.

    There are three specific configuration settings that must be established.

    - **Records Settings-** in this section the agency name, ORI, State agency mnemonic is set. There are additional settings that define how certain RMS system functions will work. General Case Management/Follow-up report configurations are set (Level of Case management; Identify Lead Investigator, pre-fill Offense reports from Arrest Reports, Pre-fill from MNI queries, etc.)
    - **Records Default** section allows an agency to establish certain default entries. Within this component the agencies will establish default values for such things as Resident Status, Operational Status, Arrest Agency, and Text Types to be use by record type, retention periods for record types, etc.
      - **Property/Evidence** settings. Within this configuration screen each agency can decide Disposal Review Date, Barcode settings, Purge period, authority for disposal, disposal method, digital signature (y/n), etc.

    Agency specific configuration settings are maintained by an Agency System Administrator.

Case Management Configurations

The Case Management System within the Versadex RMS is a powerful, flexible component that can automate traditional paper flows, and improve existing computer-based processes, within a police agency. Case Management gives police agencies the ability to automatically route cases anywhere within the agency, and track them at every step of the way, from initial entry to final disposition. It allows police agencies to quickly and efficiently process the large number of routine cases they deal with on a daily basis, as well as keep track of large, complex cases with several investigators and numerous Follow-ups. When Case Management is fully implemented, fewer police agency resources are consumed by administrative tasks, freeing up more resources for actual police work.

Case Management can be fully activated within the RMS, partially activated, or turned off altogether. It can also be implemented on an incremental basis as agencies adapt existing paper flow and computer-based processes to take advantage of Case Management's many benefits. Because Case Management functionality is highly configurable, individual agencies can gradually work toward a customized Case Management component to suit their specific needs and organizational structure.

Each agency would have the ability to configure how Case Management would work within each of their organizations. There are a series of configuration functions that are configured by each agency and maintained by an agency specific administrator.

User Defined Code Tables

The proposed solutions have hundreds of definable code fields. Many of these tables rarely require adjustment (NCIC code values for colors, makes, etc. for instance, Beat/reporting area designators) while others always do (City ordinances and codes, agency organization structure and of course, employee info and access rights). In addition there are some tables that have special characteristic and should never be altered.

In a multi-jurisdictional environment there are 3 critical Code Table files that can be agency specific. These are:

- **Call Type-** this is a code that is transferred into the RMS system from an agencies CAD system. Each agency (or group of agencies depending on the CAD configuration) will be able to maintain an individual version of this table.
- **Offense Type-** this code table contains the codes and definitions for all the types of "Offenses" for which a report may be generated. This table supports 8 character codes and 3 character alphanumeric extensions and a translated description. Offense codes would be mapped to the appropriate Oregon and Washington NIBRS/UCR codes and NCIC codes, so that incident information entered into the RMS once can serve multiple purposes. It is possible for each participating agency to maintain their own Offense Code Table to primarily accommodate local/county offenses that aren't UCR/NIBRS related. Since one of the stated goals of this project is to promote information sharing, we would recommend that that all agencies seriously consider utilizing the same offense codes, to the greatest

extent possible. If everyone were to use different codes it becomes very difficult to effectively share information.

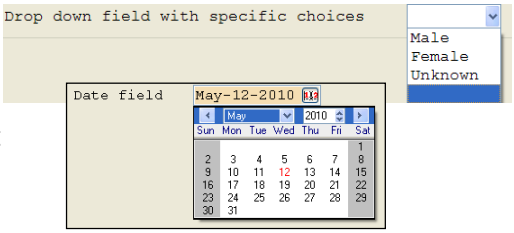
- **Charge Code-** the Charge Code table is designed primarily to aid those departments or officers who enter statue codes instead of offense codes and during the arrest process. Charges and Offenses are cross referenced to each other so that no matter what code is used the other will automatically be updated to the record. Each agency may maintain a separate code table to accommodate local/county statutes. These codes like the Offense Codes the majority of the charges will remain the same.

  Please note that it is possible for all agencies within a multi-agency environment to add their own specific codes to the other tables within the proposed system, however, these will not be tables unique to that agency but will be used by all. In order to facilitate information sharing it is strongly recommended that the participating agencies try to agree to the extent possible on the appropriate data table codes.

Text Template Maintenance

Versadex also supports what we call Text templates (similar to MS Word forms) which are used to both guide officers in the preparation of a specific type of report (by filling in the blanks) as well as to collect additional information on that offense. Versaterm customers make extensive use of text templates and these can be updated over the wireless to assure that all mobiles quickly reflect a new or changed text template. These customers can attest to the configurability and flexibility of the Versadex RMS.

This is one of the easiest and quickest methods of extending the data that is collected by individual agencies.

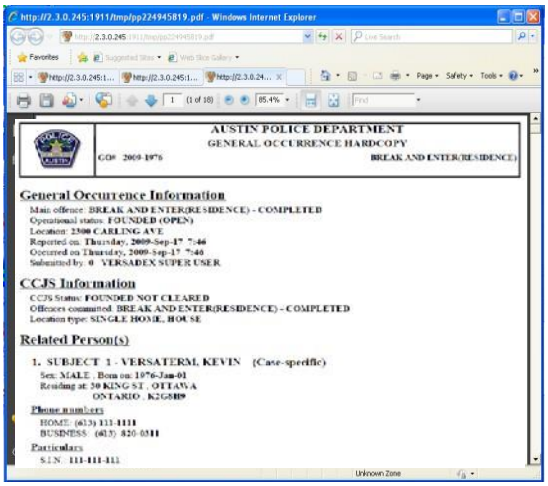


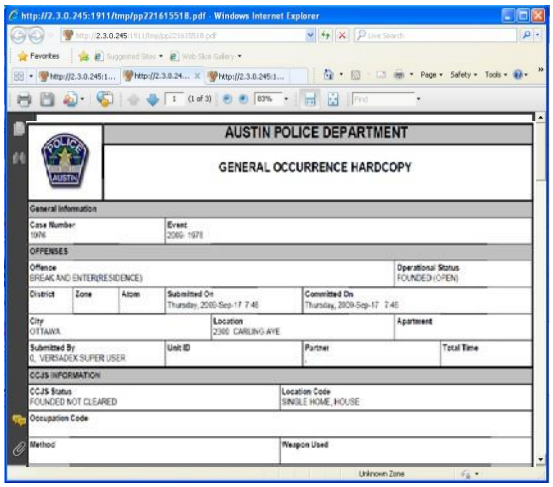
Drop-down field boxes with specific entries and date widgets can also be used to capture specific types of data. Once this data is entered, all of the data elements within the text template can be searched through the Browse function.

Hard Copy Out-Put Creation and Maintenance

In a recent release we enhanced our approach to printing information (hardcopies) of events (occurrences, street checks, etc.). Although Adobe PDF is the standard printed output format, Versadex RMS has been enhanced to permit each agency to tailor their report output look and feel.

Using standard Internet style sheet technology, agencies will be able to tailor the output of data and offer their users choice when producing hardcopies. The following illustrates viewing the same occurrence data, viewed in IE / Adobe Reader, but using 2 different style sheets to present the data. The first window illustrates a report layout whereas the second is in a "form" layout.





Customer Custom Data Fields

A relatively new feature of Versadex is the ability to extend the standard Versadex forms with local or custom fields so that agencies can simply extend a Versadex form with their own data collection requirements within one or more sub-forms. These data elements are searchable and are included in the standard print routines/XML outputs. Currently these custom can only be added by Versaterm technical personnel but we are working to complete custom field maintenance functions which will enable a customer to maintain their own customer fields.

Mobile Report Entry

The MRE can be configured to guide an officer through the completion of a report to ensure accuracy. Although it is possible to specify required fields it is even possible to create a wizard-like approach that verifies an officer has completed all of the required details before submitting the report. The following is an example of how an agency created 'Report Types' that ensure compliance to local policies.

It is also possible to even further segment required reports, for example, by Arrest Report Type. The screen to the right shows the different Arrest Report types that are currently being used by a customer. Each report type contains those data elements that are required for the different type of Arrests.

Both the **Versadex vCAD and vRMS** solutions contain powerful **Analytic** functions that are capable of assisting agencies in improving operational and administrative process. The philosophy for all Versaterm products is to ensure that an agency has access to all of the information contained within any of our systems. In our experience, of primary importance to any analytical activities is that the data itself be accurate and timely. In addition, a system must be designed to include a user-friendly experience that encourages single-entry and tight integration across modules. Versaterm provides easy-access tools to everyone, thus many of the simple 'research' activities can be performed by the users themselves and without a performance hit. Over the years, we have developed tools and methods to measure performance and have monitoring processes (aka VersaNanny) to monitor system performance. We are looking at extending this capability to measure "user experience" with the ability to set thresholds for more proactive responses. For an Agency, we believe this design approach is ideal as it enables output that can reliable and actionable.

There are a number of methods used to search and measure information from within the Versaterm solutions and we believe that they can serve an Agency well because:

- The data contained in the CAD and RMS will be timely and accurate thus lending to more reliable reports.
- The tools available are easy to use and do not require specialized technical or programming skills.
- The tools are very flexible and offer a number of options for visualization including interactive summary lists, charts and graphs, maps and the ability to export search results for further analysis.
- The tools can monitor and identify user-experience problems, before they become real issues.

The Versaterm solutions include a variety of reporting and analytical functions, including Business Intelligence (BI) capabilities. The following are the reporting, analytical and KPI functions that would be available:

- Dashboards and Event Trending
- Standard System Reports (for both CAD and RMS)
- Versaterm Operations & Crime Analysis Package (VCAP)
- Query and Browse
- System Performance Monitoring and Alerting Tools

Dashboards and Event Trending

Integrated dashboards

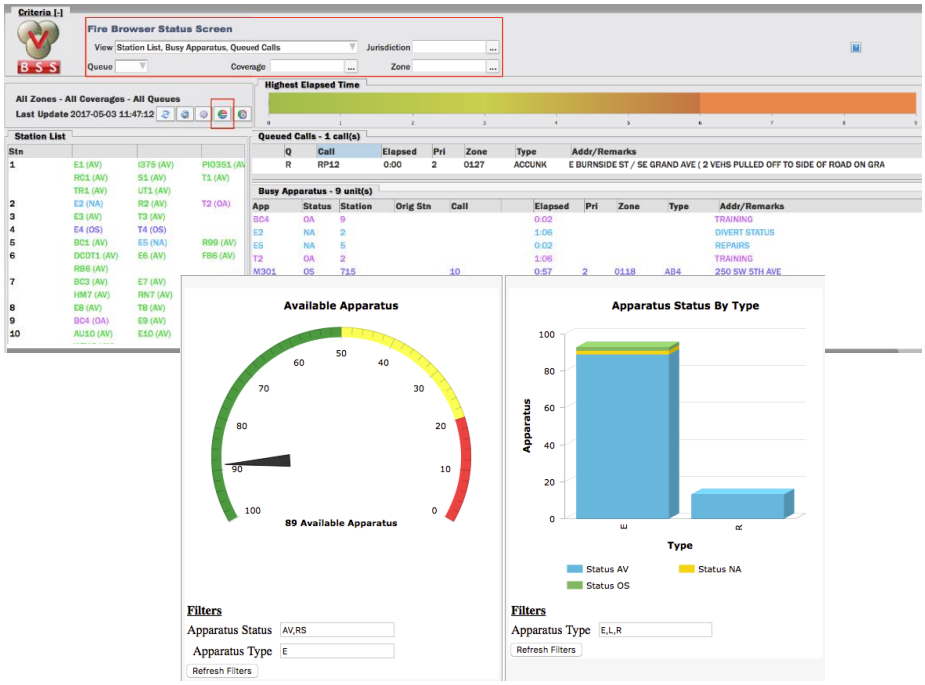
The Versaterm CAD and RMS come with integrated and configurable dashboards contained within the Browser Status Screen (BSS) and Case Management module respectively. These dashboards display current metrics using advanced visual displays and notifications.

There are unique BSS dashboards for Police and then Fire & EMS. The base BSS dashboard view will show all CAD activity including Units/Apparatus, Queued Calls and Active Calls. The user can then select from a number of drop downs lists to alter the content displayed such as by geographic area. These dashboards have configurable thresholds, measure for acceptable performance, and warn if thresholds are met. Our goal is to detect an issue before it becomes critical.

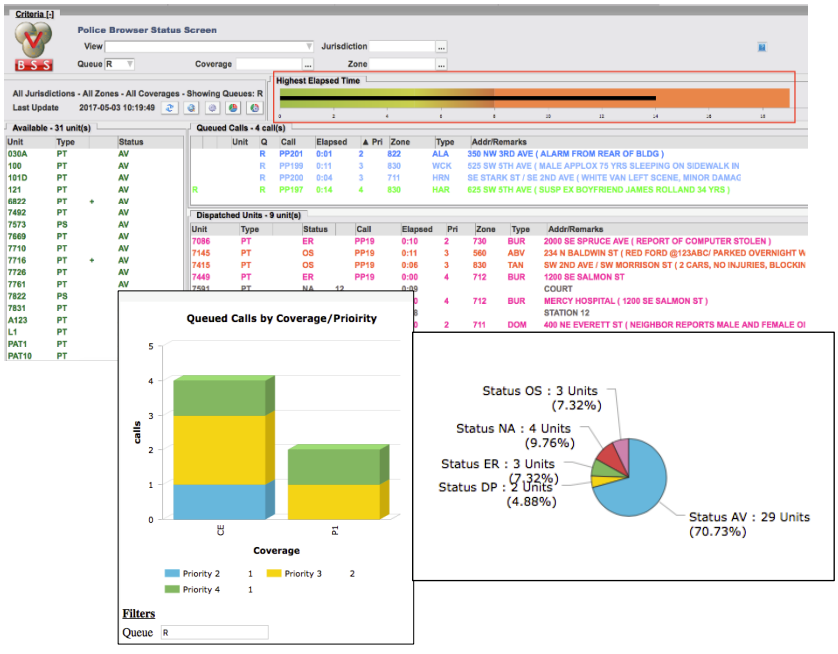
We have already incorporated CAD dashboards focusing on Call Volume, Unit Availability and Call times and are working on a System performance dashboard. Below are examples of such dashboards.

Within the BSS there is an option to open the graph displays →

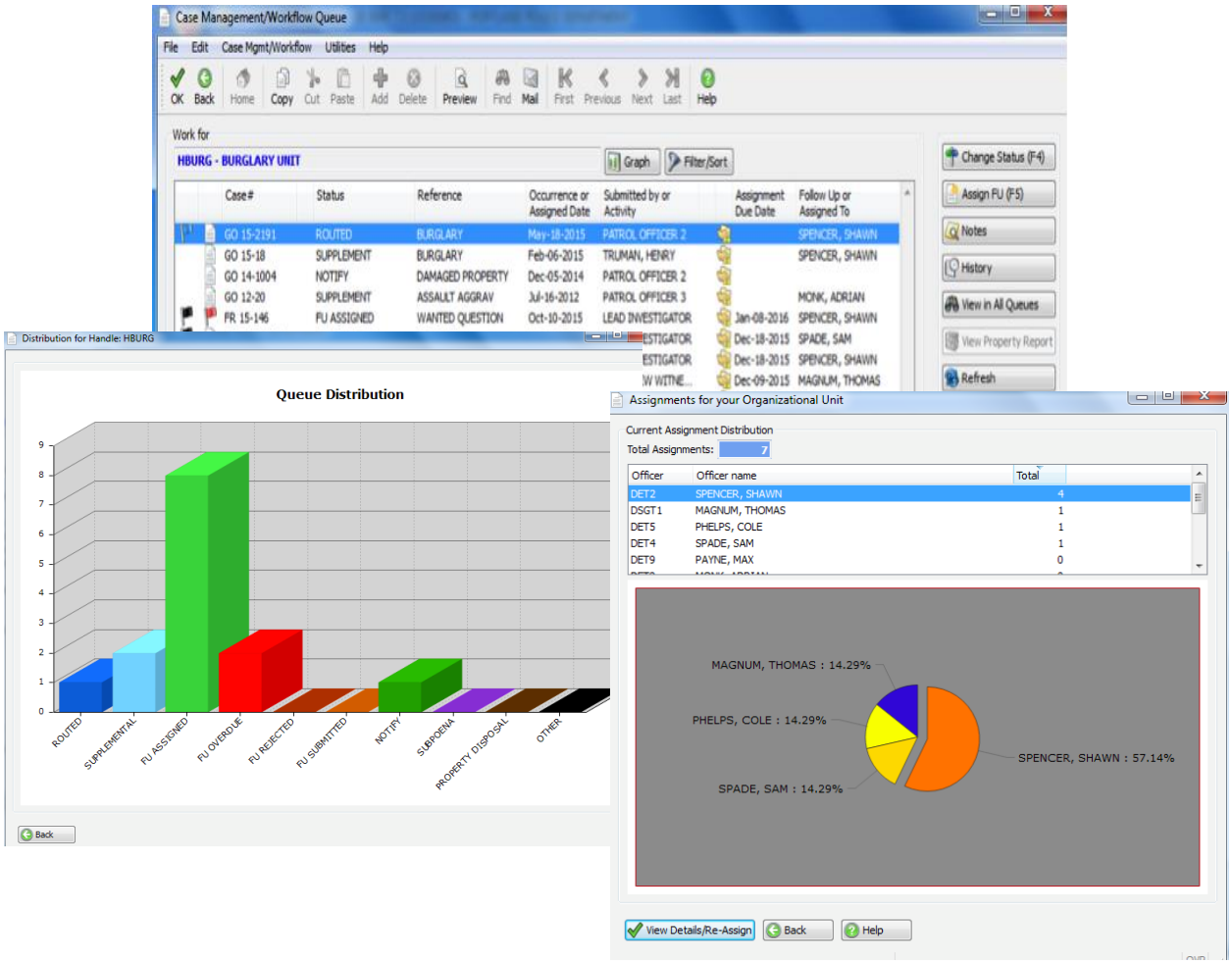
This screen shot below is from the Fire & EMS BSS, with a Graphical display of available Engines (drawdown) on the left and on the right, the status of Engines and Rescues.



In the example below on the Police BSS, there is a **Highest Elapsed Time** bar that indicates the time in minutes of the oldest pending call. The Police BSS also has a graph option and a number of graphs can be created such as the examples below of queued calls by area and priority (lower left) and the units by status (lower right).



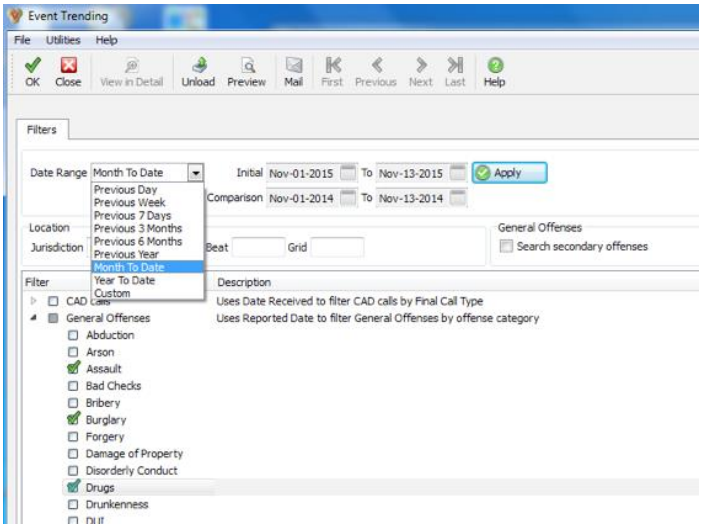
Case Management is a powerful and flexible component of the RMS that automates paper flows and provides users with timely and accurate access to assignments. Case Management Queues display the assignments that fall under that area of responsibility. The queue is typically monitored by the Unit manager and is similar to a status board of all new and ongoing activity. Managers can also obtain a graphical representation of the case assignments (as shown below).



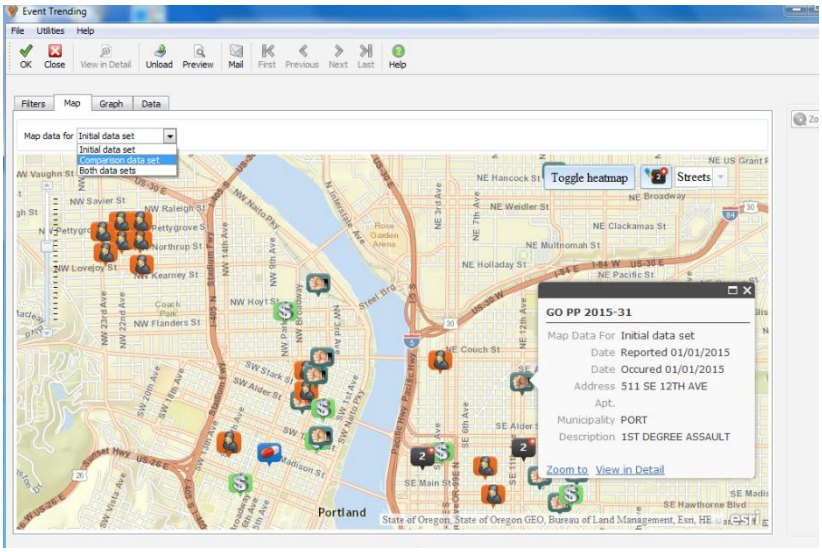
Event Trending

The Event Trending tool provides the ability for Agencies to perform a comparison of data for two time periods, mapped in a geographic context. By comparing the two time periods it's possible to quickly determine if there was an increase or decrease in activity for a specific area. Event Trending will also assist the Agency in detecting hot spots and chronic locations when collaborating on crime reduction strategies. Event Trending is available in the main RMS system so that all users can access it. It should be noted that all Versaterm CAD calls can permanently be stored in the vRMS system and can also analyzed within the Event Trending application as well.

Depending on the nature of the inquiry, the Agency has a number of options to refine the search including date ranges (previous day, week, 7 days, 3 months, year, month to date, year to date or a custom range), geographical area and then crime categories.

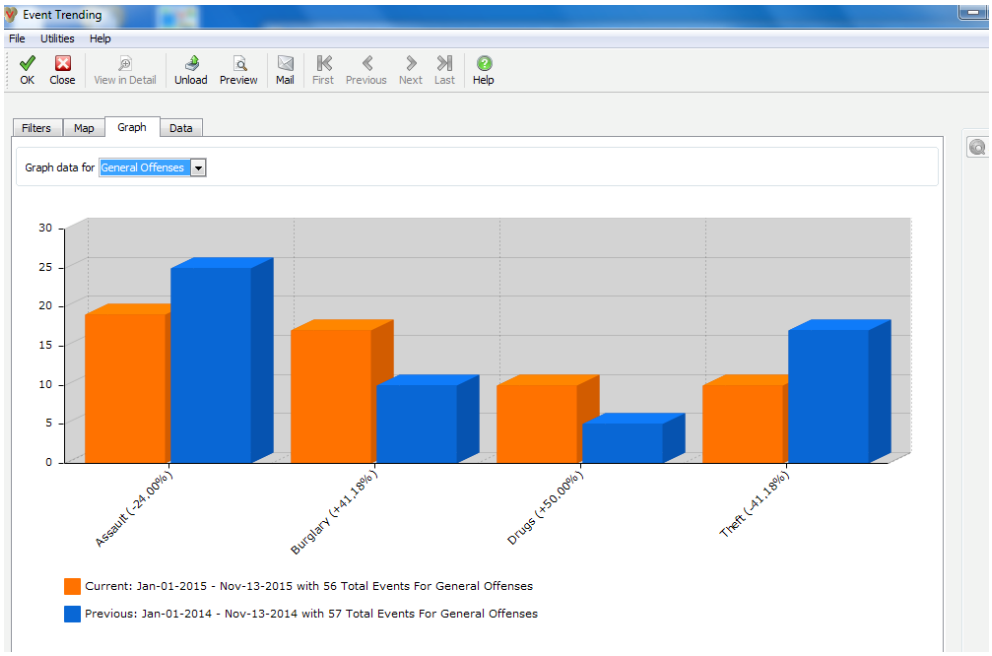


Event Trending will present the Agency with two views of the comparison data for visualization.

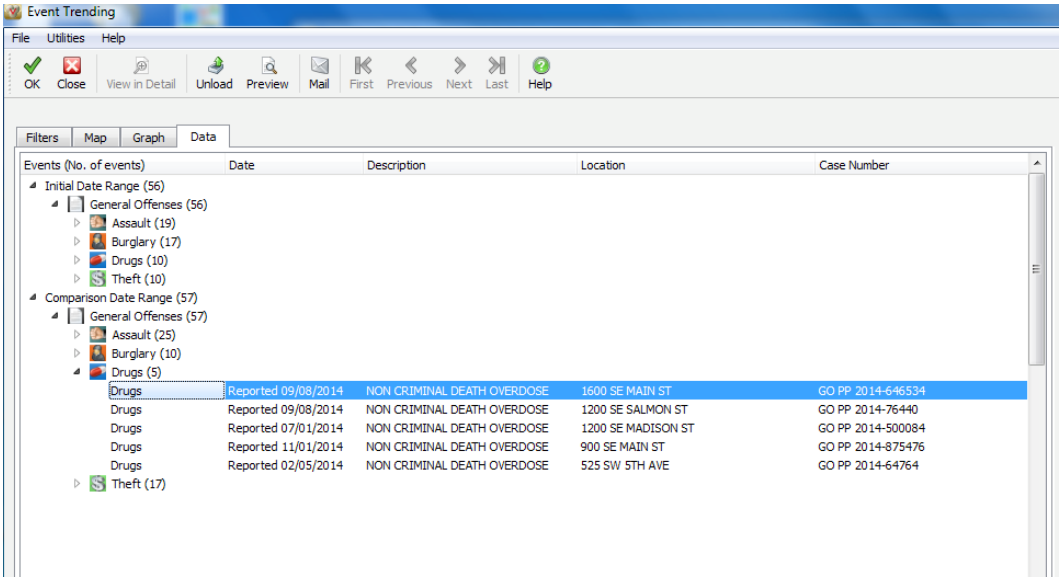


The first one is a map where crime-specific icons are overlaid on the map to show where the offenses are taking place. This map is interactive so the Agency can click on any of the icons, view a summary of the case and, if required, see the entire case right from this screen. The map also allows the Agency to toggle between the sets of data returned in the search (Initial, Comparison or Both)

The second view is a Graph comparing the frequency of the requested crime types between two periods.



Finally, Event Trending also has a Data option that has a summary view of all of the cases returned in the search. As with the map view, this tab permits the Agency to drill into the results and go directly to a specific case right from this screen. Also, as with the Browse described above, there is an 'Unload' feature to export the data into an ASCII file on the Agency's desktop.



Standard System Reports (included in the core system)

The Versaterm CAD and RMS come equipped with a variety of standard system reports. The creation of Agency Defined Reports through Style sheets allow agencies to define report outputs using standard tools. The look, feel and content of these reports are completely configurable by each agency. This is not limited just too new reports but in fact can be used to change the look and feel of the standard reports, the browse results, and used to customize the output to 3rd party tools.

The following lists all of the system reports that come with the core system:

Police CAD Reports

Calls by Hour
Calls by Month
Calls by Week (by day of week)
Calls by Zone
Call Frequency
Daily Incident
Dispatch Analysis
Down Time
Expired Hazard Reports
Officer Activity by Call type
Officer Radio Log
Response Time
Snapshot Report
Time Log
Zone by Hour
Zone by Month
Zone by Week
Invalid Locations

Fire CAD Reports

Monthly Apparatus Activity
Call Analysis
Call Type comparison
Call by month
Calls by day of the week
Daily Incident
Response Time Analysis Reports

Records Reports

UCR/NBIRS Reports/File
Case by hour report
Case by month report
Case by week report
Case Frequency report
CAD Calls report
Crime Trend report
Daily Bulletin report
Daily Incident report
Dispatch Analysis report
Down Time report
IBR Edit report
Juvenile report
Invalid Locations report
Media report
MV Accidents report
MV Tickets report
Officer Activity report
Officer Case Load report
Officer Case Tracking report
Officer Radio Log report
Outstanding Applications report
Outstanding Warrants report
Overdue reports
Response Time Analysis report
Sobriety Test report
Time Log report
Unit Radio Log report
Zone by Hour report
Zone by Month report
Zone by Week Report

Property reports

Case Closed DR report
Disposal Notice report
Disposal Review report
Property Picking report
Disposal Authority report
Form Letter report
Matching reports:
- Article Match report
- Bicycle Match report
- Firearm Match report
- Jewelry Match report
- Securities Match report

Owners/Finders report
Property Inventory report
- Selecting inventory by - Offense date
- Selecting inventory by - Location

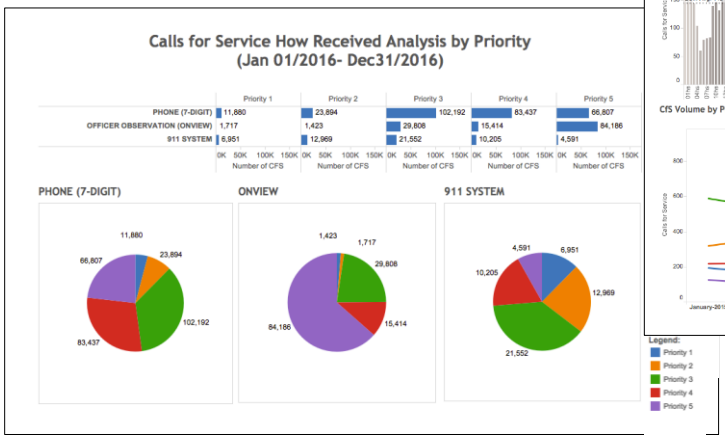
Securities Match report
Total Cash report
Value of Stolen and Recovered Goods report

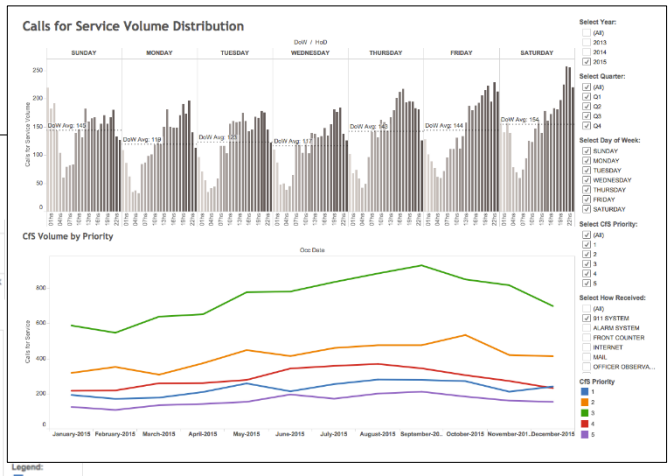
Versaterm Operations & Crime Analysis Package (VCAP)

The Versaterm Crime Analysis Package (VCAP) consists of two main parts:

- The Versaterm Suite is configured with a Data Mart that serves as a secondary replicated database that contains key information from the Production systems. The Versaterm Data Mart (VDM) normalizes data extracted from the operational CAD and RMS for use in detailed CFS, crime and operational analysis. The purpose of the Data Mart is to provide convenient access to the most-needed information while shielding users from the complexities of the database structure on the source system. The VDM contains the data most often used for trend analysis and presents it in a way that is easy to understand. The data in the VDM is kept up to data in near real time with the Production CAD and RMS so that reports contain the timeliest data.
- The Versaterm Crime Analysis Package (VCAP) has simplified the integration of powerful business analytical tools into CAD and RMS using Tableau as the recommended tool. Tableau amply meets the requirement for reporting, KPI's, analytics, dashboarding, information sharing and collaboration within the agency. Tableau BI technology turns raw data into meaningful information. Tableau is a powerful analytical Visualizer that is capable of producing interactive reports that will meet the BI requirements of PPD.
    - Although we have proposed Tableau, the VDM is ODBC compliant should PPD wish to use a different BI tool. Currently, our customers use an array of BI tools such as Cognos, Crystal and SQL Server Reporting Services (SSRS).

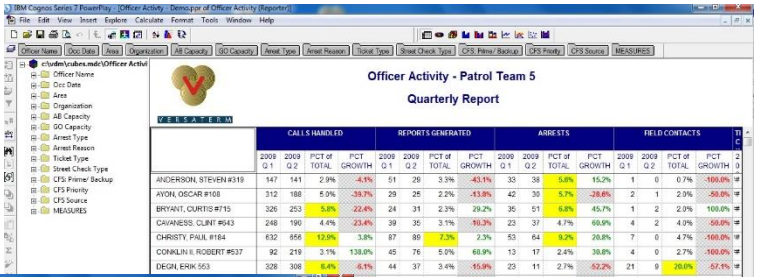
Below are sample reports that illustrate how BI tools can be used to measure operational and crime data.

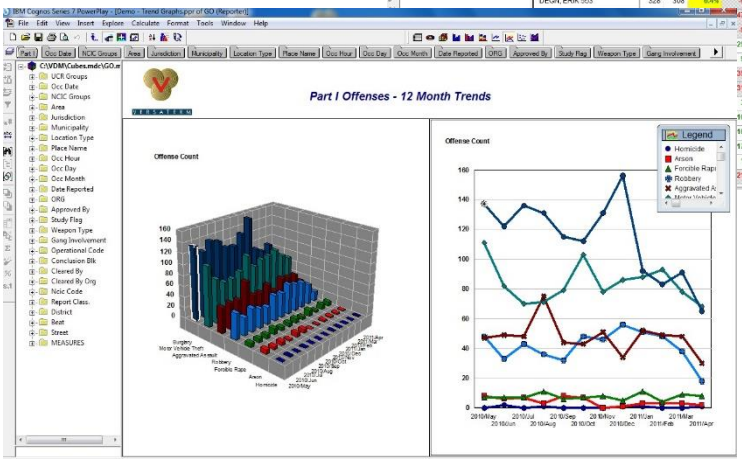




These reports below graphically display CAD CFS data in many ways.

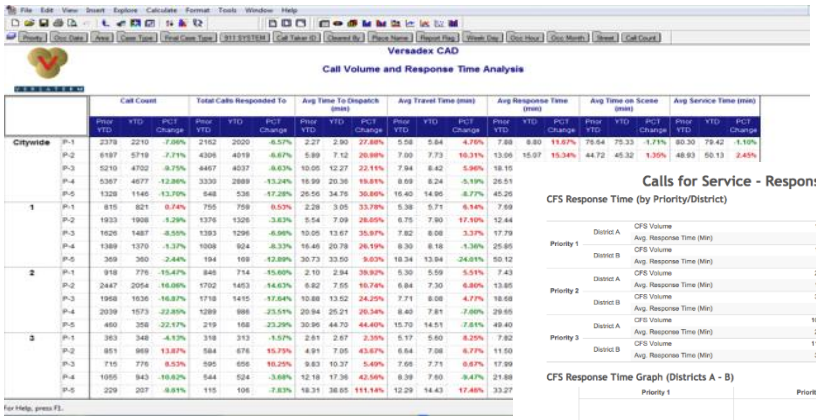
Operational Productivity Data is displayed on the right.

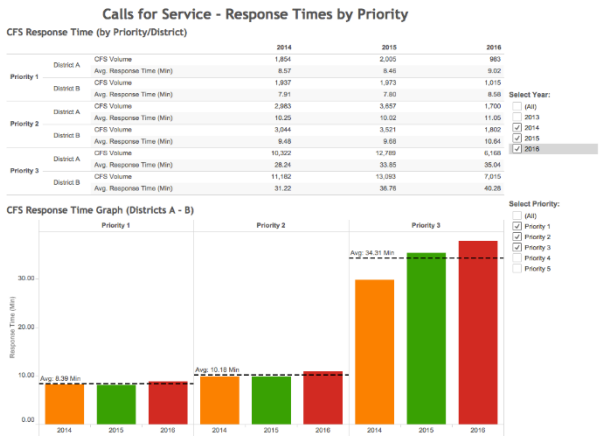




Crime Data rendered graphically displayed to the left.

This report will be able to answer the myriad of questions surrounding call response times. It looks at call volume as well as average times for each call priority, by area. The report makes extensive use of calculated measures to accurately count calls and calculate average times. (Same report rendered in two ways).





Query and Browse

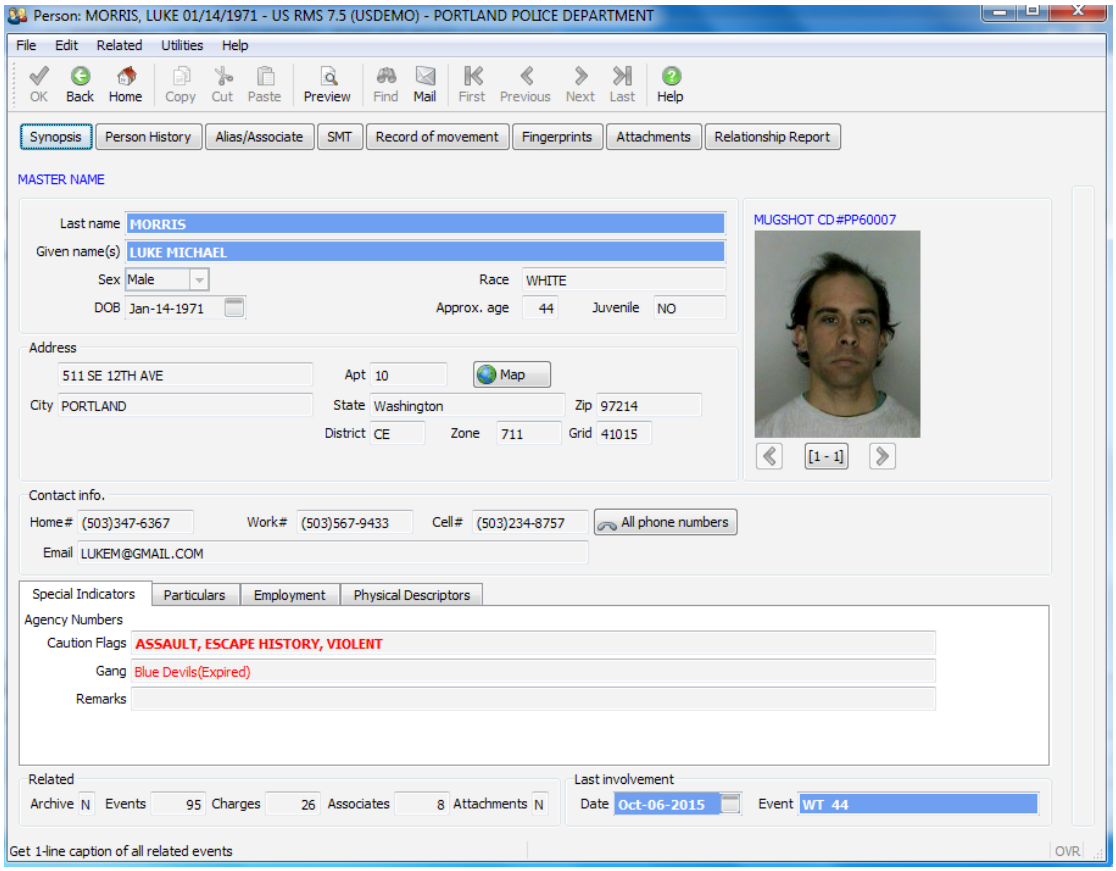
Query

The Query tool provides the Agency with a consolidated view of events in the system. For example, if the Agency was interested in a particular person, Query will provide a summary, detailed and interactive report on the person.

To begin, Query includes sound-alike features that will enable the Agency to find the person without having an exact match. This means that a Query on the name 'GOMEZ' will also return 'GOMES'. The Soundex will also automatically take into consideration hyphenated names so that 'MARTINEZ-GARCIA' will be the same as 'GARCIA-MARTINEZ' regardless of how it was entered in the system. The Query will also help streamline this search by examining a list of diminutive names where the name 'RICH', 'RICKY', 'RICK', 'DICK' are all the same as 'RICHARD'.

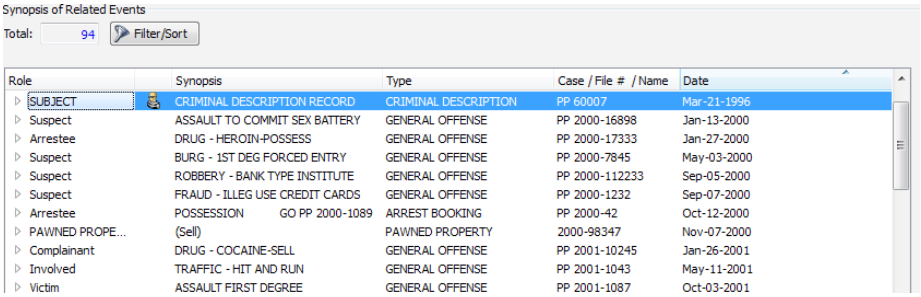
Versaterm has experience with very large systems where millions of names will be on record. To help the Agency get to the person they are looking for, Query will also take into consideration factors such as sex, age range, DOB, and ID numbers such as Driver's License and Social Security.

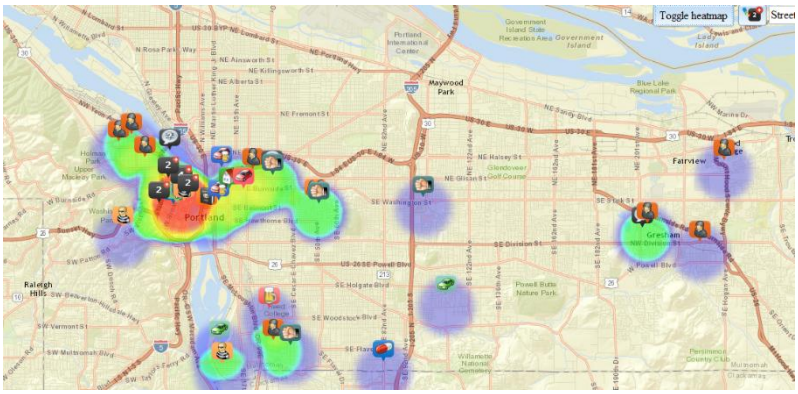
Once you find the person, Query provides a summary description of the person including their most recent mugshot.



From the summary report, the Agency has quick links to get information on a variety of information including:

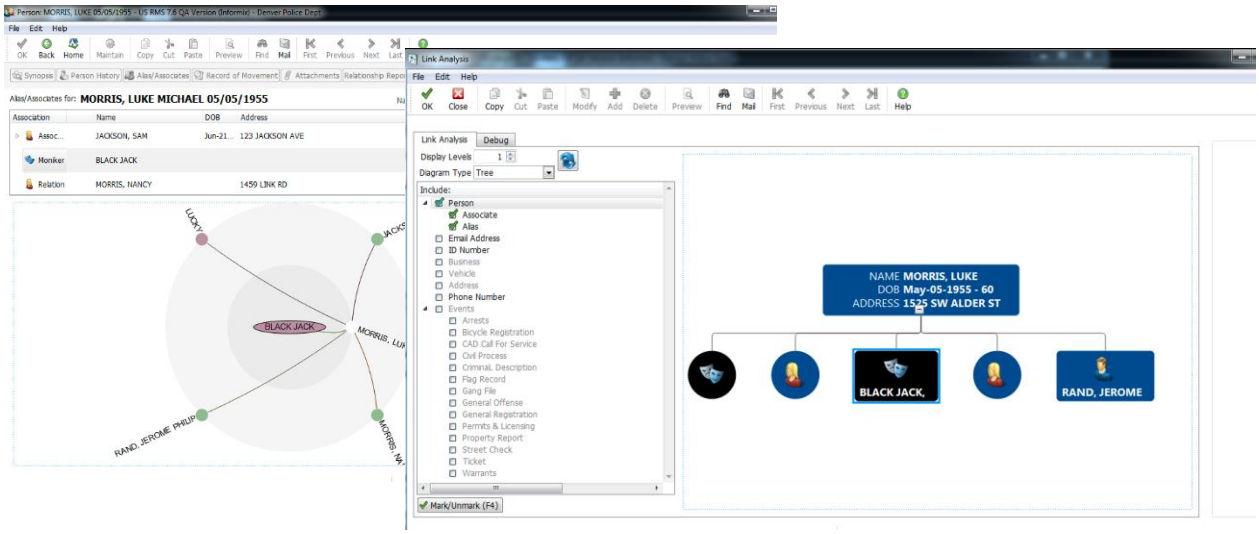
Synopsis of all events associated to this person including their association (victim, witness, arrestee, etc.)

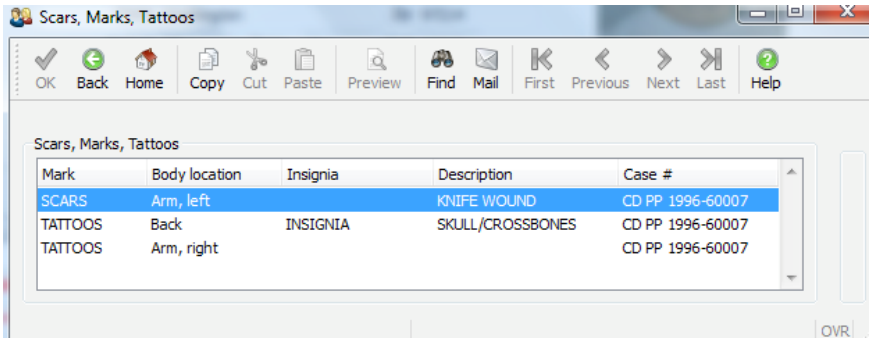




Person History that retains their descriptive information throughout their involvements in your agency. For example, 5 years ago, what phone number where they using? Person history also includes an integrated map feature to show the Agency where this person has been active.

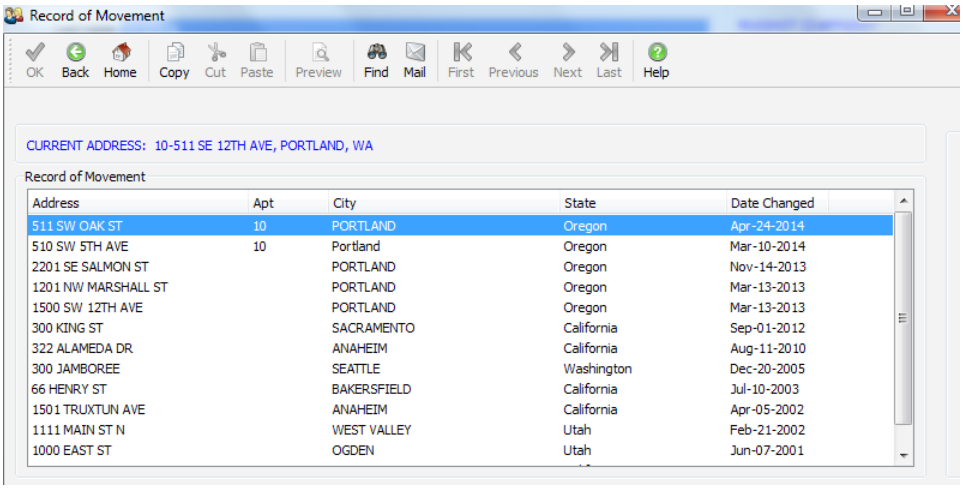
The Versaterm RMS system can also be used to analyze people, locations and phone numbers to find possible connections and to help solve crime. Link Analysis is a powerful embedded visual analysis tool that aids investigators and other users by allowing them to see links and connections between entities. This is one way the RMS system goes above and beyond just a storage system of information but a tool that puts pieces together as an aide to help solve crime.

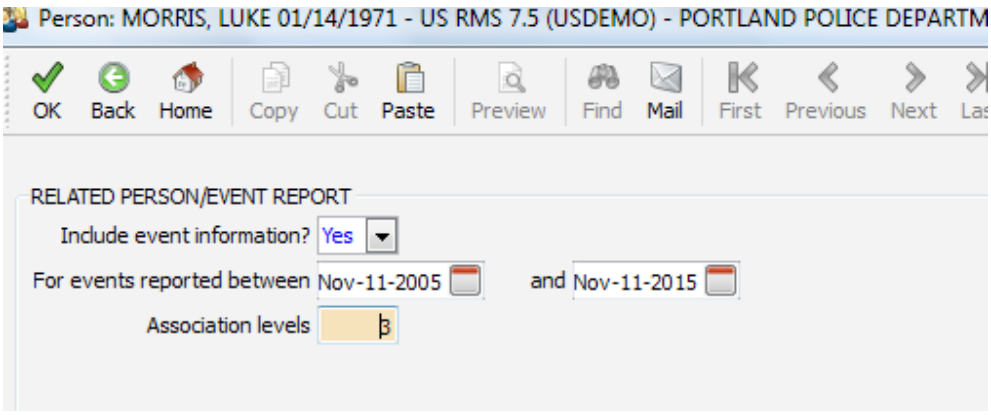




Scars, Marks, Tattoos (SMT) includes information such as body location and description.

Record of Movement details all of the historical addresses this person has used including the date the address was changed. Having this consolidated view eliminates the need for the Agency to open multiple reports to look up old addresses.





Relationship Report allows the Agency do perform a multi-layer report on known associates. For example, Luke is associated with Sam, who is Sam related to and so on.

The Query function is available in many other areas including Vehicles, Addresses, Businesses and Events. All of these other Query types operate similarly and offer the Agency powerful information-retrieval tools.

Browse

The Browse facility (ad-hoc query by example) is a simple yet powerful tool that allows a user to scan the database using virtually any data field used in the CAD and RMS. This facility is a useful tool when you are searching for a call but do not have enough precise information to perform a query.

Browse has been purposely designed to be user-friendly so that anyone can get data out of the RMS without technical training. In addition, Browse uses the same look and feel when searching the system as a user would be presented when entering data. As such, users will already have a high degree of familiarity with Browse without additional specialized knowledge.

The Browse tool has multiple uses including 'Wild Card' and 'String' searches such as OR, AND, EQUAL, NOT EQUAL, GREATER, LESS as well as ranges. Browse also supports a 'Filter' mechanism so that the layout and content of the unloaded data can be more easily imported into other tools.

Upon the completion of a Browse, a list of all results that meet the search criteria are displayed and the user can request and display all detailed information on each of the found records. In addition, results from a Browse can be unloaded for export for further analysis using 3rd party tools such as Excel, Access, Crystal, etc.

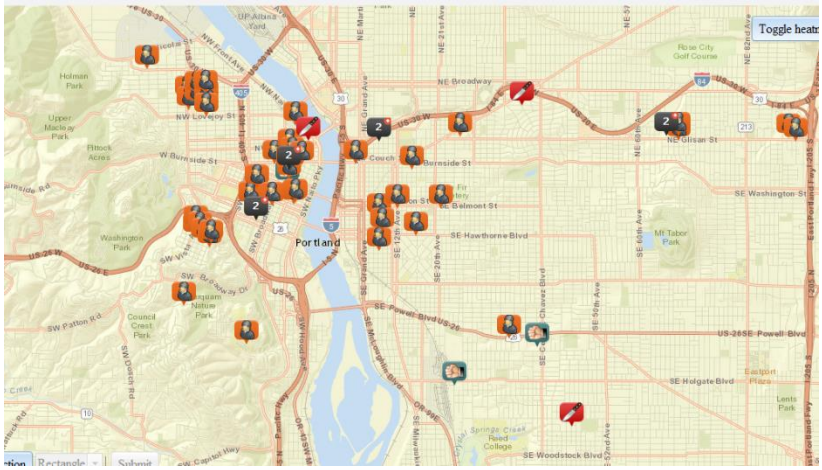
The following are a few examples of how Browse can be applied to meet an Agency's needs:

Leads Identification: For Investigation assistance (single or series), an agency can use Browse to identify potential targets based on description or similar historical activity. Some simple examples might be:

- Find all Chevrolet automobiles with a model year between 2000 and 2010 that are 4-Door and either Blue or Gray.
- Find all white males that are between the ages of 16 and 20, who are greater than 6' 3" and who reside in either Topanga or West Valley.
- Find all people involved in criminal activity that used an address in the 1000 Block of W 124th St between 2011 and 2013.
- Who has ever used the phone number 213-509-6996?
- Find all people who have committed or attempted sex assaults in the area of a bus stop while soliciting for aid or directions.
- Find all cases in the past 2 months where the text "LATIN KINGS" appeared in any narrative across all event types (Criminal, Citations, Arrests, Supplemental, and Witness Statements).

Trend Analysis: In order to assist in detecting patterns to identify future criminal activity, assist with deployment decisions and specialized missions, the Agency can use Browse to quickly identify these cases. Some simple examples might be:

- Identify all auto thefts where the vehicles were stolen from the Van Nuys area and recovered in the Newton area.
- Identify all residential burglaries where entry was gained by lifting a sliding patio door off the track, the target areas were bed and bathrooms and the items stolen included prescription medication.
- Identify all cases where a person under the age 14 was arrested for or named as a suspect in the sales of methamphetamine.



Browse results can be displayed as a list the user can drill into for more information as well as a map view of the results (as shown below).

Activity Analysis: Often Agencies are asked to provide reports on Police activity captured in the CAD and RMS. When performing research into performance management, crime counts or officer activity, Browse is the tool Agency's rely on. Some simple examples might be:

- How many Field Interviews were conducted in the Pacific Division relating to complaints of panhandling in the past 4 weeks?
- How many Citations were issued for distracted driving to persons under the age of 25?
- How many cases did the Juvenile Division handle this year? Of those, how many did they close by Arrest?

If required, Browse results can also be exported in an ASCII delimited file that could be imported into commonly used desktop tools such as Microsoft Excel. For recurring Browses, Agencies can even create filters to control the content and order of the export results.

Because Browse allows you to build a search quickly and easily in an ad-hoc manner, it is ideally suited when assisting with Crime Control Meetings and press conferences where there may be little notice and results required urgently.

Versaterm Customers

Client Bios and System Overview

2019

Introduction

This document contains a complete listing of Versaterm customers in Canada, the Caribbean and the United States. Each listing contains agency information, a synopsis of the systems installed and contact information. If you are an agency considering the Versaterm System, feel free to contact any of our customers. This listing offers two ways for you to find the agency most like your own or that uses the particular systems in which you are interested.

First, the body of this document lists our customers in alphabetical order by agency name. There are three sections: USA, Canada and Caribbean, the alphabetical order starts over in each section.

Second, there are a set of tables in the back of the document that list our customer agencies in order of population served, number of sworn officers and the state/province in which the agency is located. There is a set of tables for both American and Canadian agencies. Using these you can find an agency that is similar to yours in size.

We at Versaterm hope you find this volume useful. We think you will find our customers are a great source of information and ideas – we do.

Contents

US Customers

(alphabetical by name of agency)

Anaheim Police Department (California)

Population Served: **353,504**

Sworn Officers: **408**

Customer Since: **2005**

Anaheim PD began by installing the Versadex RMS and CAD systems along with the Mobile Workstation MWS (MDT and MRE). Anaheim participates in a city-wide interface that is known as the Enterprise Virtual Operations Center (EVOC) Portal, which is dedicated to aggregating data from various city departments and sharing that data within those city departments. This system is part of an "emergency- preparedness" initiative and is intended to assist in the deployment of all city services in the event of a severe emergency such as a terrorist threat, earthquake etc. Anaheim optimized its interface with the COPLogic systems so that reports submitted via this system are reviewed, approved and then ingested into the RMS system. This process results in significant savings and makes the department both more efficient and responsive to the public.

Installed Applications

Versadex Computer Aided Dispatch

Versadex Records Management System

- Evidence/Property subsystem
- Arrest subsystem

Versadex Mobile Field Reporting

vMobile

Versadex Mobile Data Terminal

Interfaces

- CAD/RMS Gateway
- E-911
- CLETS/NCIC
- Queries
- Automatic Adds/Updates
- Maps
- Master Time Clock
- Motorola RNC 3000
- Metro Net Enterprise Virtual Operations Center
- Browser CAD Status
- COPLogic
- COPLogic Alarm Interface
- COPLINK information sharing
- Cogent Mugshot Interface
- Cogent Criminal Registrant Interface
- Lynx information sharing interface
- VCAP
- Remote CAD

Contact: Kurt Wallace, Communications Manager
TEL: (714) 765-1824
KWallace@anaheim.net

Nicole VanTrain, Records Manager
NVantrain@anaheim.net

Aurora Police Department (Colorado)

Population Served: **366,477**

Sworn Officers: **670**

Customer Since: **1995**

The Aurora Police Department became a Versaterm customer in 1995 when they replaced an existing optical disk imaging system with the integrated Versadex document management system. Over the years Aurora added the complete RMS, Mobile Workstation MWS (MDT and MRE), an interface to their third party CAD system, and the Versadex Booking and integrated mugshot system which supports the Aurora jail. They also support an integrated NCIC/CCIC interface to their RMS and Mobiles.

Aurora PD has been submitting electronic NIBRS info to CBI since 1995.

Installed Applications
Versadex Records Management System ♦ Evidence/Property subsystem ♦ Bar Coding ♦ Arrest/Booking subsystem ♦ Integrated Mugshot System
Versadex Integrated Document/Multimedia Attachments
Versadex Mobile Field Reporting
Versadex Mobile Data Terminal (for RMS/NCIC queries)
Interfaces ♦ Third-Party CAD Call for Service Ingest ♦ NCIC/CBI ♦ Queries ♦ Auto Adds/Updates ♦ PictureLink Mugshot Interface ♦ MorphoTrust Livescan Interface ♦ Lumen Numerica (Regional Information Sharing) ♦ Court Interface (eCite Ingest)

Contact: Sgt. Matthew Fyles
TEL: (303) 739-6041
mfyles@auroragov.org

Austin Police Department (Texas)

Population Served: **956,911 (full purpose population*)**

Sworn Officers: **1,807**

Customer Since: **2003**

Austin acquired the Versadex RMS and Mobile Field Reporting solutions in 2003 and the Mobile Data Terminal and several other remote system interfaces in 2006. These systems have been upgraded twice since then. Approximately 10 years of existing data have been converted and loaded into the new system which was also interfaced with the Tri Tech CAD system installed to support Police/Fire/EMS.

Austin is the capital of Texas and is one of the fastest growing cities in the US.

Installed Applications

Versadex Records Management System

- Evidence/Property subsystem
  - Bar Coding
- Arrest/Booking subsystem
- Integrated Document/Multimedia Attachments

Versadex Mobile Field Reporting

Versadex Mobile Data Terminal (for RMS/NCIC queries)

Interfaces

- Tri Tech CAD Interface
- TCIC/NCIC
  - Queries
  - Automatic Adds/Updates
- County Jail Interface
- Electronic Pawn Upload
- Batch Pawn Check
- Regional Warrant Query Interface
- LIMS Forensics
- PictureLink Mugshot System

Contact: Ron MacKay, Planning & Crime Analysis Division Manager
TEL: (512) 974-5022
Ron.mackay@austintexas.gov

* This population includes areas outside Austin served by the Police.

Bakersfield Police Department (California)

Population Served: **380,000**

Sworn Officers: **400**

Customer Since: **2002**

In 2002, Bakersfield PD replaced their existing records system with the Versadex RMS and soon thereafter, decided to replace their CAD system, Mobile Field Reporting and MDT software. By 2003, Bakersfield was in production with the CAD and Mobile Solutions including Interfaces to E911, CLETS, and the Kern County Jail.

Installed Applications
Versadex Computer Aided Dispatch
Versadex Records Management System ♦ Evidence/Property subsystem, including bar coding ♦ Arrest/Booking subsystem ♦ Integrated Document/Multimedia Attachments
Versadex Mobile Field Reporting
Versadex Mobile Data Terminal
Interfaces ♦ E-911 ♦ CLETS/NCIC ◊ Queries ◊ Automatic Adds/Updates ♦ County Jail Interface (Arrest) ♦ Browser Status Screen ♦ COPLINK ♦ eCitation

Contact:

Capt. Jeremy Grimes
Support Services
TEL: (661) 326-3824
jgrimes@bakersfieldpd.us

Baytown Police Department (Texas)

Population Served: **77,224**

Sworn Officers: **163**

Customer Since: **1991**

In 1991 Baytown, an eastern suburb of Houston became Versaterm's first US customer with RMS and MiniCAD. Then in 1999, Baytown upgraded to the full Versadex CAD to support Mobile Data.

Baytown now operates the full suite of Versadex products. The CAD and MDT support both the Police and Fire Departments while the RMS application is also in place in the PD. The police applications also include interfaces to a mugshot system, bar coding and NCIC/TCIC.

Installed Applications
Versadex Computer Aided Dispatch (Police and Fire)
Versadex Records Management System ♦ Evidence/Property subsystem ◊ Bar Coding ♦ Arrest/Booking subsystem ♦ Integrated Document/Multimedia Attachments
Versadex Mobile Field Reporting
Versadex Mobile Data Terminal
Versadex Crime Analysis Package
Interfaces ♦ E-911 ♦ Harris County Integrated Justice System ♦ Mugshot System ♦ TCIC/NCIC ♦ Firehouse (Fire RMS) Interface

Contact: Ed Tomjack – Director of ITS
TEL: (281) 420-7000
ed.tomjack@baytown.org

Bellingham/Whatcom County Police/Fire (WA)

Population Served:	**206,000+**
Sworn Officers:	**600 + sworn and civilian,** **19 Public Safety Agencies (Police, Fire EMS)**
Customer Since:	**2016**

In 2017, Whatcom County 911 Regional Dispatch operations went live with the Versadex CAD and MDT applications. Whatcom County supports a multi-jurisdictional, multi-service installation, spread across two geographically distinct dispatch centers, where they provide dispatch services for the Whatcom County Sheriff's Office, the City of Bellingham Police and Fire Services, as well as several other law enforcement and fire agencies in the County.

This project involved multiple CAD interfaces including E911, NCIC queries, Call for Service Transfer to several Police/Fire RMS systems, Alerting (toning their radios), as well as interfaces to ProQA and PulsePoint.

Installed Applications

Versadex Computer Aided Dispatch (Police and Fire)

Versadex Mobile Data Terminal

Interfaces

- E-911
- NCIC
- Alerting
- ProQA
- PulsePoint

Contact: Greg Erickson, Deputy Director of Operations at What-Comm 911.
TEL: 360-778-8906
Gerickson@cob.org

Chandler Police Department (Arizona)

Population Served: **265,922**

Sworn Officers: **329**

Customer Since: **2011**

Chandler Arizona is a growing city in the Phoenix metropolitan area where Versaterm implemented an integrated law enforcement system consisting of CAD, Mobile, RMS and MRE.

A number of interfaces are also included to improve officer and citizen safety while gaining efficiencies with automation. The RMS interfaces include NCIC/ACIC, Livescan, Mugshots, Municipal Courts and RMS Property to the Laboratory Information Management System. The CAD project includes interfaces for E911, Motorola Push-to-Talk, and Crywolf Permitted Alarms. The Department handles approximately 162,000 calls for service, producing over 60,000 reports.

Installed Applications
Versadex Computer Aided Dispatch
Versadex Records Management System
Versadex Mobile Field Reporting
Versadex Electronic Citations
Versadex Mobile Data Terminal
Interfaces ♦ ACIC/NCIC ♦ Livescan ♦ Mugshot System ♦ Courts ♦ Property ♦ E-911 ♦ Motorola PTT ♦ Crywolf ♦ COPLINK

Contact: Bill Edel, Police Technology Manager
(480) 782-4153
william.edel@chandleraz.gov

Denver Police Department (Colorado)

Population Served: **699,259**

Sworn Officers: **1,483**

Customer Since: **2003**

Phase I of this multi-year implementation began in 2005 with the roll-out of the Versaterm mobile components across Denver PD's entire fleet. This included the installation of the Versadex MDT software which is used by the officers to query the RMS as well as to query CBI/NCIC directly from the field. The MDT software also includes mapping and AVL/GPS functionality. Phase I also included an interface between the Versadex MDT and Denver's Tritech CAD. This interface provides call details, status updates, car-to-car/car-to-dispatch messaging as well as AVL.

In 2006, Phase II of the project saw the implementation of the full RMS, including case management, document management (multimedia attachments), property, the remaining arrest booking functionality, as well as the implementation of full field reporting. Phase II also included capturing Motor Vehicle Accident details out in the field as well as interfaces to both COPLINK for information sharing (replaced with Lumen Numerica interface) and Coplogic for Citizen Based Reporting.

The Department has also rolled out electronic summons and complaints (citations) as part of their mobile field reporting. Denver Police also support an interface to send event, arrest summons/citation and offender information to the Jail, City and County Courts as well as to the City Attorney and District Attorney.

DPD also supports Colorado NIBRS reporting.

Installed Applications

Versadex Records Management System

- Evidence/Property subsystem
- Arrest/Booking subsystem

Versadex Mobile Data Terminal (with Maps & AVL)

Versadex Mobile Field Reporting

- Motor Vehicle Accidents
- Summons/Citations

Interfaces

- CBI/NCIC
- Queries
- Automatic Adds/Updates
- Tritech CAD -to- MDT Interface (Silent Dispatch)
- Tritech CAD AVL Interface
- County Mugshot System Interface
- City and County Court Interfaces
- City Attorney Interfaces
- District Attorney Interfaces
- JMS Interface
- LIMS Interface
- Lumen Numerica (Regional Information Sharing)
- CopLogic (Online Citizen Reporting)
- City and County of Denver Oracle Bus Interface

Contact: Cliff Barnes, Manager, Information Management Unit
TEL: (720)-913-6544
clifford.barnes@denvergov.org

Fullerton Police Department (California)

Population Served: **141,968**

Sworn Officers: **141**

Customer Since: **2005**

In 2004 Fullerton installed the full Versadex suite of products: Versadex CAD and RMS along with the complete MWS (MDT and MRE). They also have a CLETS/NCIC interface through the Orange County message switch known as OCATS. They have their own Jail and use the complete Versadex RMS Jail component. Their mugshot system is an Imagis CABS system, which interfaces with Versadex.

Fullerton PD is located in Orange County, south of Los Angeles and is right next door to Anaheim, CA (another Versaterm customer).

Installed Applications

Versadex Computer Aided Dispatch

- Browser Status Screen

Versadex Records Management System

- Evidence/Property subsystem
- Arrest/Booking subsystem
- Integrated Document/Multimedia Attachments
- Jail Management

Versadex Mobile Field Reporting

Versadex Mobile Data Terminal

Interfaces

- E-911
- CLETS/NCIC
  - Queries
  - Automatic Adds/Updates
- CABS Mugshot Interface
- CLETS Validation Process
- Maps
- COPLINK
- Identix Booking Interface
- Alarm Interface

Contact: Helen Hall
Directory Administrative Services
(714) 738-5309
helenh@cityoffullerton.com

Hillsboro Police Department (Oregon)

Population Served: **102,000**

Sworn Officers: **127**

Customer Since: **2019**

The HPD is the municipal law enforcement agency of the city of Hillsboro, Oregon with approximately 127 sworn officers serving a population of over 100,000.

Hillsboro's RMS went live on the Versaterm vCloud in January 2019 powered by Amazon Web Services (AWS), vCloud is fully CJIS compliant with both the database and application stack securely hosted in the GovCloud, a specialized area in the cloud designed to host sensitive data.

The city hosts many high-technology companies, such as Intel, that comprise what has become known as the Silicon Forest.

Installed Applications
Records Management System
Mobile Field Reporting
Mobile Data Terminal
Interfaces ♦ LEDS/NCIC ♦ CAD Interface ♦ Electronic Citation Court Interface

Contact: John Taylor
IT Manager, City of Hillsboro
(503) 681-5402
john.taylor@hillsboro-oregon.gov

Hillsborough County Sheriff's Office (Florida)

Population Served: **1,349,000**

Sworn Officers: **1,181**

Customer Since: **2005**

The HCSO provides full law enforcement services to the unincorporated areas of Hillsborough County (Tampa). Approximately 1,160 sworn officers are assigned to the law enforcement division. The Sheriff's Office also operates the county jail that provides correctional services for the county, including the City of Tampa. HCSO began replacing their 15 year old CAD and RMS in 2005. The CAD, Mobile Data Terminal, Mobile Field Reporting and RMS are now in production allowing the department to function in a near paperless environment. Several remote system interfaces are provided and the Versadex Message Controller serves as the communications gateway to FCIC/FDLE for the Tampa Police Department.

Installed Applications

Versadex Computer Aided Dispatch

Versadex Records Management System

- Evidence/Property subsystem
- Arrest/Booking subsystem
- Integrated Document/Multimedia Attachments

Versadex Mobile Field Reporting

Versadex Mobile Data Terminal

Interfaces

- E-911
- FDLE/FCIC/NCIC
  - Queries
  - Automatic Adds/Updates
- County Jail Interface
- RMS to RMS interface to Tampa PD
- FCIC Validation Process
- Mugshot interface to Dataworks mugshot system
- Maps
- Master Time Clock
- Push to Talk Interface
- JD Edwards Personnel Interface
- County Court Ticket Interface
- County Court Warrant Validation Interface
- Electronic Pawn Upload
- NCIC Batch Pawn Check
- AVL
- COPLINK

Contact: Chris Peek, CIO Information Services Division
(813) 290-2221
cpeek@hcso.tampa.fl.us

Inglewood Police Department (California)

Population Served: **112,059**

Sworn Officers: **186**

Customer Since: **2015**

The Inglewood Police Department has proudly served the City of Inglewood since 1908.

The Department consists of multiple resources, such as specially trained canine teams, directed enforcement units, scientific services investigators, bike teams, community affairs, fiscal services and recruitment.

Inglewood PD consists of approximately 202 sworn officers and 137 civilian support personnel.

In 2015, the PD went live with the Versadex CAD and MDT. In 2016 they went live with Versadex RMS and MRE.

Installed Applications

Versadex Computer Aided Dispatch

Versadex Records Management System

- Evidence/Property subsystem
- Arrest/Booking subsystem
- Integrated Document/Multimedia Attachments
- Jail Management

Versadex Mobile Field Reporting

Versadex Mobile Data Terminal

Interfaces

- E-911
- Livescan
- Coplink
- CLETS/NCIC
  - Queries
  - Auto Adds/Updates

Contact: Sgt. Sgt. Jeff LaGreek
(310) 412-5641
jlagreek@cityofinglewood.org

Lenexa Police Department (Kansas)

Population Served: **52,903**

Sworn Officers: **88 – 39 Civilians**

Customer Since: **1996**

The Lenexa PD, a suburb of Kansas City, selected Versaterm in 1995 and went live with the RMS in 1996, with full property bar-coding and automated field reporting. In 1998, they added mobile data (wireless) and now run the Versadex RMS system directly from their mobiles.

Installed Applications
Versadex Records Management System ♦ Evidence/Property subsystem ♦ Arrest/Booking subsystem ♦ Integrated Document/Multimedia Attachments **Interfaces** ♦ Mugshot System (Arrest booking information feed to TFP mugshot system) ♦ Arrest booking information feed to Identix Touch Print fingerprint system ♦ COPLINK

Contact: Dave Wilson
TEL: (913) 477-7356, FAX (913) 927-0305
dwilson@lenexa.com

Minneapolis Police Department (Minnesota)

Population Served: **400,000**

Sworn Officers: **888**

Customer Since: **2018**

Minneapolis is the largest city in the state of Minnesota, and is home to approximately 400,000 residents. Minneapolis is also part of a larger metropolitan area including Saint Paul, the state's capital, with a total metro-area population registering nearly 3.4 million people. MPD employs approximately 888 sworn officers and 300 civilian employees

In June 2018, the Minneapolis Police Department went live with the Versaterm RMS in a multi-jurisdictional environment in collaboration with the University of Minnesota Police and the Minneapolis Park Police.

The implementation of Versaterm's RMS, Mobile Workstation and numerous interfaces, supports the evolving changes in legislation, technology and policies. Together with modernized technology and efficient business processes, these systems provide the foundation for the City of Minneapolis to continue the delivery of professional police services.

Installed Applications						
vCAD Police	vCAD Fire	vMDT	vMobile	vMRE	vRMS	vJMS
		✓		✓	✓	

RMS Subsystems	**RMS Interfaces**
Arrest/Booking Property (barcoding) Workflow/Case Management	Advanced Public Safety (APS) Citizen reporting interface with CopLogic Crime Reporting System (NIBRS) Hennepin County JDAWG IBM I2 IBase Integrated Search Service (ISS) LEMS/NCIC queries and auto adds/updates Metro Transit Police Department RMS MNCIS Court Notification Personnel Interface (with Workforce Director) Practice Manager STARLIMS Interface TriTech CAD Call For Service Transfer Versaterm Data Mart Versaterm GIS Interface
MDT/MRE Interfaces	
MRE Prefill Interface LEMS/NCIC queries Versaterm eTicketing	

Contact: Lt Jeff Rugel, Business Technology Unit
TEL: (612) 673-3428
james.rugel@minneapolismn.gov

Pennsylvania State Police (Pennsylvania)

Population of State: **12,805,537**

Sworn Officers: **4719**

Customer Since: **2015**

Pennsylvania State Police (PSP) consists of 16 troops and 89 stations located throughout the State as well as the State Police Headquarters in Harrisburg. That adds up to approximately 45,000 square miles of coverage. Versaterm worked with PSP to transition from a mostly manual and paper-based environment to a fully integrated and state-wide Versadex solution, while at the same time transitioning their dispatch operations to Versadex CAD/Mobile operating out each of their 89 stations. The PSP now operates in a fully integrated environment which is accessible by all Troopers state-wide. The system is running in a private cloud where the servers are located in Virginia.

Installed Applications
Versadex Computer Aided Dispatch
Versadex Records Management System ♦ Evidence/Property subsystem ♦ Arrest subsystem
Versadex Mobile Field Reporting
Versadex Mobile Data Terminal
Interfaces ♦ CAD/RMS Gateway ♦ CLEAN/NCIC ♦ Queries ♦ Automatic Adds/Updates ♦ Maps ♦ PA Justice Network (JNET) ♦ Livescan ♦ Memex (SAS) ♦ Browser CAD Status ♦ AVL ♦ FBI Law Enforcement Data Exchange (N-Dex) ♦ Legacy Initial Crime Index (ICI) System ♦ TraCS ♦ SAP Personnel System ♦ Beast LIMS ♦ VCAP ♦ Remote CAD

Contact: Lieutenant Colette M SMITH
TEL: (717) 525-5408
colesmith@pa.gov

Phoenix Police Department (Arizona)

Population Served: **1,586,611**

Sworn Officers: **2762**

Customer Since: **2010**

With a population growing beyond 1.5 million, the City of Phoenix is one of the 10 largest Cities in the United States. The Communications Center handles more than 2.5 million calls for service each year and dispatches for the 3,114 sworn police officers. In 2008 the city began looking for a new CAD and Mobile Data system that was both comprehensive and provided a single source solution to meet the demands of their growing region. Versaterm was selected in April of 2009. The new system went live in March 2010—a 9 month implementation. At the time of the award, Phoenix was Versaterm's first and only customer in Arizona. Since then, two more Arizona Cities have awarded systems to Versaterm.

Installed Applications
Versadex Computer Aided Dispatch
Versadex Mobile Data Terminal
Interfaces ♦ Vesta E-911 ♦ PACE (Phoenix PD's RMS) for record transfer and queries ♦ Arizona Department of Public Safety DPS ♦ Motorola ASTRO 25 SmartZone 800MHz voice system. ♦ Over 1,000 MDTs (Panasonic CF series rugged laptops and Motorola ML 900 on motor cycles) over the Motorola DataTAC network. ♦ NCIC ♦ Automatic Vehicle Location (AVL) ♦ Motorola RDLAP ♦ Master Clock Interface ♦ Maps

Contact: Dan McNemee, Administrative Manager
Communications Bureau
Phoenix Police Department
TEL: 602.262.6070
dan.mcnemee@phoenix.gov

Portland Bureau of Emergency Communications (Oregon)

Population Served: **700,000**

Sworn Officers: **1000**

Fire Fighters: **755 (includes civilian staff)**

Customer Since: **2009**

The City of Portland, Bureau of Emergency Communications (BOEC) is a sophisticated, multi-jurisdiction, multi-class, emergency dispatch center serving the law enforcement, fire, and emergency medical agencies in the City of Portland and Multnomah County. Supporting a population of approximately 700,000, the center receives approximately 950,000 emergency and non-emergency calls per year.

BOEC runs CAD 7.4 along with MDTs for Police, Fire and EMS, a CAD-to-CAD interface, automated paging, Fire Station Alerting, the Versadex DataMart, the Versadex Remote CAD module. Remote CAD is a scaled down CAD that allows queries, browses and other administrative type functions without having a full CAD desktop client installed. The BOEC CAD and MDTs interface to the City of Portland's RegJIN Versadex RMS.

Installed Applications

Versadex Computer Aided Dispatch (Police, Fire and EMS)

Versadex Mobile Data Terminal

Interfaces

- E-911
- CAD to CAD
- Automated Paging
- Fire Station Alerting (Zetron & USDD)
- VDM (Versadex Datamart)
- Remote CAD
- NCIC/LEDS
- Automatic Vehicle Location (AVL)
- E911
- Voice Radio – Push to Talk (PTT) and Radio Alerting
- Permit Alarms
- Fire RMS
- Voice Recording (PYXIS)
- AMR CAD

Contact: Murrell Morley, Emergency Communications Systems Manager
TEL: (503) 823-4556
murrell.morley@portlandoregon.gov

City of Portland Regional Justice Information Network (Oregon)

Population Served: **~1,000,000**

Sworn Officers: **~2,000**

Customer Since: **2014**

The City of Portland, Regional Justice Information Network (RegJIN) is a multi-jurisdictional RMS/MRE system supporting various law enforcement agencies within the Portland area. The System also provides query access to approximately 50 law enforcement related agencies (Federal, State and Local).

Various agencies went live with the Versadex Mobile Report Entry (MRE) application in May of 2014. The remaining agencies deployed MRE when the RMS went live for all agencies in April of 2015.

Installed Applications
Versadex Records Management System **Versadex Mobile Field Reporting** ♦ In car report approval ♦ eTicketing ♦ eMVA (Electronic Motor Vehicle Accident) **Versadex Mobile Data Terminal** **vMobile** **Interfaces** ♦ County Prosecutor's Office ♦ CopLogic ♦ 3rd Party CAD systems (CFS transfer and queries) ♦ Court Citation ♦ Jail Management Systems (pre-book, mugshot and housing queries) ♦ Oregon LEDS/NCIC ♦ Washington ACCESS/NCIC ♦ Washington State SECTOR ♦ Property Systems

Contact: Tammy Mayer, RegJIN Sr Program Manager
TEL: (503) 823-0101
tammy.mayer@portlandoregon.gov

PSNet Agencies (Oregon)

Combined Population Served:529,000

Combined Sworn Officers/Deputies: 425

Customer Since: 2019

PSNet agencies (Beaverton Police Department, Washington County Sheriff's Office, and the King City Police Department) went live with a multijurisdictional RMS on the Versaterm vCloud in January 2019.

PSNet agencies enjoy the flexibility of agile development and quick deployment secure in the knowledge that Versaterm is their full-service system partner. vCloud provides unparalleled scalability, data security both in transit and at rest, and a cost-effective solution for our PSNet partners.

Installed Applications
Records Management System
Mobile Data Terminal
Mobile Field Reporting
Interfaces ♦ LEDS/NCIC ♦ CAD Interface ♦ Electronic Citation Court Interface ♦ DA Interface

Contact: Taylor Hollandsworth
IS Manager, Information Services Department
City of Beaverton
TEL: 503-526-2406
thollandsworth@beavertonoregon.gov

Sacramento County Sheriff (California)

Population Served: **1,510,000**

Sworn Officers: **1247**

Customer Since: **2009**

The Sacramento Sheriff's Department serves a growing region of approximately 1.5 million people and covers 965 miles of territory within the Central Valley including the State Capital and California's agricultural area. The center dispatches approximately 560,000 incidents per year.

In January 2010 the Sheriff's Department went into production with Versaterm CAD and MDT, version 7.2. The system provides a broad spectrum of functionality incorporating Mapping, Automatic Vehicle Location (AVL) technology, the Versadex Crime Analysis Package (VCAP), as well as interfaces to a variety of external systems including CLETS, County CJIS, California DOJ, Vesta E911 along with both an incident transfer and query capability to their Northrop Grumman RMS and Field Reporting System. The mobile system communicates with Panasonic CF-30 laptops via Air Cards and Motorola RDLAP.

Installed Applications
Versadex Computer Aided Dispatch
Versadex Mobile Data Terminal
Interfaces ♦ Vesta E-911 ♦ CJIS/CLETS/NCIC ◊ Queries ♦ Northrop Grumman RMS/AFR ♦ Automatic Vehicle Location (AVL) ♦ California DOJ ♦ Motorola RDLAP ♦ Maps

Contact: Anthony Cathey, Communications Dispatcher
TEL: (916) 874-5128
acathey@sacsheriff.com

Sacramento Police Department (California)

Population Served: **495,471**

Sworn Officers: **652**

Customer Since: **2002**

The SPD established the following priorities for the replacement and addition of the following IT projects: replace their Mobile Data Terminal networks; implement a new RMS; and add mobile field reporting. RMS was implemented in early 2004 and was followed by Mobile Field Reporting in the fall of 2004. CAD went live in May of 2004.

Installed Applications
Versadex Computer Aided Dispatch
Versadex Records Management System ♦ Evidence/Property subsystem ♦ Arrest/Booking subsystem ♦ Integrated Document/Multimedia Attachments
Versadex Mobile Field Reporting
vMobile
Versadex Mobile Data Terminal
Interfaces ♦ E-911 ♦ CLETS/NCIC ♦ Queries ♦ Automatic Adds/Updates

Contact: Brian Dabel, IT Manager
TEL: (916) 761-0154, FAX (916) 808-0404
bdabel@pd.cityofsacramento.org

Salt Lake City Police Department (Utah)

Population Served: **190,000/night; 500,000/day**

Sworn Officers: **435**

Customer Since: **1996**

Salt Lake City PD started with the RMS in 1996, re-engineering the entire police department's workflow using electronic case management and single entry with the Versadex Mobile Report Entry. In 1998, the Salt Lake City 911 purchased the Versaterm Police CAD system and replaced the SCA Premier MDT with the Versadex MDT product to achieve the integration necessary to make single entry a reality. In 20??, the Salt Lake City Fire Department implemented the Versaterm Fire CAD and MDTs. In 2016, the Salt Lake City Fire personnel started using vMobile in the field.

The RMS is multi-jurisdictional and shared with the Unified Police Department of Greater Salt Lake, Sandy Police Department, the Utah Attorney General's Office and Salt Lake County Sheriff's Office.

Installed Applications						
vCAD Police	vCAD Fire	vMDT	vMobile	vMRE	vRMS	vJMS
✓	✓	✓	✓	✓	✓	

RMS Subsystems	**RMS Interfaces**
Arrest/Booking Property (barcoding) Workflow/Case Management	Arrest interface with County Jail CAD Call For Service Transfer Citizen reporting interface with CopLogic eMVA (DI-9 Crash reporting and validations) eTicketing interface with Brazos Mugshot interface with County Jail Utah BCI/NCIC queries and auto adds/updates Versaterm Data Mart

MDT/MRE Interfaces	**CAD Interfaces**
DMV Prefill Drivers License Photos eMVA (DI-9 Crash reporting and validations) Utah BCI/NCIC queries	CAD Data Sharing with UPD and VECC E911 Interface Integrated RMS queries ProQA interface Utah BCI/NCIC queries Versaterm Data Mart

Contact: Mia Jacobs, Director, Records
TEL: (801) 799-3552
mia.jacobs@slcgov.com

Lisa Burnette, Director, Salt Lake City 911
TEL: (801) 799-3592
lisa.burnette@slcgov.com

Assistant Chief Tim Doubt
TEL: (801) 799-3812
tim.doubt@slcgov.com

Lt Scott Teerlink
TEL: (801) 799-3429
scott.teerlink@slcgov.com

Sgt Mark Cryder
TEL: (801) 799-3133
mark.cryder@slcgov.com

Unified Police Department of Greater Salt Lake

Population Served: **1,030,000**

Sworn Officers: **419**

Customer Since: **1998**

Formerly known as the Salt Lake County Sheriff's Office, the Unified Police Department (UPD) began with the CAD system including mobile data in 1998. They soon after purchased the RMS and under agreement with the Salt Lake City PD, created a multi-jurisdictional RMS providing full query capability to all information directly from the mobile workstation. Salt Lake City Police Department, UPD, Sandy Police Department and Utah Attorney General's Office share the RMS system. In 2019, the UPD Dispatch Centre merged with the Valley Emergency Communications Centre (VECC) to form what is known now as the Salt Lake Valley Emergency Communications Centre (SLVECC). Ex-UPD dispatchers use the Versaterm CAD.

Installed Applications						
vCAD Police	vCAD Fire	vMDT	vMobile	vMRE	vRMS	vJMS
✓		✓		✓	✓	

RMS Subsystems	**RMS Interfaces**
Arrest/Booking Property (barcoding) Workflow/Case Management	Arrest interface with County Jail CAD Call For Service Transfer eMVA (DI-9 Crash reporting and validations) Mugshot interface with County Jail Utah BCI/NCIC queries and auto adds/updates Versaterm Data Mart
MDT/MRE Interfaces	**CAD Interfaces**
DMV Prefill Drivers License Photos eMVA (DI-9 Crash reporting and validations) Utah BCI/NCIC queries Versaterm eTicketing	CAD Data Sharing with SLC911 and VECC E911 Interface Integrated RMS queries Utah BCI/NCIC queries Versaterm Data Mart

Contact: Lt Justin Hoyal, Division Commander
TEL: 385-468-8900
jhoyal@updsl.org

Captain Jon Fassett
TEL: (385) 468-9710
jfassett@updsl.org

Lt Dwayne Anjewierden, Technical Services Division
TEL: (385) 468-9711
DAnjewierden@updsl.org

Sherry Gonzales, Records Manager Technical Services Division
TEL: (385) 468-9720
sgonzales@updsl.org

San Jose Police Department (California)

Population Served: **1,041,844**

Sworn Officers: **939**

Customer Since: **2010**

San Jose claims to be "The Capital of Silicon Valley". The police department went live with the Versadex Records Management System in 2012 servicing California's third largest city and the 10th largest City in the nation. The department went live with the MRE system in 2013.

Installed Applications
Versadex Records Management System ♦ Evidence/Property subsystem ◊ Bar Coding ♦ CJIS Arrest/Booking transfer ♦ Integrated Document/Multimedia Attachments eCollision – CHP 555 **Versadex Mobile Field Reporting** **Versadex Mobile Data Terminal** ♦ Mugshot Display ♦ Mapping **Interfaces** ♦ Intergraph iCad to RMS Call transfer ♦ CJIC/CLETS/NCIC ♦ Queries ♦ Auto Adds/Updates ♦ DataWorks Mugshot Interface ♦ COPLogic ♦ COPLINK ♦ PeopleSoft

Contact: Sylvia Lopez
AFR/RMS Business Analyst
TEL: 408-537-1320
Sylvia.lopez@sanjoseca.gov

Santa Barbara Police/Fire Department (California)

Population Served: **92,519**

Sworn Officers: **140**

Fire Fighters: **101**

Customer Since: **2007**

In 2007, Santa Barbara chose Versaterm to replace their legacy systems with an integrated CAD, mobile and RMS solution. The PD went into production use with the CAD and MDT in December 2007 and RMS and MRE in May 2008.

The Santa Barbara Police Department is comprised of 138 sworn officers, with the Fire Department commanding 101 firefighters, both serving a population of 91,000.

Santa Barbara is located on California's Pacific Coast approximately 90 miles north of Los Angeles and is often referred to as "America's Riviera".

Installed Applications
Versadex Computer Aided Dispatch
Versadex Records Management System ♦ Evidence/Property subsystem ◊ Bar Coding ♦ Arrest/Booking subsystem ♦ Integrated Document/Multimedia Attachments
Versadex Mobile Field Reporting
vMobile
Versadex Mobile Data Terminal
Interfaces ♦ E-911 ♦ COPLINK ♦ FireHouse Fire RMS E-911CLETS/NCIC ◊ Queries ◊ Auto Adds/Updates

Contact: Dennis Diaz, Director Information Technology
TEL: (805) 897-3735
ddiaz@sbpd.com

Seattle Police Department (Washington)

Population Served: **700,313**

Sworn Officers: **1384**

Customer Since: **2006**

In 2006, the City of Seattle chose Versaterm to replace their legacy systems with an integrated CAD, mobile CAD, RMS and Mobile RMS.

The City of Seattle was seeking a solution from a single vendor who could provide a truly integrated law enforcement technology suite. The City specified that the system must be demonstrable as complete and functional with minimal software modifications, be capable of interfacing to internal and external systems using modern standards and that the vendor have a solid history of providing technology and implementation planning, project management and post-implementation support.

Installed Applications

Versadex Computer Aided Dispatch

Versadex Records Management System

- Evidence/Property subsystem
  - Bar Coding
- Arrest/Booking subsystem
- Integrated Document/Multimedia Attachments

Versadex Mobile Field Reporting

vMobile

Versadex Mobile Data Terminal

- Mugshot Display
- Report Approval

Interfaces

- E-911
- ACCESS/NCIC
  - Queries
  - Auto Adds/Updates
- PTT
- Autodial
- Paging
- ALARMS
- AVL
- King County
- Seattle Justice Information System

Contact: Capt. Ron Rasmussen
TEL: (206) 684-8632
ronald.rasmussen@seattle.gov

Simi Valley Police Department (California)

Population Served: **127,252**

Sworn Officers: **131**

Customer Since: **2003**

In 2003, Simi Valley went live with CAD, MDT and AVL. Included with CAD is an interface to their E911, CLETS and Netclock. Simi Valley went into RMS Production use in 2004. Over the years, additional interfaces have been added such as a query into Ventura County RMS (VCIJIS), an export to Coplink and LInX as well as citizen reporting via Coplogic.

Installed Applications
Versadex Computer Aided Dispatch
Versadex Records Management System ♦ Evidence/Property subsystem ♦ Arrest/Booking subsystem ♦ Integrated Document/Multimedia Attachments ♦ Telephone Reporting
Versadex Mobile Field Reporting
Versadex Mobile Data Terminal
Interfaces ♦ E-911 ♦ VCIJIS (Ventura County) ♦ COPLINK ♦ Coplogic Citizen Reporting ♦ CLETS/NCIC ◊ Queries ◊ Automatic Adds/Updates

Contact: Sgt. Craig Dungan
TEL: (805)-583-6993
cdungan@simivalley.org

Tampa Police Department (Florida)

Population Served: **375,904/night; 1,000,000/day**

Sworn Officers: **951**

Customer Since: **1999**

This was a multi-year phased-in project. The Tampa Police Department replaced their AS400 RMS with the Versadex RMS in 1999 – a Y2K issue – and converted most data. Versaterm then replaced the existing mobile data software and developed a temporary interface to the existing AS400 CAD and completed implementing the Versadex Police CAD in 2001. Mobile Report Entry including In-vehicle report approval and mugshot integration with Hillsborough County TFP mugshot system, and property bar coding was added in 2002, along with Florida UCR compliant and a NCIC/FCIC 2000 interface (query only).

Installed Applications

Versadex Computer Aided Dispatch

Versadex Records Management System

- Evidence/Property subsystem
- Arrest/Booking subsystem
- Integrated Document/Multimedia Attachments

Versadex Mobile Field Reporting

- In car report approval

Versadex Mobile Data Terminal

- Mugshot Interface (TFP Mugshot System)

Interfaces

- E-911
- FDLE/FCIC/NCIC
  - Queries
- County Jail Interface
- Versonnel
- Pawn Upload
- NCIC Batch Pawn Check
- Master Clock Interface
- Maps

Contact: Shar Ishee, Records Manager
TEL: (813) 276-3240
shar.ishee@tampagov.net

Tempe Police Department (Arizona)

Population Served: **183,683**

Sworn Officers: **355**

Customer Since: **2010**

Tempe Arizona is a thriving city of 166,000 in the heart of the Phoenix metropolitan area and is home to the state's largest university, Arizona State University (ASU). The City of Tempe Police Department consists of 354 sworn officers and over 210 civilian personnel. The Department handles approximately 218,000 calls for service, producing approximately 60,000 reports.

The Tempe system consists of Computer Aided Dispatch (CAD), Mobile Workstation (MWS), including field reporting, Record Management System (RMS), and Mobile Report Entry (MRE). In addition to the complete suite of integrated Versadex products, the Tempe project includes a number of interfaces to improve officer and citizen safety while gaining efficiencies with automation. These interfaces include DPS/NCIC, Coplink, E911, Motorola Push-to-Talk, Livescan, Mugshots, and Coplogic for citizens to file reports over the Internet. In early 2013 Tempe was the first Versaterm customer to implement the APCO ASAP (Automated Secure Alarm Protocol) that processes Call for Service requests automatically from alarm monitoring stations needing emergency dispatch.

Installed Applications

Versadex Computer Aided Dispatch

Versadex Records Management System

- Evidence/Property subsystem
- Arrest/Booking subsystem
- Integrated Document/Multimedia Attachments

Jail Management System

Versadex Mobile Field Reporting

- In car report approval

Versadex Mobile Data Terminal

Interfaces

- E-911
- DPS/NCIC
- Coplink
- COPLINK
- Motorola PTT
- Livescan
- Mugshots
- Coplogic Citizen Online Reporting
- PeopleSoft
- Master Clock Interface

Contact: Angelique Watson, Technical Services Administrator
TEL: (480) 350-8722
angelique_watson@tempe.gov

Ventura City (California)

Population Served: **100,000**

Sworn Officers: **134**

Customer Since: **2018**

Ventura's Public Safety dispatchers went live with Versaterm's CAD system in late 2018.

In 2019 Ventura City Police began a multijurisdictional RMS project, sharing a records database with Santa Barbara Police.

In addition, the Ventura City Police are using the Versaterm Mobile Data Terminal (vMDT) and vMobile app, giving police officers the power of knowledge at their fingertips, providing easy access to search information from their cars and devices.

The Ventura Police Department is considered one of the most modern and progressive agencies in California. Ventura City has a population of around 110,000 and the Police Department employs 134 sworn officers and 43 civilian staff. On average, the department handles over 90,000 calls-for-service a year and processes nearly 40,000 reports.

Installed Applications
Versadex Computer Aided Dispatch
Versadex Records Management System
Versadex Mobile Data Terminal
vMobile
Versadex Mobile Field Reporting

Contact: Matt Moore
Systems Specialist
Ventura Police Department
mmoore@cityofventura.ca.gov

Ventura County Sheriff (California)

Population Served: **850,536**

Sworn Officers: **756**

Customer Since: **2015**

The Sheriff's Communication Center (SCC) is the primary public safety answering point (PSAP) for the County. Five of the County's ten incorporated cities (Thousand Oaks, Camarillo, Moorpark, Fillmore, and Ojai) contract with the Sheriff's Office to provide police services. These cities, plus the unincorporated area of the county, make up nearly half of the county's population and ninety-five percent of its land area.

The Sheriff's Office consists of approximately 1200 personnel, 700 of whom are sworn officers. The Department handles approximately 100,000 calls for service each year.

In 2015, the County went live with the Versadex CAD, dispatch, mobile, and interface software for their entire organization. Included in the implementation was a new interface to the Ventura County Integrated Justice Information System (VCIJIS) that enables Patrol and Communication to have integrated queries to a vast repository of person, arrest, mugshot, address and vehicle histories.

Installed Applications
Versadex Computer Aided Dispatch
Versadex Records Management System
Versadex Mobile Data Terminal
vMobile App
Versadex Mobile Field Reporting
Interfaces ♦ E-911 ♦ VCIJIS ♦ NCIC/CLETS

Contact: Captain. Romano Bassi
TEL: (805) 388-4212
Romano.Bassi@ventura.org

Walnut Creek Police Department (California)

Population Served: **69,860**

Sworn Officers: **85**

Customer Since: **2003**

Walnut Creek replaced their legacy CAD, Mobile Data and RMS systems, and added Mobile Report Entry functionality with in car report approval. The CAD and mobiles were also extended to include full mapping functionality. Supported interfaces include CLETS and JAWS (County Warrant System) as well as an interface to the Dynamic Imaging Arrest/Mugshot system (County system), which in turn is interfaced to AFIS. Mugshot images are accessible and viewable from the RMS or from a mobile out in the field.

Installed Applications
Versadex Computer Aided Dispatch
Versadex Records Management System ♦ Evidence/Property subsystem ♦ Arrest/Booking subsystem ♦ Integrated Document/Multimedia Attachments
Versadex Mobile Field Reporting
Versadex Mobile Data Terminal (with Maps and AVL)
Interfaces ♦ E-911 ♦ CLETS/NCIC ◊ Queries ◊ Automatic Adds/Updates ♦ County Warrant System (JAWS) ♦ Dynamic Imaging Arrest Booking Interface (County System) ♦ Dynamic Imaging Mugshot Interface ♦ Maps

Contact: Chasity Ledford, Technology Unit Supervisor
Walnut Creek Police
TEL: (925) 256-3567
ledford@walnutcreekpd.com

Canadian Customers

(alphabetical by name of agency)

Durham Regional Police Service (Ontario)

Population Served: **645,862**

Sworn Officers: **550 + 134 Civilian**

Customer Since: **2005**

Durham's installation includes RMS, CAD, Mobile Workstations (Mobile Data + Mobile Report Entry) including mugshot integration, property bar coding and a CPIC MOM interface. All modules went into production during the fall of 2005.

Installed Applications

Versadex Computer Aided Dispatch

Versadex Records Management System

- Evidence/Property subsystem
- Arrest/Booking subsystem
- Integrated Document/Multimedia Attachments

Versadex Mobile Field Reporting

- eTicketing
- eMVA (Electronic Motor Vehicle Accident)

vMobile

Versadex Mobile Data Terminal

- Mugshot interface

Interfaces

- PIP (Data Sharing with other Ontario agencies)
- E-911
- CPIC
  - Queries
  - Automatic Adds/Updates
- Mugshot System Interface
- Provincial Motor Vehicle Accident Interface
- CopLogic

Police Information Portal (PIP)

Contact: Christine Robson, Manager of Information Technology
TEL: (905) 579-1520 Ext. 3318, FAX (905) 721-4226
crobson@drps.ca

Service de Police et Sécurité de la Ville de Gatineau (Québec)

Population Served: **276,338**

Sworn Officers: **393**

Customer Since: **1992**

Gatineau is the fourth largest city in the Province of Quebec and is located on the North Bank of the Ottawa River. This is just across from Ottawa, the nation's Capital. The Gatineau Police is one of Versaterm's oldest customers, and runs the complete Versadex product line.

The Versaterm Computer Aided Dispatch system serves both the Police and Fire departments where call taking is shared and dispatching is dedicated by service. Both operate in the same facility. The fire CAD system is interfaced to the fire RMS supplied by BeeOn Fire RMS and is also integrated to the Motorola Fire Station Alerting system.

Installed Applications
Versadex Computer Aided Dispatch **Police and FireCAD** **Versadex Records Management System** ♦ Evidence/Property subsystem (Property bar code printing/scanning) ♦ Arrest/Booking subsystem ♦ Integrated Document/Multimedia Attachments **Versadex Mobile Field Reporting** **Versadex Mobile Data Terminal (with Maps and AVL)** **Interfaces** ♦ E-911 ♦ CRPQ ♦ Mugshot Interface ♦ Versonnel ♦ Motorola UNS (GPS) Interface ♦ Motorola PushToTalk (PTT) Interface ♦ Motorola Emergency Alert (ERTT) Interface ♦ Motorola Station Alerting Interface ♦ Fire RMS Call For Service Interface ♦ CopLogic ♦ Electronic Ticketing ♦ Motor Vehicle Accident Interface **Police Information Portal (PIP)**

Police Contact: Lynn Carpentier Joanisse
Responsable - Technologies de l'information et du Contrôle de la qualité
TEL: 819 243-2345
carpentier-joanisse.lynn@gatineau.ca

Fire Contact: Dany Fortin
TEL: (819) 243-2345 ext. 6294
fortin.dany@gatineau.ca

Halifax Regional Police/Fire (Nova Scotia)

Population Served: 359,200

Sworn Officers: 400 Halifax Police and 260 RCMP Members

Fire Fighters: 1176 (422 full time/754 volunteers)

Customer Since: 2004

The Halifax Regional Police Service supports a regional Police and Fire Dispatch Center. They have a multi-jurisdictional and multi agency RMS system and host the RCMP Halifax Detachment on their CAD and RMS platform.

The Halifax RCMP Detachment makes extensive use of the VDM Datamart and Crime Analysis BI Tools for their Compstat reporting as well as for Prolific Offender Management. They also support ESRI mapping to identify and analyze 'hot spots' and what is occurring in the districts.

Installed Applications

Versadex Computer Aided Dispatch

- Police/Fire CAD with AVL
- FireCAD with AVL

Versadex Records Management System

- Evidence/Property subsystem with bar code support
- Arrest/Booking and Court Assist
- Integrated Document/Multimedia Attachments

Versadex Mobile Field Reporting

- Electronic Ticketing (eSOT's)

Versadex Mobile Data Terminal

- Police MDTs with integrated AVL
- Fire MDTs

vMobile (Police and Fire)

Interfaces

- E-911
- CPIC
  - Queries
  - Automatic Adds/Updates
- Arrest Booking and Mugshot Interface
- FDM Fire RMS Interface
- IAmResponding (Fire CAD) Interface
- Provincial Registry of Motor Vehicles
- Electronic Summary Offense Ticket Interface
- Coplogic Online Citizen Reporting
- VDM Datamart and Crime Analysis BI Tools

Police Information Portal (PIP)

Police Contact: Deputy Chief Bill Moore
TEL: (902) 490-7138
mooreb@halifax.ca

Fire Contact: Mary Dawson-Power
TEL: (902) 233-7605,
dawsonm@halifax.ca

Kingston Police Service (Ontario)

Population Served: **131,746**

Sworn Officers: **203**

Customer Since: **1988**

Kingston Police Service currently use Versaterm's RMS, CAD and Mobile Workstation (MDT) functionality, with the RMS first installed in January 1988. Notable by being our very first RMS install with the current "OPEN SYSTEMS" product line; Kingston has migrated through the annual releases and runs the very latest software today (illustrating the return on their investment).

Installed Applications
Versadex Computer Aided Dispatch
Versadex Records Management System ♦ Evidence/Property subsystem ♦ Arrest/Booking subsystem and Court Assist
Versadex Mobile Data Terminal
Versadex Mobile Report Entry
Interfaces ♦ E911 ♦ CPIC ♦ Queries ♦ Automatic Adds/Updates ♦ CAD to CAD Regional Information Sharing ♦ Motorola UNS (GPS) Interface ♦ Mugshot Interface ♦ Coplogic Online Citizen Reporting
Police Information Portal (PIP)

Contact: Scott Geoffrey, Manager Information Systems
TEL: (613) 549-4660 ext 2263, FAX (613) 549-3111
sgeoffrey@kpf.ca

London Police Service (Ontario)

Population Served: **397,493**

Sworn Officers: **605**

Customer Since: **1993**

London's installation includes RMS, CAD, Mobile Workstations (Mobile Data + Mobile Report Entry) including mugshot integration; property bar coding and a CPIC interface (queries and maintenance transactions). Mobile data functions include a full array of queries, automated field reporting, mugshot viewing and in-car mapping.

In the summer of 2003, Versaterm installed LEIP (Law Enforcement Information Portal) which allows police agencies all over Canada to participate in information sharing. With LEIP, each participating agency is able to control what is published and who can subscribe to the detailed records thereby remaining in control of their records. London hosted the LEIP server for the province of Ontario up until it was migrated to the RCMP as part of their National Police Services (NPS).

The London Police Service is a model for implementing technology and have agencies from around the world visit their operation. They are a near paperless operation and have implemented technology that allows them to point to real time savings which in turn save dollars. They have the lowest officer cost per capita in Canada. In 2000, they won a national award for their achievements in implementing technology with measurable results – they beat the airlines, banks and numerous private sector companies for this award.

Installed Applications
Versadex Computer Aided Dispatch
Versadex Records Management System ♦ Evidence/Property subsystem ♦ Arrest/Booking subsystem ♦ Integrated Document/Multimedia Attachments
Versadex Mobile Field Reporting
vMobile
Versadex Mobile Data Terminal ♦ Mugshot interface
Interfaces ♦ E-911 ♦ CPIC ◊ Queries ◊ Automatic Adds/Updates ♦ Integrated Justice System ♦ Mugshot System Interface ♦ RCMP CJIM (Criminal Dispositions) Interface ♦ CopLogic
Police Information Portal (PIP)

Contact: Jack Morgan, Director of Information Technology
jmorgan@London.ca
519-661-5496

Medicine Hat Police Service (Alberta)

Population Served: **61,097**

Sworn Officers: **85**

Customer Since: **2000**

Medicine Hat PS purchased Versaterm's RMS, MRE and CAD in 2000. They Installed MDT and PoliceCAD in 2003 and Fire Services use the Versadex Fire CAD.

Installed Applications
Versadex Computer Aided Dispatch with AVRR
Versadex Fire CAD with AVRR
Versadex Records Management System ♦ Evidence/Property subsystem ♦ Arrest/Booking subsystem ♦ Integrated Document/Multimedia Attachments ♦ Integrated Mugshots (FIMS)
Versadex Mobile Field Reporting
Versadex Mobile Data Terminal (with Maps & AVL) ♦ Maps and GPS
Interfaces ♦ E-911 ♦ CPIC ◊ Queries ◊ Automatic Adds/Updates
ProQA for Police

Contact: Aaron Sheard, Manager IT Section
TEL: (403) 581-1052
aaron.sheard@mhps.ca

Moose Jaw Police Service (Saskatchewan)

Population Served: **34,700**

Sworn Officers: **55**

Customer Since: **1999**

Installed Applications
Versadex Computer Aided Dispatch
Versadex Records Management System ♦ Evidence/Property subsystem ♦ Arrest/Booking subsystem ♦ CPIC Interface

Contact: Richard Bourassa, Chief of Police
TEL: (306) 693-2167, FAX (306) 694-7654
rbourassa@mjpolice.ca

Department of National Defense – Military Police

Population Served: **All 32 bases have been installed**

Sworn Officers: **1500**

Customer Since: **2001**

Implementation of the complete product suite (CAD, RMS and MWS) in bilingual form, across 5 time zones to all 32 Operational Bases. The Military Police systems are based on centralized server infrastructure that supports the Canadian Forces Military Police in their operations worldwide. These systems have been used in domestic emergencies such as the Winnipeg Floods and BC forest fires as well as International Coalition led operations such as the NATO Missions in Afghanistan and Iraq.

Installed Applications
Versadex Computer Aided Dispatch
Versadex Records Management System ♦ Evidence/Property subsystem (with bar code option) ♦ Integrated Document Multimedia Attachments ♦ Arrest/Booking subsystem
Versadex Mobile Field Reporting
Versadex Mobile Data Terminal
Interfaces ♦ CPIC

Contact: Maj Daniel Perron
TEL: 613 949 1101
daniel.perron@forces.gc.ca

Province of New Brunswick (PORS Project)

Population Served: **143,800**

Sworn Officers: **270**

Customer Since: **1988**

The City of Fredericton was Versaterm's initial pilot site for the provincial PORS implementation which was installed in 1989. Presently Fredericton and 7 other municipal police services use the Versadex system. Fredericton has a consolidated dispatch center and dispatches both Police and Fire for multiple jurisdictions/ agencies.

All PORS Agencies have implemented an interface to the national PIP (Police Information Portal) server which enables information sharing across the province as well as with other Provinces (national).

Installed Applications
Versadex Computer Aided Dispatch ♦ Multi-Jurisdictional Police/FireCAD (several installations)
Versadex Records Management System (several installations) ♦ Evidence/Property subsystem ♦ Arrest/Booking subsystem ♦ Versonnel
Versadex Mobile Field Reporting ♦ Fredericton only
Versadex Mobile Data Terminal (with Maps & AVL) ♦ Fredericton only
Interfaces ♦ E-911 ♦ CPIC ♦ FDM Fire RMS Interface ♦ RCMP CJIM (Criminal Dispositions) Interface ♦ CopLogic
Police Information Portal (PIP)

Contact: Eileen Boroski Director of Policing Services
TEL: (506) 453-8172,
Eileen.Boroski@gnb.ca

Niagara Regional Police Service (Ontario)

Population Served: **Approx. 453,817 residents and 15,000,000 visitors annually.**

Sworn Officers: **706 Officers and 310 Civilians**

Customer Since: **2005**

The Niagara Regional Police have installed the complete Versadex suite including RMS, CAD and MWS with interfaces to CPIC, eJust, Intellibook, Ontario MTO, eMVA, Ontario PowerCase and the National Law Enforcement Information Portal.

Established on January 1st, 1971, the Niagara Regional Police Service is the oldest regional police service in Ontario. In an area of 1,863 square kilometers, the Niagara Regional Police Service patrols one of Ontario's largest geographic Regions. A few of the unique policing challenges facing Niagara are: the combination of urban and rural development; the large annual influx of tourists; its proximity to the United States; the effect of the nation's busiest border crossings; a major summer cottage population in varying communities; and a waterfront shoreline that surrounds the Region on three sides.

Installed Applications

Versadex Computer Aided Dispatch

- Police CAD
- AVL/AVRR

Versadex Records Management System

- Evidence/Property subsystem with bar code support
- Arrest/Booking subsystem and Court Assist/Officer Scheduling
- Integrated Document/Multimedia Attachments

Versadex Mobile Field Reporting

- With Magnetic Card Swipe
- MRE Staging

Versadex Mobile Data Terminal (with Maps &AVL)

Interfaces

- NG-911
- CPIC
  - Queries
  - Automatic Adds/Updates
- Arrest Booking and Mugshot Interface to Intellibook
- Court Document interface to eJust
- Provincial Registry of Motor Vehicles
- Provincial Major Case Management
- CopLogic
- Niagara Region Courts eTickets CAMS

Police Information Portal (PIP)

Contact Tracy Morin, Supervisor - IT Operations Systems & Applications
TEL: 905 688 4111
tracey.morin@niagarapolice.ca

Ottawa Fire Service (Ontario)

Population Served: **973,481**

Fire Stations: **42**

Fire Fighters: **1200 (800 full time/400 volunteers)**

Customer Since: **2003**

Ottawa is the fourth largest city in Canada with a population of 877,300. Ottawa Fire Service protects an area of 1100 square miles with 43 fire stations, 250 vehicles/apparatus, 900 career firefighters, and 425 volunteer firefighters.

The Ottawa Fire Service went live in 2003 with the Versadex FireCAD and they operate on the same host platform as the Ottawa Police Service. Both agencies share common street files and common address information (hazards, contacts, etc.). While the Fire Dispatch Center is located in a separate building from the 911 and Police dispatchers, both services share call information on combined call responses and fire dispatchers can exchange messages with police dispatch personnel. Extensions to support paging (to a Zetron paging system), fire station alerting (also using a solution from Zetron) as well as station printing (ripNtear type functionality) were installed in 2004. Fire Services also use the FDM Fire RMS software. Call data entered in FireCAD is transferred to the FDM system.

Installed Applications
Versadex FireCAD ♦ AVL/AVRR **Versadex Mobile Data Terminal (Maps & AVL)** **Interfaces** ♦ Paging ♦ Station Alerting ♦ CAD Complaint Transfer to FDM Fire RMS ♦ FDM Premise Info Upload ♦ PushToTalk (PTT), Emergency (ERTT) Interface

Contact: Colleen Woolsey, Division Chief of Communications
TEL: 613-247-4841
colleen.woolsey@ottawa.ca

Ottawa Police Service (Ontario)

Population Served: **973,481**

Sworn Officers: **1242** **528 Civilians**

Customer Since: **1998**

The Ottawa Police Service runs the entire suite of Versadex applications including the Versadex RMS, CAD, Mobile Workstations (Mobile Data and Mobile Report Entry) including mugshot integration. In addition the system is interfaced to CPIC and the Police Information Portal (PIP).

The Ottawa PS selected Versaterm in 1997 to supply the new regional police service with a new CAD, RMS and mobile environment. This project proved to be very challenging due to each individual police department (Ottawa, Nepean, Gloucester) having their own CAD and RMS systems. This project was an immense success converting data from the various systems into the single Versadex solution. It was in production, as planned, well before year 2000 (Y2K requirement).

The CAD was extended to include Fire/RMS dispatch functionality in 2003 and a shared dispatch environment is supported for Police and Fire (see Ottawa Fire Service for more information on supported Fire dispatch functionality).

Installed Applications
Versadex Computer Aided Dispatch
AVL
Versadex Records Management System ♦ Evidence/Property subsystem ♦ Arrest/Booking subsystem ♦ Integrated Document/Multimedia Attachments
Versadex Mobile Field Reporting
Versadex Mobile Data Terminal (Maps & AVL) ♦ Niche Mugshot interface ♦ AVL
Interfaces ♦ E-911 ♦ Push to Talk (PTT), Emergency (ERTT) Interface ♦ CPIC ◊ Queries ◊ Automatic Adds/Updates ♦ Mugshot System Interface ♦ Media Release ♦ RCMP CJIM (Criminal Dispositions) Interface ♦ Background Check (Person Query) Interface ♦ CARFAX Interface ♦ Motor Vehicle Accident Interface ♦ Provincial Major Case Management ♦ CopLogic Online Citizen Reporting ♦ VDM Datamart and Crime Analysis BI Tools
Police Information Portal (PIP)

Contact: Debra Frazer, Director General
TEL: (613) 236-1222 ext 5472, FAX (613) 760-8030
frazerd@ottawapolice.ca

PRIME BC (British Columbia)

Participating Agencies: **All Municipal Police Agencies and RCMP Detachments in the Province of British Columbia**

Population Served: **4,000,000**

Sworn Officers: **8000+**

Customer Since: **2001**

Initially installed to serve 3 agencies, namely Vancouver, Port Moody and Richmond RCMP Detachment, this system has since become the British Columbia provincial standard. It now serves 19 entities including: Vancouver, West Vancouver, Victoria, Saanich, Central Saanich, Oak Bay, Delta, Abbottsford Nelson, New Westminster, The Transit Police Service, the Combined Forces Special Enforcement Unit of BC (CFSEU) and all 140 Royal Canadian Mounted Police (RCMP) Detachments in British Columbia.

In May 2005, Vancouver moved off the Northrop Grumman/PRC AltarisCAD, to become part of the Versaterm MJ CAD that is servicing the rest of the mainland municipal agencies.

In April 2004, the Richmond RCMP went into production with the Versaterm CAD. In February 2006 Richmond will move from their standalone RMS and CAD servers to the MJ Lower Mainland RMS and CAD.

To share information across jurisdictional boundaries, Versaterm has been delivering a web-based clearing house solution called LEIP (Law Enforcement Information Portal/PIP) which allows each agency to control what information is published and who can subscribe to the detailed records (each agency remains in control of their records).

Installed Applications
Versadex Computer Aided Dispatch
Versadex Records Management System ♦ Evidence/Property subsystem ♦ Arrest/Booking subsystem ♦ Court Assist
Versadex Mobile Field Reporting
Versadex Mobile Data Terminal
Interfaces ♦ E911 ♦ CPIC Interface ♦ Provincial Integrated Justice Interface (to JUSTIN) ♦ Mugshot System Interface ♦ Livescan/Mugshot System Interface (for RTID)
Police Information Portal (PIP)

Contact: Bob Gehl, Director, Chief Operating Officer
PRIMECorp
TEL: 604-581-1483
bob.gehl@primebc.ca

Prince Albert Police Service (Saskatchewan)

Population Served: **40,000**

Sworn Officers: **85**

Customer Since: **1993**

RMS and CAD have been implemented since 1993.

Installed Applications
Versadex Computer Aided Dispatch
Versadex Records Management System ♦ Evidence/Property subsystem ♦ Arrest/Booking subsystem ♦ Integrated Document/Multimedia Attachments ♦ Versonnel
Versadex Mobile Field Reporting
Versadex Mobile Data Terminal
Interfaces ♦ CPIC

Contact: Curtis Schnitzler, IT Manager
TEL: 306-953-4253
cschnitzler@papolice.ca

Royal Newfoundland Constabulary (RNC) (Newfoundland and Labrador)

Population Served: **208,708**

Sworn Officers: **339**

Customer Since: **1998**

The RNC polices three regions of the province of Newfoundland and Labrador; St. John's, Corner Brook and Labrador West. The server plant is located in St. John's; the two remote divisions connect to the server via the provincial governments WAN. They installed CAD and RMS in 1998.

Installed Applications
Versadex Computer Aided Dispatch Versadex
Records Management System ♦ Evidence/Property subsystem ♦ Integrated Document/Multimedia Attachments
Versadex Mobile Data Terminal
Versadex Mobile Field Reporting
Interfaces ♦ CPIC

Contact: Kim Harding, Director of Information Services
TEL: 709-729-8291
KimH@rnc.gov.nl.ca

Province of Saskatchewan

Population Served: **1.1 million**

Customer Since: **2018**

In early 2019, the Province of Saskatchewan went live with the Versaterm multi-jurisdictional RMS with interfaces to the Saskatchewan Provincial Emergency Communication Centre (P-ECC) I/CAD for transferring calls and vRMSqueries.

The RMS supports investigative business processes and associated data management, reporting, and disclosure activities for the consortium of law enforcement agencies, creating a common, standard practice throughout the province.
Government ministries participating in the new vRMS initiative include:

- Ministry of Environment
- Ministry of Highways
- Ministry of Justice
- Ministry of Corrections & Policing – Safer Communities & Neighborhoods, Community Safety Officer Program & Civil Forfeiture
- Ministry of Government Relations

Installed Applications
Records Management System **Interfaces** ♦ CPIC ♦ Call for Service Transfer ♦ RMS Queries ♦ Carrier Data Exchange

Contact: Krista Campbell, Executive Director Business Support Services
Ministry of Environment
306-787-5796
Krista.campbell@gov.sk.ca

Saskatoon Police Service (Saskatchewan)

Population Served: **266,064**

Sworn Officers: **460**

Customer Since: **1990**

Versaterm customers since 1981, Saskatoon installed our modern product lines in 1989 and 1990 and hired two of our key developers who developed and maintained their own version of the products.

With the introduction of industry wide changes including CPIC changes, PIP, RTID, the SPS decided they needed someone else responsible for advancing and supporting their key software. In 2007, SPS began implementing the Versadex RMS and Mobile Report Entry with integration to their existing CAD and Mobile Data application.

Installed Applications

Versadex Computer Aided Dispatch

Versadex Records Management System

- Evidence/Property subsystem
- Arrest/Booking subsystem
- Integrated Document/Multimedia Attachments

Versadex Mobile Data Functions

Versadex Mobile Field Reporting

Interfaces

- E-911
- AVL
- CPIC
- Queries
- Automatic Adds/Updates
- IntelliBook BDT/mugshots

Police Information Portal (PIP)

Contact: Jack Heiser, Manager of Information Systems
TEL: (306) 975-8378, FAX (306) 975-8319
Jack.heiser@police.saskatoon.sk.ca

Toronto Police Service (Ontario)

Population Served: **2,876,095**

Sworn Officers: **5190**

Customer Since: **2013**

Established in 1834, Toronto Police Service was the first municipal police service created in North America and is one of the oldest police services in the English-speaking world. It is the largest municipal police service in Canada and fourth largest in North America with approximately 5,600 sworn officers, 2,400 civilians, and 17 divisions.

In late 2013, Toronto Police went live with Versadex RMS, MDT and MRE for their report writing needs, which also included the eTicketing and eMVA solutions.

Installed Applications

vCAD Police	vCAD Fire	vMDT	vMobile	vMRE	vRMS	vJMS
		✓		✓	✓	✓

RMS Subsystems

Court
Workflow/Case Management

MDT/MRE Interfaces

CPIC queries
eMVA (Ministry Of Transport Ontario collision reporting and validations)
iCAD/vMDT mobile interface
Police Information Portal (PIP)
Versaterm eTicketing

RMS Interfaces

Citizen reporting interface with CopLogic
CPIC queries and auto adds/updates
DVAMS
IBM Identify Insights
i/CAD Call For Service Transfer
eMVA (Ministry Of Transport Ontario collision reporting and validations)
IntelliBook interface (Livescan and Mugshots)
Prosecution Transfer to eJust
Police Information Portal (PIP)
User Management Interface
Versaterm Data Mart

Contact: Acting Inspector Gregory Watts
Strategic Management
TEL: (416) 808-3893
Gregory.Watts@torontopolice.on.ca

Sgt Paul Jones
Business Change Management
paul.jones@torontopolice.on.ca

Ville de Sherbrooke (Québec)

Population Served: **162,638**

Sworn Officers: **200**

Customer Since: **2008**

The Ville de Sherbrooke installed Versadex CAD for both Police and Fire along with the Versadex Police RMS systems. In addition, Versaterm took over the support and development of their "Alerte" system, a Fire RMS product that is used by the Sherbrooke Fire Service.

Sherbrooke has a population of about 150,000 residents. The Police Service has approximately 200 permanent and 45 temporary officers. The Fire Service has 92 permanent, 63 part-time, and 20 temporary firefighters.

Installed Applications
Versadex Computer Aided Dispatch (Police and Fire)
Versadex Records Management System ♦ Evidence/Property subsystem (with bar code option) ♦ Arrest/Booking subsystem
Versadex Mobile Field Reporting
Versadex Police Mobile Data Terminal Functions (with GPS/AVL)
Versadex Fire Mobile Data Terminal Functions (with GPS/AVL)
Interfaces ♦ CRPQ Mugshot ♦ SMTP Email/Paging interface (for Fire calls)

Contact: Philippe Paultre
TEL: 819-823-8000 x5994
Philippe.Paultre@ville.sherbrooke.qc.ca

Windsor Police Service (Ontario)

Population Served: **218,270**

Sworn Officers: **473 + 146 Civilian**

Customer Since: **1998**

The Windsor Police Service was a Y2K transition customer replacing their legacy UNISYS software, running on a mainframe (for RMS) and UNIX box (for CAD) unable to survive Y2K. The CAD, with 911 and CPIC interface was installed in early 1999 with the RMS and Mobile Data coming online later that year. With the addition of Versadex Field Reporting they have migrated to a paperless environment. As with most projects, this entailed an extensive conversion effort to migrate data from systems that would be shut down.

In 2017 The Windsor Police Service vCAD was configured as a full multi-jurisdictional dispatch system and welcomed the **Amherstburg Police Service** on board Versaterm vCAD and vMDT.

Installed Applications

Versadex Computer Aided Dispatch

Versadex Records Management System

- Evidence/Property subsystem
- Arrest/Booking subsystem
- Integrated Document/Multimedia Attachments

Versadex Mobile Field Reporting

Versadex Mobile Data Terminal

- Electronic Ticketing
- Electronic Accident Reporting

vMobile

Interfaces

- E-911
- CPIC
  - Queries
  - Automatic Adds/Updates
- Mugshot interface to L1 mugshot system Note: L1 interface was developed by a Windsor Police Officer
- Batch Pawn Check
- Maps
- Versonnel
- Timekeeping Inventory
- Property Bar Code Scanning
- Telephone Reporting Center
- InCharge
- CopLogic
- VDM/Cognos
- Ontario MTO/eMVA Interface

Police Information Portal (PIP)

Contact: Brendan Dodd
TEL: (519) 255-6700
bdodd@police.windsor.on.ca

York Regional Police Service (Ontario)

Population Served: **1,11 million**

Sworn Officers: **1,529/605 civilians**

Customer Since: **2005**

The York Regional Police has installed the complete Versadex suite including RMS, CAD and MWS with appropriate interfaces to CPIC, eJust, mugshots, etc.

The Regional Municipality of York is comprised of nine area municipalities covering 1,750 square kilometers (675 square miles).

Installed Applications
Versadex Computer Aided Dispatch
Versadex Records Management System ♦ Evidence/Property subsystem (with bar code option) ♦ Arrest/Booking subsystem ♦ Integrated Document/Multimedia Attachments
Versadex Mobile Field Reporting
vMobile
Versadex Mobile Data Terminal ♦ Including AVL/GPS
Interfaces ♦ IP/XML E911 ♦ CPIC ♦ TRC (Telephone Reporting Centre) ♦ Mugshot interface ♦ VGI (Versaterm GIS Interface) ♦ inCHARGE by EJust Systems ♦ Provincial Major Case Management (PowerCase) ♦ CopLogic ♦ Provincial Motor Vehicle Accident Interface ♦ Background Check
Versonnel/Timekeeping
Police Information Portal (PIP)

Contact: Ron Huber, Information Technology Manager
TEL: (866) 876-5423 ext 7948
5390@yrp.ca

Richmond Hill Fire Department (Ontario)

Servers hosted by York Regional Police Service

Population Served: **369,000**

Fire Fighters: **143**

Customer Since: **2008**

In 2008 Versaterm extended the CAD supporting York Regional Police to include FireCAD. The Fire functionality now supports two agencies in the region: the Richmond Hill Fire Department, and the Vaughan Fire and Rescue Service.

The Police and Fire services share the CAD server resources, but operate out of separate communication centers.

The Richmond Hill Fire Department provides emergency services to the residents of Richmond Hill, Newmarket, Aurora, Georgina and East Gwillimbury. There are eight fire halls servicing a population of about 369,000. The department is responds to 38 square miles with 116 total personnel.

Installed Applications
Versadex FireCAD **Interfaces** ♦ Paging ♦ CAD Complaint Transfer to FDM ♦ FDM

Contact: Doug Bonathan
TEL: (866) 876-5423 x 7978
5385@yrp.ca

Vaughan Fire and Rescue Service (Ontario)

Servers hosted by York Regional Police Service

Population Served: **265,000**

Fire Fighters: **276**

Customer Since: **2008**

In 2008 Versaterm extended the CAD supporting York Regional Police to include FireCAD. The Fire functionality now supports two agencies in the region: the Richmond Hill Fire Department, and the Vaughan Fire and Rescue Service.

The Police and Fire services share the CAD server resources, but operate out of separate communication centers.

Vaughan Fire and Rescue Service provide emergency services to the residents of the City of Vaughan and King Township. Nine fire halls service a population of about 265,000. The department responds to 106 spare miles with 250 total personnel.

Installed Applications
Versadex FireCAD **Interfaces** ♦ Paging ♦ CAD Complaint Transfer to FDM ♦ FDM

Contact: Doug Bonathan
TEL: (866) 876-5423 x 7978
5385@yrp.ca

Caribbean Customers

Trinidad and Tobago Police Service

Population Served: **1,339,000**

Sworn Officers: **5,000**

Customer Since: **1994**

Trinidad and Tobago Police Service use Versadex for their national criminal records database as well as their operational records management system. Based on their British heritage, the Canadian RMS system was a good match for their organization. In 2007, Trinidad and Tobago upgraded their system to RMS v7 and began the implementation of direct entry, tickets, property, arrest, major case management and crime analysis.

Installed Applications
Versadex Records Management System ♦ Evidence/Property subsystem ♦ Arrest/Booking subsystem and Court Assist **Interfaces** ♦ Versonnel ♦ Timekeeping/Inventory

Contact: Miklos Badaloo, Manager of Information Systems
TEL: (868) 701-1433
Miklos.Badaloo@ttps.gov.tt

Customer Listing Tables

Versadex agencies in the US by population served

Name	State	*Population*	Sworn
Pennsylvania State Police	PA	12,805,537	4719
Portland RegJIN	OR	~1,000,000	~2000
Phoenix Police	AZ	1,586,611	2762
Sacramento County Sheriff	CA	1,510,000	1247
Hillsborough County Sheriff's Office	FL	1,349,000	1181
San Jose Police Department	CA	1,041,844	939
Unified Police Department of Greater Salt Lake	UT	1,030,000	419
Austin Police	TX	956,911	1807
Ventura County Sheriff	CA	850,536	756
Seattle Police Department	WA	700,313	1384
Portland Bureau of Emergency Communications	OR	700,000	1755
Denver Police	CO	699,259	1483
PSNet Agencies	OR	529,000	425
Sacramento Police	CA	495,471	652
Minneapolis Police	MN	400,000	888
Bakersfield Police	CA	380,000	400
Tampa Police	FL	375,904	951
Aurora Police	CO	366,477	670
Anaheim Police	CA	353,504	408
Chandler Police Department	AZ	265,922	329
Salt Lake City Police	UT	193,918	435
Tempe Police Department	AZ	183,683	355
Fullerton Police	CA	141,968	141
Simi Valley Police	CA	127,252	131
Inglewood Police	CA	112,059	186
Hillsboro Police	OR	102,000	127
Ventura City Police	CA	100,000	134
Santa Barbara Police Department	CA	92,519	140
Bellingham/Whatcom County Police/Fire	WA	86,005	600
Baytown Police	TX	77,224	163
Walnut Creek Police	CA	69,860	85
Lenexa Police	KS	52,903	88

Versadex agencies in the US by number of sworn

Name	State	*Population*	Sworn
Pennsylvania State Police	PA	12,805,537	4719
Phoenix Police	AZ	1,586,611	2762
Portland RegJIN	OR	~1,000,000	~2000
Austin Police	TX	956,911	1807
Portland Bureau of Emergency Communications	OR	700,000	1755
Denver Police	CO	699,259	1483
Seattle Police Department	WA	700,313	1384
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Tampa Police	FL	375,904	951
San Jose Police Department	CA	1,041,844	939
Minneapolis Police	MN	400,000	888
Ventura County Sheriff	CA	850,536	756
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Bellingham/Whatcom County Police/Fire	WA	86,005	600
Salt Lake City Police	UT	193,918	435
Unified Police Department of Greater Salt Lake	UT	1,030,000	419
Anaheim Police	CA	353,504	408
Bakersfield Police	CA	380,000	400
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Tempe Police Department	AZ	183,683	355
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Ventura City Police	CA	100,000	134
Simi Valley Police	CA	127,252	131
Hillsboro Police	OR	102,000	127
Lenexa Police	KS	52,903	88
Walnut Creek Police	CA	69,860	85

Versadex agencies in the US by State

Name	State	*Population*	Sworn
Chandler Police Department	AZ	265,922	329
Phoenix Police	AZ	1,586,611	2762
Tempe Police Department	AZ	183,683	355
Anaheim Police	CA	353,504	408
Bakersfield Police	CA	380,000	400
Fullerton Police	CA	141,968	141
Inglewood Police	CA	112,059	186
Sacramento County Sheriff	CA	1,510,000	1247
Sacramento Police	CA	495,471	652
San Jose Police Department	CA	1,041,844	939
Santa Barbara Police Department	CA	92,519	140
Simi Valley Police	CA	127,252	131
Ventura County Sheriff	CA	850,536	756
Ventura City Police	CA	100,000	134
Walnut Creek Police	CA	69,860	85
Aurora Police	CO	366,477	670
Denver Police	CO	699,259	1483
Hillsborough County Sheriff's Office	FL	1,349,000	1181
Tampa Police	FL	375,904	951
Lenexa Police	KS	52,903	88
Minneapolis Police	MN	400,000	888
Hillsboro Police	OR	102,000	127
Portland Bureau of Emergency Communications	OR	700,000	1755
Portland RegJIN	OR	~1,000,000	~2000
PSNet Agencies	OR	529,000	425
Pennsylvania State Police	PA	12,805,537	4719
Austin Police	TX	956,911	1807
Baytown Police	TX	77,224	163
Salt Lake City Police	UT	193,918	435
Unified Police Department of Greater Salt Lake	UT	1,030,000	419
Bellingham/Whatcom County Police/Fire	WA	86,005	600
Seattle Police Department	WA	700,313	1384

Versadex agencies in Canada by population served

Name	Prov	*Population*	Sworn
National Defense Military Police	National	32 Bases	1,500
Prime BC/Vancouver/Port Moody/Richmond RCMP/Victoria	BC	4,000,000	7,800
Toronto Police Service	ON	2,876,095	5190
York Regional Police Service	ON	1,110,000	1,529
Province of Saskatchewan	SK	1,100,000	1000+
Ottawa Fire Service	ON	973,481	1,200
Ottawa Police Service	ON	973,481	1,242
Durham Regional Police Service	ON	645,862	550
Niagara Police Service	ON	453,817	706
London Police Service	ON	397,493	605
Richmond Hill Fire Department	ON	369,000	143
Halifax Police/Fire	NS	359,200	660/1176
Gatineau; Service de Police Gatineau	QC	276,338	393
Saskatoon Police	SK	266,064	460
Vaughan Fire and Rescue Service	ON	265,000	276
Windsor Police Service	ON	218,270	473
Royal Newfoundland Constabulary	NF	208,708	339
Ville de Sherbrooke	QC	162,638	200
New Brunswick; Province of New Brunswick / PORS (8 agencies)	NB	143,800	270
Kingston Police Service	ON	131,746	203
Medicine Hat	AB	61,097	85
Prince Albert	SK	40,000	85
Moose Jaw	SK	34,700	55

Versadex agencies in Canada by number of sworn

Name	Prov	*Population*	Sworn
Prime BC/Vancouver/Port Moody/Richmond RCMP/Victoria	BC	4,000,000	7,800
Toronto Police Service	ON	2,876,095	5190
York Regional Police Service	ON	1,110,000	1,529
Ottawa Police Service	ON	973,481	1,242
National Defense Military Police	National	32 Bases	1,500
Ottawa Fire Service	ON	973,481	1,200
Province of Saskatchewan	SK	1,100,000	1000+
Niagara Police Service	ON	453,817	706
Halifax Police/Fire	NS	359,200	660/1176
London Police Service	ON	397,493	605
Durham Regional Police Service	ON	645,862	550
Saskatoon Police	SK	266,064	460
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Gatineau; Service de Police Gatineau	QC	276,338	393
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Kingston Police Service	ON	131,746	203
Ville de Sherbrooke	QC	162,638	200
Richmond Hill Fire Department	ON	369,000	143
Medicine Hat	AB	61,097	85
Prince Albert	SK	40,000	85
Moose Jaw	SK	34,700	55

Versadex agencies in Canada by Province

Name	Prov	*Population*	Sworn
Medicine Hat	AB	61,097	85
Prime BC/Vancouver/Port Moody/Richmond RCMP/Victoria	BC	4,000,000	7,800
National Defense Military Police	National	32 Bases	1,500
New Brunswick; Province of New Brunswick / PORS (8 agencies)	NB	143,800	270
Royal Newfoundland Constabulary	NF	208,708	339
Halifax Police/Fire	NS	359,200	660/1176
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Windsor Police Service	ON	218,270	473
York Regional Police Service	ON	1,110,000	1,529
Gatineau; Service de Police Gatineau	QC	276,338	393
Ville de Sherbrooke	QC	162,638	200
Province of Saskatchewan	SK	1,100,000	1000+
Moose Jaw	SK	34,700	55
Prince Albert	SK	40,000	85
Saskatoon Police	SK	266,064	460

Chatham County, Georgia

Request for Information

Computer Aided Dispatch and Law Enforcement Records Management System

RFI# 19-0062

Submitted by:

VERSATERM

7534 E. 1Street
Scottsdale, Arizona 85251

June 28, 2019

Introduction

Who is Versaterm?

Versaterm was founded just over 40 years ago by the individuals who created CPIC - the Canadian equivalent to NCIC - and we have delivering public safety systems to law enforcement agencies ever since. In fact, that is all we do. By 1987 Versaterm begin operating under what has become our current business model; delivering and supporting a line of best-in-class COTS applications known as Versadex. This model is designed to build our success (and profitability) solely on our clients' long-term success rather than on making the next "deal" or building market share. This model also enables us to throttle our growth so that we never outstrip our ability to deliver quality service. As a result of this approach, Versaterm is one of the few major players left in the industry who has thrived under single ownership.

Today, Versaterm is a major supplier of law enforcement applications across North America. In the United States, jurisdictions such as Denver CO, Austin TX, Phoenix AZ, San Jose CA, and many others depend on Versadex. In Canada, we are installed from coast to coast. We serve customers who range in size from 37 sworn officers to over 9,000. These include major cities, large counties, consortiums of cities and counties, states, provinces and even a national military police. As different as these agencies are from each other, they all have two things in common: they are all successful and they are all references for Versaterm. A complete listing of our clients along with their contact information and a system description can be found at the end our response.

The Versaterm Approach

Because of our background in and exclusive focus on public safety, Versaterm appreciates your unique constraints and requirements:

- You're over-tasked and more than likely, under-funded. Therefore, you must become more efficient with each passing year.
- You face new and evolving challenges and, because of this, you need tools that can grow and adapt through time to meet those needs.
- In a 24/7 operation, you don't have the luxury of being on the bleeding edge of technology, but on the other hand you must also take advantage of every proven development in order to keep up.

In order to meet those needs, Versaterm has adopted a unique business and product approach:

A proven system: Versadex is reliable, stable, predictable, and powerful. Through decades of user input, it has become a virtual repository of best practices. While Versadex is state-of-the-art, utilizing the latest proven technology, the underlying technology is never 'bleeding edge' so we don't create "technology orphans" eventually requiring a 'fork lift' upgrade.

Information at your fingertips: Versaterm products have always been distinguished by being information retrieval oriented, getting information out as well as putting data in, to deliver real value – especially for those serving in the field. With Versadex, it's like having the knowledge of the entire department, and beyond, riding with you. Modules such as the myVersadex portal / dashboard will even publish information to your web browser - you indicate what is relevant and it makes it available automatically as it occurs. Users will have the opportunity to easily consume vast amounts of information.

Tangible efficiency improvement: With Versadex, agencies capture data at the source – one time. This results in timely and accurate data and eliminates duplicate entry throughout the department. Then, via workflow routing rules, Versadex delivers information to those who need it thus creating a paperless environment. For Police, this speeds case clearance, while increasing both accuracy and efficiency. For Fire, the information is readily available to you to complete your NFIRS reporting or patient care report. In fact, Versadex will provide you with the data you need to monitor your efficiency improvement thus proving its own value.

The last system your agency will ever need: Versadex grows with you so you can adapt to new challenges as they emerge. Guided by our users' input and that of a highly experienced advisory board, we create new releases that contain numerous improvements and new features. Versaterm continually evolves the underlying technology of Versadex so that your system remains as technologically modern and functionally relevant as it was the day you installed it. All of this is at no additional charge – no upgrade fees or pricey enhancements. We call this process *Evergreening* and because our solution is constantly renewing itself it never requires wholesale replacement. This is why we say our clients own the last system they will ever need.

The Versadex Solution

The Versaterm suite of fully integrated public safety COTS solutions consists of the following software components:

Computer-Aided Dispatch

The Versaterm vCAD is a fully featured, robust system built specifically for non-stop operation in mission critical Police, Fire and EMS environments. The easy-to-use and modern design of vCAD provides call takers and dispatchers with a predictable and efficient solution that is required in a large communications center.

Mobile Data Solution

The integrated Mobile Data solution consists of the following components:

- Versaterm Mobile Data Terminal (vMDT) – provides Police, Fire and EMS users with an array of tools and dashboards to manage dispatches, conversations and to increase situational awareness.
- Versaterm Mobile Report Entry (vMRE) – provides off-line reporting with customizable rules to simplify data collection by report type.

- Versaterm vMobile (smartphone/tablet) – enhances mobility by providing easy access to vital information and supplementing report creation from any mobile device (iOS, Android, etc.).

Law Enforcement Records Management System Solution
The Versaterm vRMS is a future-proof system that provides a true operational management system that supports report creation, investigations, analytics and statistical reporting.

Jail Management Solution
The Versaterm vJMS system is a new addition to our suite of integrated solutions. Built on our existing Cell Management System we have expand our solution to incorporate features and functions that are required for the operational management of a full custodial jail environment.

The Versadex systems provide *integration by design.* The guiding principles are:

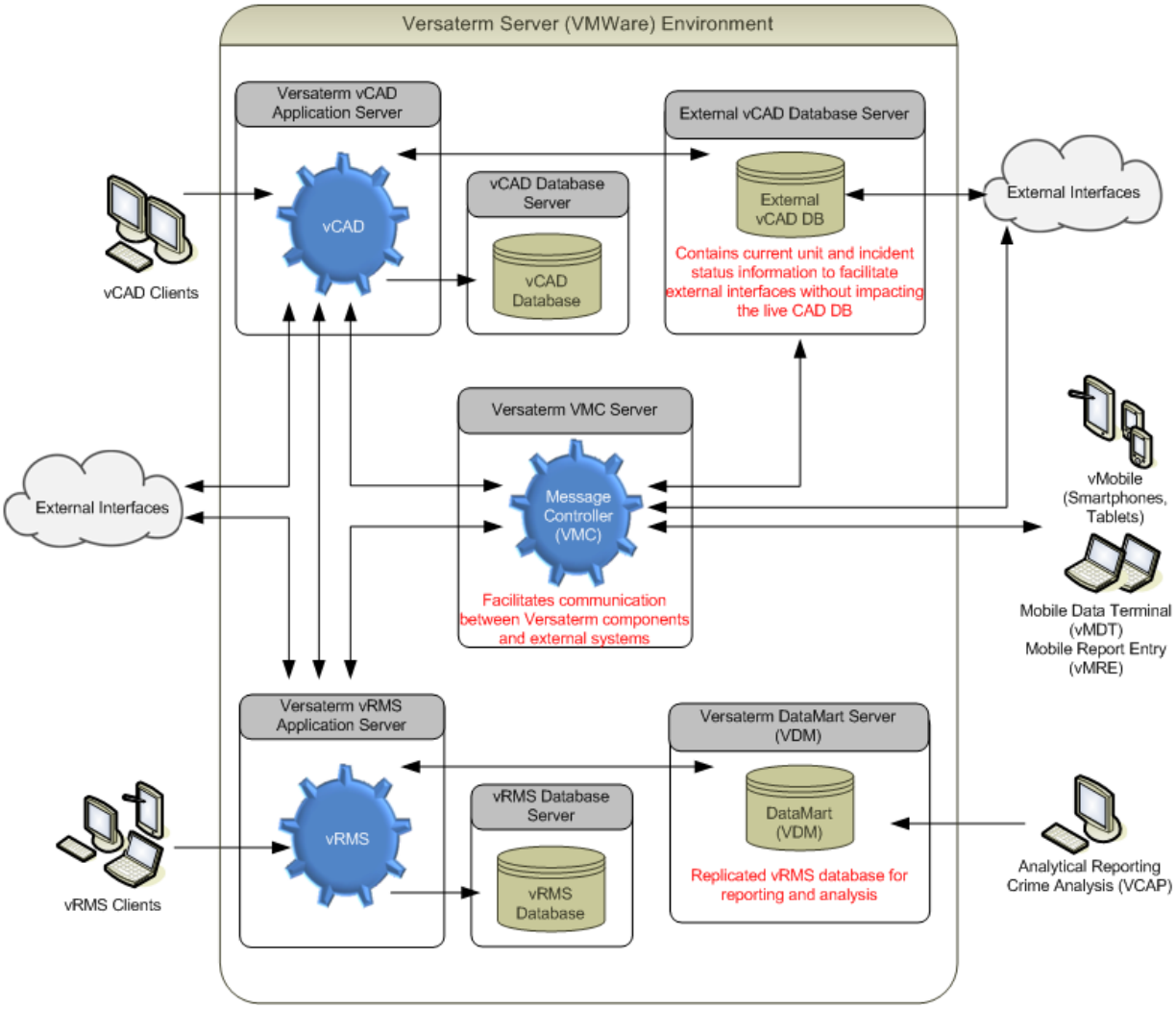
- Direct entry of information - capturing it as close to the source as possible;
- Single entry of information - you will never have to re-key known information; and
- Enterprise-wide access to information – The Software provides integration, not the user.

All of our Versadex systems have been designed for multi-jurisdictional use (and in the case of vCAD multiple agencies). The Versadex vCAD allows each agency and each jurisdiction that ability to create their own unique unit/apparatus recommendation algorithms. Within the vRMS although information at the Master Index levels are shared, individual agencies can create their own unique data validation rules, workflow parameters, and security rules. Additionally, our mobile applications enable each agency the ability to design the user interface look and feel for both the Mobile Report entry systems and the Mobile CAD application. In addition we have many years of experience implementing multi-jurisdictional systems and would share all of our best practices that we have learned over the years in order to insure a successful implementation.

Flexible System Architecture

The Versaterm solution is based on an open systems model and was built for interoperability and scalability. Not only does this model provide data sharing and seamless integration between the various Versaterm products, it also provides interoperability with external systems using standard data exchange methods and protocols. The open model separates the application and presentation layers from the communication and transport layers and allows us to be very flexible and adaptable as systems and communication standards evolve.

The following diagram illustrates the high-level system components of a typical Versaterm installation and is followed by various descriptions and examples of the interoperability and scalability provided with the Versaterm solution.



External interoperability

The Versaterm solution contains a number of built-in standard interface touch points so that external systems can easily query or exchange information with the CAD and RMS. The interfaces leverage industry standard communication methods and protocols and also supports interface connectors to support data transformations and various other forms of communication. With this approach, we avoid custom development as the only customization is in the connection to the interface.

One of the more common Versaterm interfaces that support interoperability is the CAD-to-CAD data sharing interface which allows CAD users to exchange call and unit information with external agencies that use a separate CAD system – regardless of the CAD vendor. For example, a fire agency can request mutual aid assistance from a neighboring fire agency or even request the assistance from other services for combined incidents such as a serious car accident. Call information can be exchanged automatically by incident type with optional filtering by incident location (e.g. border

areas) or the dispatcher can manually transfer call information to another agency. Additionally, the interface allows unit information to be exchanged between CAD systems making the availability and AVL locations of units known to other agencies. Our standard data exchange consists of a NIEM compliant XML transfer; however, we can also transform into another vendor's format if required.

To further facility interoperability, included in the Versaterm solution is an External vCAD database (as illustrated in the system component diagram above). This database contains a snapshot of current incident and unit status information. External systems can read directly from the database or take advantage of the various built-in triggers that publish real-time CAD data. Having an external database segregated from the core CAD database provides the ability for external systems to access real-time CAD data without impacting the performance of the CAD system.

Another interesting interface is our interoperable interface with NCIC/SCIC. Although we support integrated NCIC/SCIC queries; we take this a step further. Our vRMS incorporates integrated transactions that are automatically spawned as a result of entering information into the RMS. For example, the system can be configured to automatically generate the appropriate EV transaction to the Georgia Crime Information Center (GCIC) when a user adds a stolen vehicle. The resulting numbers (e.g. NIC) are automatically stamped on the source RMS record so that, should it be recovered, the appropriate "clear" transactions can be generated and sent to GCIC. This level of integration provides accuracy and timeliness. This feature is also available for Stolen Property, and Missing Persons. Thus information is entered only once but automatically shared with other essential systems.

You will also notice at the center of the system component diagram above is the Versaterm Message Controller (VMC). The VMC serves as a message router not only between the Versaterm components but also as a gateway to various external systems. The flexible design of the VMC provides the ability easily add communication plug-ins along with configurable routing rules to make the development of a new interface easy and manageable. Over the years we have developed interfaces to numerous 3rd party systems and devices.

Internal interoperability

In addition to external interoperability, the integrated Versaterm solution provides full interoperability between the various Versaterm components - the CAD, Mobile Data solution and the RMS. We leverage the same industry standard communication methods and protocols that are used to interface to external systems within our own internal products. This provides us with a very robust and flexible integration between the various Versaterm products. The communication and data exchange models are designed to be backwards compatible which provides us with the ability to upgrade one product without affecting the integration with the other products.

An example of the interoperability between Versaterm products would be how the vRMS is very tightly integrated into the vCAD and Mobile environment. Call Takers, Dispatchers and mobile users can easily query persons/vehicles and premise history in the RMS directly from their vCAD Mobile screen. For example, when entering a plate into the incident remarks, vCAD will not only automatically run the plate against NCIC and CAD, but it will also check vRMS and return any results

directly to the Dispatcher's vCAD mail box. Another example is when dispatched to an incident, the officer can simply touch the address displayed on the screen to query both CAD and RMS for all activity related to the incident's location. The integration also works in reverse. That is, included with the vRMS is a WebCAD module which provides RMS users with real-time access to view current incident and unit status information and even communicate directly with the mobile users. The result for the end user is a single application that has access to multiple systems.

Scalability

The Versaterm product suite has been designed for scalability. For example, the service-oriented architecture (SOA) of vCAD provides distributed scalability and can be deployed in a high-availability / active-active architecture. Additionally, as an open system, Versadex can use a number of databases which support distributed and/or master-slave relationships.

Further, the opens systems model of the Versaterm solution provides the additional flexibility of not being tied to a single database, operating system or technology platform. For example, this design allows the database to be upgraded to the latest version or even migrated to a different database engine with minimal impact to the application.

The Versaterm solution also contains numerous features to scale the application for best performance in a busy environment.

Deployment Options

Versaterm offers several architectural deployment options to meet our customers' current and future needs. We can configure a full on-premise solution, as well as offer solutions hosted in the cloud, either as a private hosted solution, or SaaS based subscription model. We can also offer a hybrid solution where, for example, the primary production environment is hosted in the cloud, with a separate Backup configuration installed onsite. Our architecture is very flexible where our customers have the choice for their preferred deployment platform.

On-Premise Deployment

For an on-premise deployment Versaterm recommends a server platform based on the latest virtualization from VMware to provide the resiliency, fault tolerance and high availability required in a mission critical 24x7 environment. Versaterm was an early adopter of server virtualization, and most of our customer sites are running on a VMware platform. The VMware solution is a proven, solid, highly available environment providing overall flexibility and extensibility that will meet the demands of the Agency now and well into the future.

Our solution makes use of virtualization to logically separate the CAD and RMS systems into multiple virtual server appliances for manageability and business continuity. The CAD and RMS applications are delivered as pre-installed virtual server appliances, which are mounted and hosted across multiple physical servers providing for maximum protection. Multiple back end application instances, supporting an active-active configuration, load balanced across the physical servers can

be configured to provide the high availability and meet the performance demands of a large complex installation. Given the modular structure of the CAD and RMS additional application instances can be stood-up as required to meet the performance demands of the Agency.

Versaterm segregates the CAD and RMS applications from the database, which runs in a separate environment. This provides flexibility as to how the database is configured and hosted in a customer environment. It also facilitates and enables new releases of the CAD and RMS to be installed, without having to migrate the database CAD and RMS appliance is installed and connected to the existing database. To meet the performance demands, separate database instances would be configured for both systems. Versaterm would also propose to configure a pair of replicated databases for each of the CAD and RMS production environments. With this configuration, the primary database would be dedicated to handling database maintenance transactions (e.g. add calls, enter reports, etc.), whereas the second database would be configured for query, ad-hoc (Browse) searching, and reporting functions. The query database can also be used with external 3rd party analysis/reporting tools. The replicated database pair also provides a robust and resilient architecture as either database engine can become the primary and service the Agency's needs.

As previously noted the Versaterm solution is an OPEN system and is not limited to a specific database platform. Both the CAD and RMS applications are database agnostic and can run using either MS-SQL, Oracle, IBM (Informix), or PostgreSQL databases. This allows the Agency to implement a database you are familiar with and allows you to leverage existing RDBMS enterprise agreements that are in-place. Typically the selected data base is acquired by the customer.

Versaterm would propose a high availability server cluster comprised of three physical servers, which will host separate environments for the CAD and RMS Production, Training and Implementation Configuration/Test environments. Alternately (if preferred), a second smaller server cluster comprised of two smaller servers could also be installed to provide a separate isolated environment for the Implementation Configuration/Test environment.

For the primary production cluster, three physical servers are recommended to support an N+1 architecture, where the Agency can withstand the failure of an entire physical server and all virtual servers can be supported on the remaining surviving physical server(s) without any impact or loss of operational performance. As we deal exclusively with public safety systems, we understand the requirement for mission critical systems designed to operate reliably and predictably at all times.

The Implementation Configuration/Test environment is used prior to go live as an area for a team of Agency subject matter experts to begin the process of configuring the various components of the CAD and RMS. Once the system goes live, this environment continues to be used as a Testing/Quality Assurance platform. When any changes or updates are installed, these are put in the Test environment for the Agency to test and sign off on prior to moving the change into training and production.

The Test environment provides an area for testing both Versaterm software and any other system related changes, such as applying operating system patches, database updates and new CAD and

RMS features without impacting production. The Test environment contains a full development environment, including any necessary compilers along with the application source code.

To provide additional protection, servers can also be configured at a Backup/Disaster Recovery site. There are several configuration choices available to the Agency, including using SAN mirroring to implement a 'stretched cluster' across the primary and backup/DR site. The Agency could also make use of VMware's vSphere replication to replicate the CAD and RMS application virtual server appliances to the Backup site. vSphere replication takes block level changes from the primary site and applies to them to the virtual machines at the secondary site. In this case, the Backup site would host a replicated instance of the primary production virtual server appliances, allowing for failover to the Backup data center in the event of an unplanned major interruption at the primary location. At the database level, the RDBMS engine will replicate committed database transactions to the backup site in near real time. Please note that Versaterm does not charge additional licensing fees for our application software installed at a DR site. The only additional costs that would apply are server hardware, virtualization and operating system software, and database licenses.

Since our both applications are entirely virtualized, our Virtual Machines (VMs) can be deployed on a large selection of commodity enterprise class servers. Any servers that support the VMware operating system can run the application software (e.g. HPE, Lenovo (IBM), Dell, etc.). In most instances the hardware, like the operating system and Relational data base systems are provided by the customer. If required, however, Versaterm can provide these technical components

Given the mission critical nature of these systems, the servers to be used to host the applications should be configured with redundant components (power supplies, fans, network interfaces, SAN fabric interface cards, error-correcting memory as well as internal hot swappable drives configured as a mirrored disk pair) so they can withstand a number of hardware failures without affecting the end user experience.

A central enterprise class SAN is required to provide the central storage needed for the CAD and RMS applications, databases, file storage (e.g. multi-media attachments), and related components. The SAN must be accessible (read/write mode) by the physical servers in the VMware cluster. To support the performance demands and response requirements, a high-speed enterprise class fiber-attached SAN configured with high-speed SSD drives is recommended. Here as well, redundant power supplies and fans as well as battery backed up cache, hot swappable drives, and online spare drives (which automatically take over in the case of a drive failure) should be configured to provide the resiliency required. To provide the protection and performance required, the databases should be stored in mirrored (RAID) disk arrays on the SAN. Dual fiber SAN switches are also recommended to provide redundant connections to the servers.

Versaterm also makes use of the SAN's ability to expose a NAS file storage area (Versaterm File Share) that will house any non-database data files such as NCIC audit archives, other audit logs, as well as multi-media file attachments. These files will be stored on the NAS, outside the application servers. The advantage of this approach is that the application systems can be upgraded and

maneuvered easily, without having to copy or migrate the external data files. As well, the NAS storage can be expanded when required without user access interruption.

RMS User workstations running a secure browser client (HTTPS) require a 10BT connection minimum (100BT preferred).

Our mobile MDT (Mobile Data Terminal) application is optimized for the mobile environment. It makes use of secure web socket communications across LTE, 3G, and lower bandwidth wireless data networks. Our web socket server components make use of TLS encryption (FIPS 140-2 compliant) for communications.

Our CAD call-taker/dispatcher workstations communicate with CAD using standard TCP networking across secure encrypted communications (HTTPS, SSH, SSL). CAD desktops require a 100BT connection minimum (1000BT preferred). For our WebCAD users a 10BT network connection is sufficient (100BT preferred).

Our vMobile application runs on an Apache Cordova mobile development framework, which supports standard web technologies (HTML5, JavaScript, etc.) for cross-platform development. vMobile is available for iOS and Android devices (smartphones and tablets) and makes use of secure web socket communications (FIPS 140-2 compliant TLS) to communicate across 3G/4G wireless networks with the back-end RMS (and optional CAD).

Cloud Deployment

In addition to an on-premise Versaterm can also offer a cloud-based solution in the Amazon AWS GovCloud infrastructure. We have chosen to partner with Amazon because of their top position in the Infrastructure as a Service (SaaS) space. AWS has been in business for over 11 years and is at the forefront of cloud computing. Amazon continues to be one of the most evolved, feature rich, and stable cloud offerings which is why Versaterm has selected AWS to host our cloud offering. AWS's detailed functionality, and heavy usage by several large corporations such as Netflix, Citrix, Expedia, US Government, US Navy, and the CIA, to name a few, prove AWS's firm footing in the cloud arena.

Versaterm is making use of AWS's GovCloud region for US agencies, which is a special AWS region designed specifically to house sensitive US government, and public safety data. Versaterm and Amazon are partnering in order to provide a CJIS secured environment that clients can be assured will keep their data safe. The Versaterm cloud environment makes use of multiple back end application instances, supporting an active-active configuration, that are load balanced across AWS Availability Zones (AZs). Availability Zones are separate datacenters connected to each other via low latency network links and completely separate infrastructure. An outage of a single node or availability zone (datacenter), will not cause an outage to the end user (users will be automatically re-directed to the surviving datacenter/nodes).

Currently we have four police agencies in Oregon utilizing vRMS as a SaaS offering. The Sacramento County, CA Sheriff's Office and the Mesa, AZ Police Department are also implementing our Cloud vRMS and are scheduled for full operation in the next several months. Sacramento County has been a long-time customer and will continue to operate our on-premise CAD. Mesa, AZ PD who

is newest customer is replacing their Hexagon/Intergraph I-LEADS RMS and their police/fire/ems CAD system. The CAD system will be an on-premise installation and the RMS will be hosted on AWS. We should also see our first Cloud-based vCAD implementation within the next year.

In the cloud environment all server environments and database software will be provided as part of the SaaS environment. The customer is only responsible for network connectivity and desktop and mobile hardware.

Customer Deployment Choices

Having made a deployment choice, our customers are never locked into that choice. You always have the option to migrate from one architecture to another. For example, an on-premise installation can be quickly moved to the cloud should circumstances dictate or a cloud configuration can come back on-premise. It is your system and your data so you a have choice as to how things are configured and supported as things progress.

Implementation Services

Versaterm provides all of the professional services necessary to manage, install, reengineer, train and support our customers in the successful implementation of their systems. In addition, Versaterm also provides on-going annual customer service and support of our products. Versaterm will be your partner so that the County, like all Versaterm customers, realizes the maximum benefit from your new integrated public safety system – return on investment.

Our seasoned people make the difference here, many on your implementation team will have decades of experience. They will provide expert advice and guidance so that the Police Department gains efficiencies at go-live and beyond. We deliver a system “with you”, not “to you” – it’s a partnership. We encourage you to talk with any or all of our existing customers about our implementation services.

Our service delivery does not end with a go-live; it is at go-live that our customer service truly begins. To be really successful, we have to look at longer-term success and we have the reputation of doing just that. During the implementation, decisions may be made that, after use, we will collectively realize could have been re-routed or approached differently, this is inevitable of any major project. We offer expert services where we engage the end-users after go-live to ensure they remain comfortable and successful, encouraging product suggestions as a result of their own experiences.

Service delivery has many components. There are technical service levels that must be achieved, which quite frankly, are easy in today’s technical environment of high availability and mature architectures. The real trick is in the service delivery to the end-user/stakeholder which not only is about delivering a reliable and predictable solution, but also the nimbleness and willingness to *make it better*. Versaterm’s current and future success is tied to the credo that we need to listen, adapt and deliver. We do this for every one of our projects, guaranteed.

Versaterm has developed (and is continuously refined) a very successful implementation process. This process enables us to work with our customers to bring their individual projects into live operation on-time and within budgets. A typical Versaterm project has 7 major phases:

1) Planning,
2) Reengineering and Configuration,
3) Functional and Integration Acceptance,
4) Training,
5) Production Use
6) Reliability and Performance Acceptance
7) Support & Service

The planning phase actually occurs prior to contract signing while the implementation is broken down into multiple activity categories (reengineering, configuration, verification, model office, etc.).

The following provides an overview of the Versaterm standard and recommended implementation approach. We believe this is the recipe for success.

The project begins with a **Planning (project scoping) and Contract Definition** phase where all of the details, including detailed scope of work defining what will be delivered and how it will be delivered while identifying each party's roles & responsibilities.

The result of this planning phase is a detailed scope of work (SOW) identifying the roles & responsibilities and the significant tasks and milestones that are used to measure project progress. Supporting the SOW task list is a detailed project plan (Microsoft Project) providing granularity and highlighting the dependencies, completion of work, etc. The project plan will be used to monitor the day-to-day and referred to during the weekly project calls/meetings. The SOW will also include the training plan with sufficient detail outlining the formal training to be delivered to the trainers. The training plan identifies the course modules, pre-requisites, optimum class size and duration of each module – they become the building blocks for end-user training as course modules are then placed into a curriculum targeting the various user types. The SOW acceptance test plan will outline how the system will be accepted in terms of functionality, reliability and performance. Most importantly, the test plan includes the process and mechanisms to conduct the tests, the procedures to correct any deficiency and any remedies (if applicable). The interface control document (ICD) development is also part of this scoping phase so that each interface is well documented including the related business processes/flow and roles and responsibilities of each party. Any agreed upon enhancements would be part of an enhancement control document (ECD) and, should conversion be included/required, a special conversion plan identifying sources, who has to do what, etc. in sufficient detail so that conversion is a success and (hopefully) not on the critical path. These plans may be adjusted during the project but we have found that they require only refinements as they have provided a solid base to begin the implementation.

We find this planning phase to be the most critical step of the successful project recipe and is why it is crafted in conjunction with the terms and conditions of the contract. Also during this phase, the Agency will identify the implementation team including the various stakeholders. Versaterm will provide guidance as, based on our experience, we can identify the needed skillsets, the effort/duration from the various practitioner types, etc. This planning phase is the "plan your work and work your plan" credo and helps achieve a "no surprise" implementation. We feel it so worthwhile, we do it before any contract is signed (and free of charge).

Once the contract is signed we are then simply executing the plan which begins with the **Reengineering and Configuration** phase. To begin the phase, the software is installed in the Test/Dev (implementation configuration) environment and standard table values are loaded or converted into the new system (e.g. personnel / badge numbers, GIS, etc.). A baseline environment is now available where the Agency's implementation team, under Versaterm guidance, will be able to configure, test processes and run model office type scenarios. To begin the knowledge transfer on how to configure, we start with reengineering best-practices where we highlight the choices and decisions you will need to make while introducing a small portion of the system with both on-site instructor-led and hands-on sessions. These are initially based on your Business Processes outlined in the RFP but we often find they can take on a life of their own as we get deeper into the RMS and the choices available to each one of the stakeholders – new efficiencies can now be envisioned by the team. This phase takes many months to complete with a number of on-site configuration workshops supported by webinars and discussions occurring between the on-site configuration workshops. This is a critical step in the recipe for success and the measurable differentiator between Versaterm and others in our marketspace - we deliver with you, not at you. We aren't simply training you on how to configure the system, we are working with you to both configure and help you gain real efficiencies – we depend upon your success.

Numerous other activities are on-going throughout this phase including interface development, enhancement development (if any), and conversion (if any) along with the acquisition and installation of training and production hardware (as required). We often recommend to begin the implementation on a Test/Dev server environment and only acquire the full production & training environment as the project progresses (usually 6 months prior to go-live). This approach will often have the benefit of acquiring the hardware either at a better price or receiving more "horsepower" for the same price.

The **Functional and Integration Acceptance** phase is to ensure the system, as configured, will meet the needs of the stakeholders. This confirmation phase will verify the functionality, the interfaces and the integration into the Agency's environment. It can also include a model office that provides a realistic confirmation of the configuration with beginning-to-end scenarios to ensure the new system, and its configuration, aligns with the new business processes (defined during the Reengineering phase). We work closely with your team so that we may answer questions, assist and manage this phase.

The **Training** phase, in our standard implementation methodology, is really split into two parts: 1) Train-the-Trainer and 2) End User Training. The Train-the-Trainer is not actual training on the system per se, as that occurs in the reengineering and configuration phase, but is how to train on

the configuration implemented by the Agency (and Versaterm). It is often referred to "training on how to train". To prepare for this phase, Versaterm customizes the training material and a resettable training database based on your configuration, using scenarios provided by "you" (the stakeholders). The courses are divided into modules and, based on the training plan and any refinements, we assist the Agency in putting together courses targeted for the specific end-users. Following the train-the-trainer sessions, there is usually a short period where the end-user trainers adjust the material and/or courses as appropriate. Once end-user training begins, Versaterm can be on-site for a period of time to oversee and monitor training – we are not conducting the actual end-user training but providing a critic and assistance as needed. We have found this approach provides the most realistic training for the initial go-live while ensuring that on-going training can be efficiently delivered by the Agency/stakeholders.

The **Production Use** or go-live is when the system is placed into production use. As the system configuration is finalized, throughout the reengineering and configuration phase, we will be working with the Agency implementation team to refine the go-live plan with help desk roles and responsibilities, action plans, etc. Although originally developed during the planning phase, we can expect the go-live plan to be refined as the implementation team reengineers. Versaterm will be on-site before, during and after the go-live supporting your transition.

The **Reliability and Performance Acceptance** phase is designed to ensure the system meets the performance and system reliability criteria as defined in the contract. Ideally this could be performed before the decision to place the system into production use. However, we have found that creating the realistic setup to perform these types of tests is virtually impossible given the technical and multi-user environment. As our solution is a proven, off-the-shelf product and can be seen running successfully at various police services, the confirmation, that it will perform, before go-live is unnecessary (in our opinion). We should also point out that the implementation team will have been using it for many months (12 or more) before the go-live milestone is attained. Further, Versaterm remains contractually bound to ensure it will meet the acceptance requirements and the acceptance test plan will outline any procedures to remedy a failure.

The **Support and Service** phase begins right-away following go-live. Even though the system may be in a warranty period, Versaterm's standard support is provided. We understand that go-live is not the end, it's really just the beginning and we remain heavily engaged not simply for technical support, but helping you (the stakeholders) adapt and perhaps change/reconfigure as production-use can often surface a business process that was simply forgotten during the previous phases. One of the other things that makes Versaterm unique in the industry is our commitment to providing you with an on-going continuity of support.

The same Project team that implemented your system will become your on-going support team thus establishing a critical long-term continuity of support and service. This helps insure that the people you call will understand your organization, your business process and how your system is configured for operation. As a result we can immediately begin to solve your problems and there is no need for you to continually re-train our personnel as to how your system is configured.

Versaterm systems evolve. We supply functionality updates once each 12 to 18 months. These updates are installed, tested, trained and taken live by our people at your site. Technology is replaced every 5 to 7 years depending on how quickly new technologies prove ready for the rigors of public safety 24/7 use. The technology refreshes are installed on site just like the functionality updates. Therefore, no Versaterm system becomes functionally stale or technically obsolete. We call this program ***Evergreening***.

Evergreening is included in our annual maintenance contract so there is never a need to go back to the well for more money in order to keep up – even the on-site installation of the releases is included. Therefore, your agency can count on your systems being up to date and that you will never receive an "End of Life" notice.

Data Conversion

Generally speaking, our approach to converting or migrating data from legacy systems follows the principle where Versaterm is a partner in the process. We want to get it right so that it delivers a result and not simply a process. Our approach is to first evaluate the conversion options with the agency and then develop a detailed plan. The following are the steps we would follow during our contract development or discovery phase that has been previously discussed:

- On-site review of legacy systems reviewing how the data is used operationally
- Review data elements
- On-site review of the new system and possible approaches to conversion
- Develop a detailed plan and approach to conversion
- Document the plan including the mechanics and the roles / responsibilities.

This approach works as it provides an opportunity for both the agency and Versaterm to really acquire an understanding of the task at hand while reducing the risk and therefore costs.

Out of this planning process, a formal Data Conversion Plan will be included in the contract, will provide a framework documenting the roles and responsibilities and the process used to successfully convert the data. Although details may change during the execution of the plan, the framework will not, as it provides a clear understanding to both parties, including expectations and who is responsible for what. Data conversion can often be the Achilles heel of any large IT project and we have found that by spending the effort up front serves the project well as avoiding nasty surprises.

Over the years and as a result of numerous conversions Versaterm has developed a generally standard process and set of automated tools that can be used in the conversion of legacy data. The following is a description of the key steps and automated conversion tools used in this process.

- Determine what is to be converted: Agency authorities who know the data and can assess the value of the data being considered for conversion should review all of the possible information that *could* be converted based on current relevance, accuracy, difficulty to convert, etc.

This is reviewed with a Versaterm conversion expert to analyze and identify the core information that *must* be converted. The elapsed time to extract data is reviewed and the ability to detect what has changed or been added after an extract is addressed. We have had some customers who have decided to convert none of their legacy data due to data quality issues and we have had others who have converted over 25 years' worth of legacy data (Austin, TX PD-almost 125 million records).

- Typically, our customers decide to convert:
  - Known Offenders
  - All Offense Reports
  - Only Major Crime Related Offense reports (some upwards of 20 years)
  - Property/Evidence Reports (in-custody property)
  - Master Name Index (if one exists)
  - Outstanding warrants
  - Etc.
- Determine what is required to extract the identified data to be converted from existing data bases into flat files with documented fields. The Agency will need to have a technical person available who is qualified to extract the data from the legacy system database into flat file formats provided by Versaterm. Once a sample flat file has been extracted, (1,000 to 10,000 records), Versaterm provides a conversion program that will scan theses files and compile a "content" distribution for those fields that have been selected or validated for valid values (not names, text, etc. but things like race, ethnicity, eye color, etc.) and thus defines all of the possible values found in each field.
- Convert and Load the new Data Base; the converted control tables, using the main conversion tool, will read the flat files and convert them to data base records and load them. When dealing with person names, parameters are set to determine what exactly determines a "match" to an existing name. Typically these parameters deal with age range, address match, Given names, diminutive name match, initials, etc. Similarly, for vehicles, while plate and state are dominant matching criteria, we also want to assure that at least make is the same.

- Test and validate the new RMS database: At this point, we require Agency personnel who are familiar with the old and the new systems to quality assure each record (essentially spot checking) to make sure that the automated conversion process worked as intended. They can also use the RMS Browse facility to select and display all cases with any given value in the field and check that against the old data base for equivalence. Inevitably, several discrepancies surface at this point and conversion tables need to be adjusted accordingly.
- Repeat the process: Typically after some time elapses and the Agency moves closer to train the trainer training, the conversion process is repeated and all of the data to be converted is extracted. During this process it is inevitable that other values will be found that are subsequently determined to be erroneous but others may have been missed in the sample process. Thus, new table entries will need to be made before converting these much larger flat files into the new RMS data base. Once the Quality Assurance process is complete the Agency will have a solid and representative data base that can be used for process re-engineering, and training of Agency trainers and "super users", etc. However, this is not the data base for end user training; that one is created by Versaterm to match the training documentation and hand-outs and can be reset to a constant starting condition for each course.
- "Go Live" Conversion: Occasionally the previously described full data base conversion can be retained. In that event, immediately prior to "go live", we can extract only the records that have been changed and added since the full conversion (assuming that the legacy data base supports such identification) and we have code to apply those records after conversion to the existing data base to bring it up to date. More often though, we find more anomalies in the converted data and wind up repeating the extract and conversion process with revised conversion tables a week or so before the cut-over (depends on the speed of the extracting system), load that information and then catch up the additional records and changes once the old systems have been stopped. A few weeks' worth of data can be converted and applied in a few minutes.

There are other options that could also be considered. The Agency, for example, could take the approach of converting information with meta-data providing the useful hooks to the new system. That is convert RMS reports in a PDF format but include meta-data such as case numbers, persons, vehicles, addresses and businesses that can be queried either externally or through an interface from the new system. The result is that it delivers information to the end user without the effort of mapping data elements. The only benefit of converting data elements is that the Agency intends to report on (aggregate) those individual data elements, which in our experience never occurs. The goal of any conversion is to retain the *information* collected over the years, not simply convert data elements.

The following sections will provide you with a detailed description of our Computer Aided Dispatch, Law Enforcement Records Management, Mobile applications and the analytical solutions that support all of these solutions.

The Versadex CAD:

The CAD system supports the following work positions:

- Call Taker

- Dispatcher

- Combined positions

-Supervisory

- Remote CAD workstation

Supports Integrated Mapping

AVL with unit recommendation

Configurable Unit Recommendation based on Type of Service and Call Type

Support these common functions:

-Dispatch using recommendation

-Backup Unit Dispatch

-Retrieve active calls

-Custom call time stamps

-Status Change updates

- Cancelling calls after dispatch

-Re-queuing active or closed calls

-Stacked or handled calls

- On-view events

- Busy Codes

- Creating follow-up calls

- Dispatch special services

- Traffic stop/initiate incident

-Transports

- Fire Move-up calculations

- Split Crew functionality

- Premise Hazards

The **Versadex Computer Aided Dispatch (vCAD)** system was built specifically to support operations found in communications centers serving individual agencies, multiple jurisdictions and multiple classes of service (Police, Fire, and EMS).

Versadex is reliable, stable, predictable and powerful. We serve customers who range in size from those who process less than 10,000 calls-for-service per year to those who process over 2.5 million calls-for-service each year; from single installations to multi-service consortiums serving multiple cities/counties. Through decades of user input from our various customers, Versadex has become a virtual repository of best practices and a feature-rich system that focuses on gaining efficiencies for call takers, dispatchers and responders.

The Versadex Computer Aided Dispatch (vCAD) system was first introduced in 1993 and each year it continues to expand and grow in accordance with new technology. Guided by our users' input and that of a highly experienced advisory board, we create new releases every twelve to eighteen months that contain many improvements and new features. Then, every five to seven years, the underlying technology of Versadex is upgraded as well. The result is that your system remains as technologically modern and functionally relevant as it was the day you installed it. All of this is at no additional charge – no upgrade fees or pricy enhancements. We call this process Evergreening and the result is that the system never becomes obsolete; it is one of the reasons we have retained customers for almost 30 years.

The Versadex CAD provides users with a .NET User Interface (UI) and an underlying technology that utilizes Web Services within a Services Oriented Architecture (SOA).

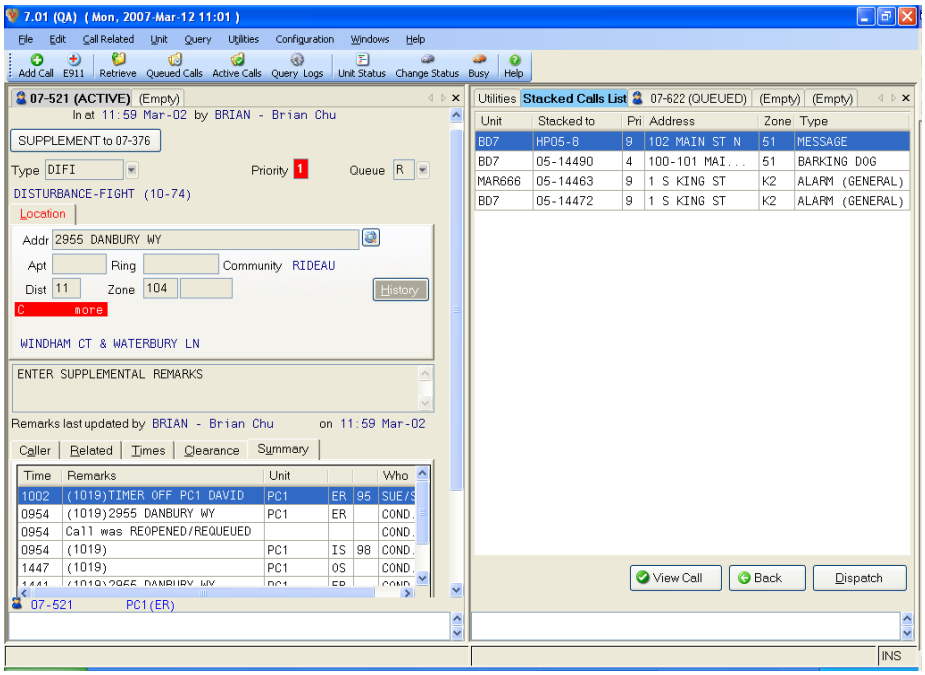
The result is an intuitive Windows UI with a disciplined and flexible CAD architecture. For example, information always appear where it is expected – not in pop-up windows that are tiled to the nth-degree; this minimizes stress and eliminates the possibility of covering critical information or an event with another window.

Versadex vCAD efficiently organizes information making it readily available to users. Folder tabs are used to categorize information and quick navigation keys can be used to flip through the folder tabs. This design provides users with a more centralized 'Working screen' in which they can access many types of information, create new calls for service, manage existing calls and resources - without having to open multiple windows.

In large part, the flexibility and ease of use of CAD is due to the use of these folder tabs. These tabs allow an operator to have a great deal of information available to them without needing multiple working screens open.

By creating two separate tab groups an operator can access critical information on either side of the screen. A common configuration is to place the **Call Screen** on the left side and the **Utilities** tab open on the right-hand side. However, an operator can retrieve any type of information (e.g., a call, the queued calls list, stacked calls etc.) on any 'Empty' tab which allows you to have different types of information open at the same time.

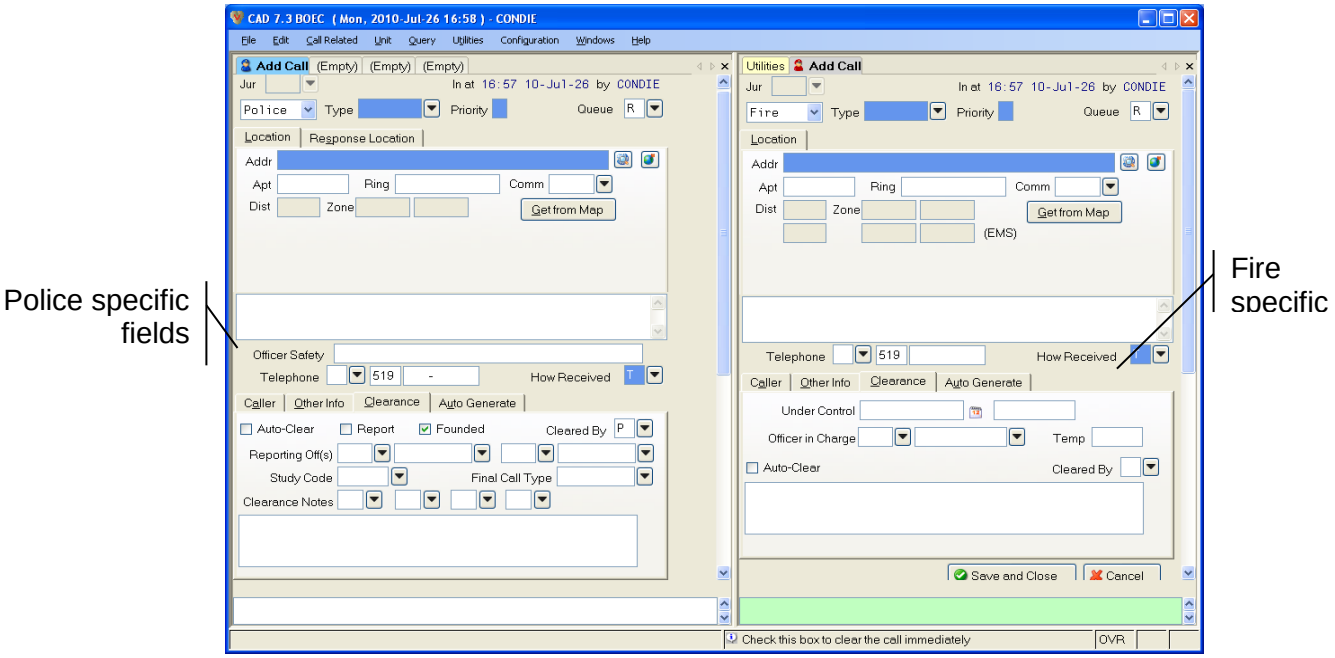
For example, in the screen below, a call is open on the left hand side while the stacked calls list is open on the right. Notice that the **Utilities** tab and another queued call are also active on the right side of the screen as well. It is important to note that the command line is always available on any empty or active tab.



The **Utilities** tab can also be configured to contain the following items:

- The Mail window which displays the Versadex Mail inbox.
- The Officer notes window to display all officer notes (memos)
- The scratch pad which call-takers and dispatchers can use to enter miscellaneous notes. The Monitor window where you can monitor a desk or unit.
- The integrated map which is a scaled down version of the existing map that dynamically updates to show the current call's location
- The message window which contains desk messages.

The Versadex CAD also supports different Command Screens for Police, Fire and EMS. The following illustrates the difference between a Police and Fire Call Creation Screens.



In order to maximize speed and efficiency Command lines are to be found in every folder tab so users can have 1, 10 or more command lines available. Users have a choice of how to operate the system – command line, function keys, hot keys and/or a mouse. User customization capabilities are provided so individual users can personalize the CAD but these features can also be disabled by the administrator (to provide conformity throughout).

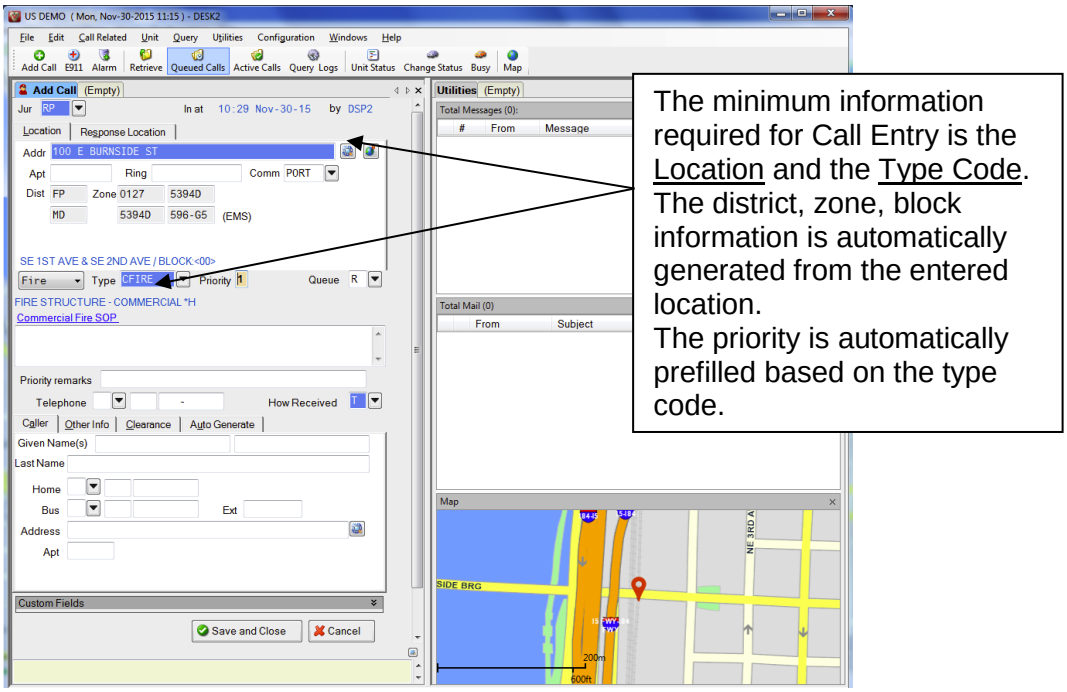
The Versadex CAD command line supports a site-configurable command set. To reduce training time, the mnemonic and parameter sequence for commands can be changed to match what the dispatchers are already familiar with. Where ever possible the existing commands with which a Call Takers and Dispatcher are already familiar can be used. A function is provided that will allow you to configure the CAD with the command set in-use today so users will be able to use the same command "language" they have become accustomed to. This functionality will help make the transition to a new CAD system easier by minimizing the necessity to re-learn a new command structure.

Call Creation

The Versadex CAD provides a variety of standard functions to initiate Calls for Service:

- E-911 Call including wireless E911 calls
- Standard telephone call
- Front Desk/District workstation
- Directly from Map Display
- Officer initiated activity from the MWS

The following screen illustrates the call-taking screen:

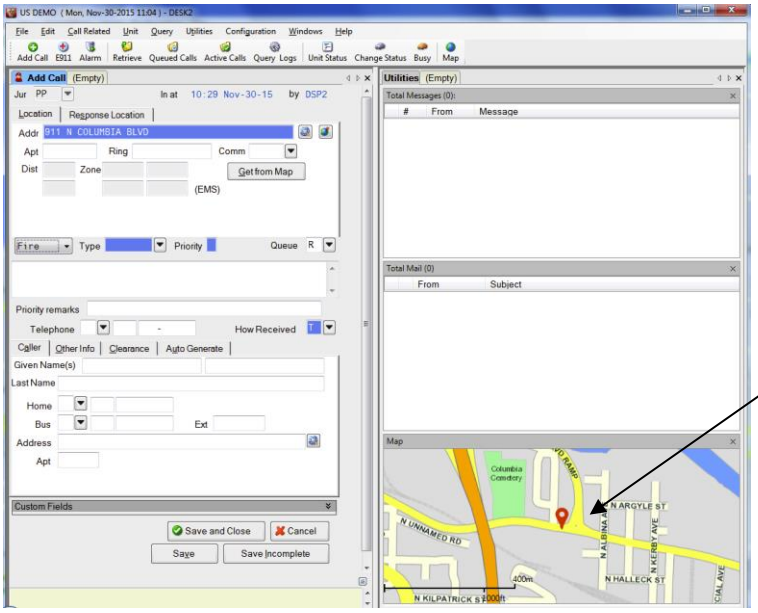


The Versadex CAD has a number of visual features and a powerful address validation utility that are designed to assist the call taker in determining the location as quickly as possible.

Once the operator enters the address (either manually or prefilled from the 911 ALI), the system will automatically verify the address/location against the Versadex GIS files. If a single or exact match is found, the address is immediately verified and geocoded. If the system is unable to verify the location or if there is more than one possible match, the user is presented with a list of choices. The user can select a match from the list, re-enter the location, or override the address.

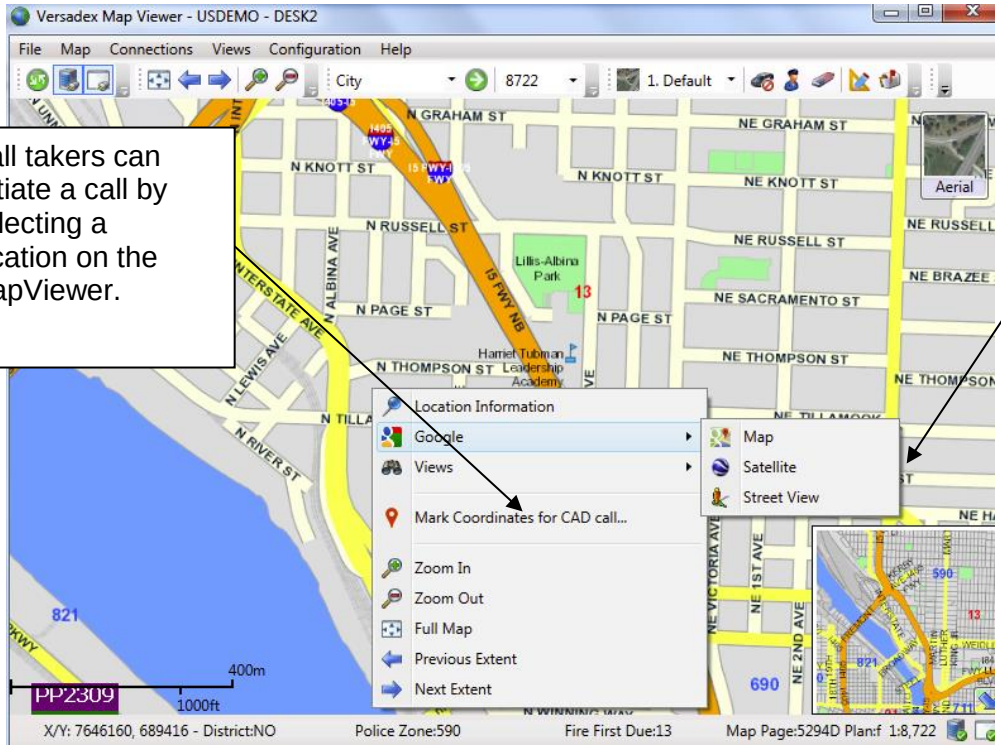
There are various ways in which the system can be configured to validate locations. For example, the Versadex CAD can be configured to either use a Soundex ('sound alike') or a name matching algorithm to validate street and intersection data. The system can also be configured to use a Soundex based on the number of characters entered in the location field.

As the call taker validates an address, the location is automatically displayed on the integrated map at a pre-defined zoom level providing the call taker with visual indicator to confirm the location that was selected.



The integrated map automatically displays the **location as the call taker validates an address.**

As an alternative to entering a verifiable address, Versadex supports a feature where a user can select a location using the MapViewer (as illustrated in the following screen shot). This is especially helpful when the caller does not know the exact address of the incident but can describe it relative to a nearby landmark.

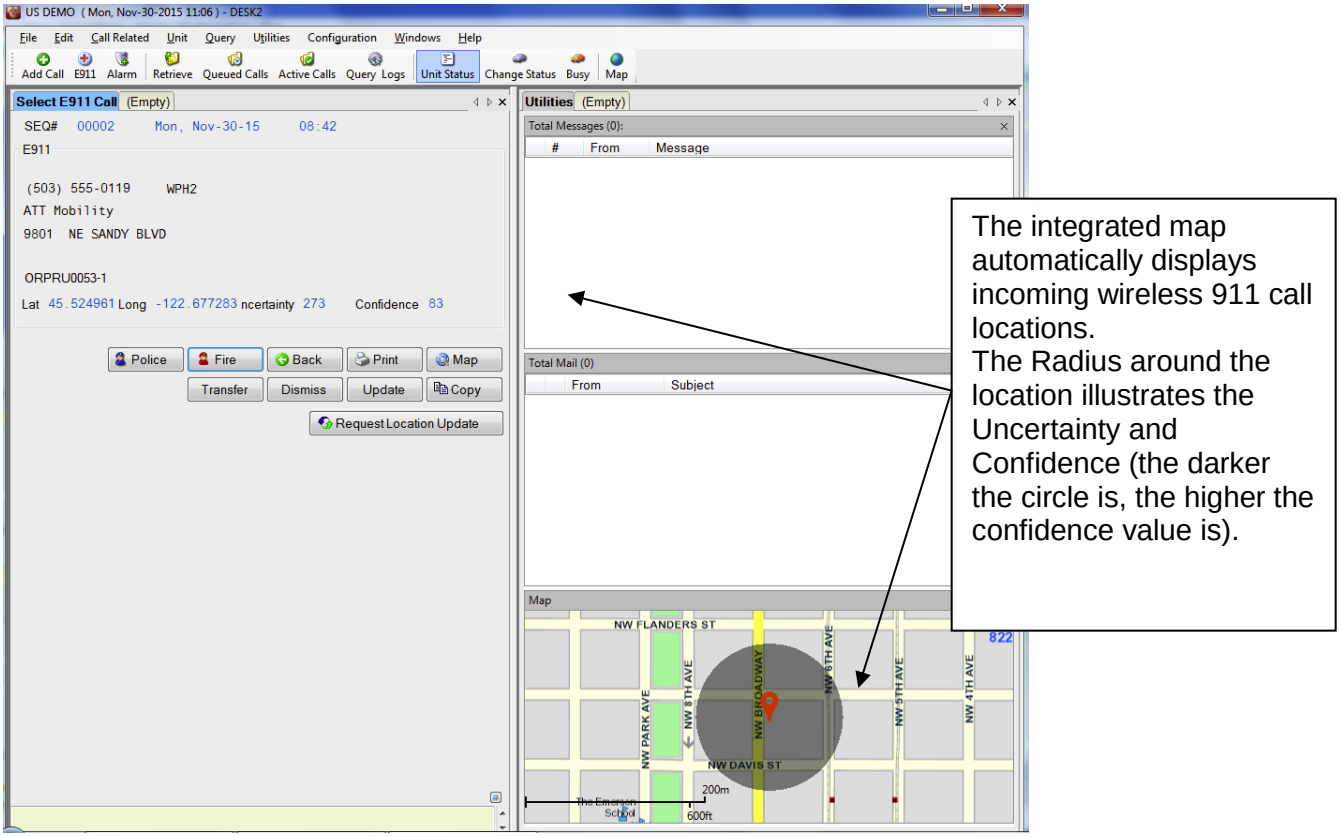


Call takers can initiate a call by selecting a location on the MapViewer.

Google maps and Street View are available to assist the call taker

The user is then presented with a list of closest locations ordered by distance.

A similar process exists for mobile 911 calls ('Phase 2' wireless). In this case, the call taker's map is automatically re-focused to display the location of the wireless call, even before the call taker has validated the address. The Map display includes a radius to illustrate the "uncertainty" and "confidence" of the wireless call.



The call taker then has the option of viewing the closest locations (ordered by distance). The call taker can either select an address/intersection from the list of closest locations to be used as the call location or can manually enter another location. Once the call is added, both locations (the Phase 2 wireless location and the actual incident location) are available to the dispatcher and can be displayed on the map.

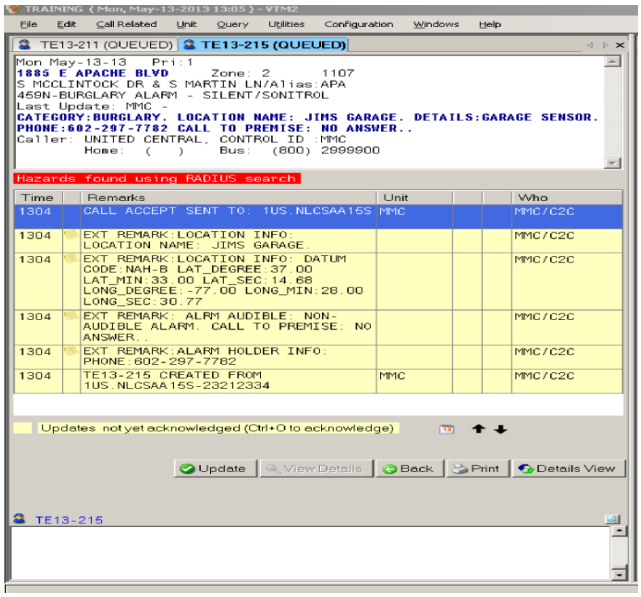
As another alternative to entering a verifiable address, Versadex support a special feature where a user can enter a location using a coordinate system.

This is especially helpful to record the exact location where the incident occurred. For example, when an incident occurs in a park, the verifiable street address is typically the park entrance. With this feature, Versadex can record the pin-point location while the user can provide a descriptive location (in the location field).

The Versadex CAD also supports two additional external call creation methods. These include:

- **APCO ASAP Electronic Alarm Event Delivery**- The Versadex CAD was the third system nationally to provide an interface APCO ASAP protocols to provide the following functionality:
    - Automatically creates an Alarm Call when a notification of an alarm event is received from an alarm monitoring company.
    - Provides the ability to receive additional information for an alarm call from the alarm monitoring company (e.g., cancellation requests or updates concerning key-holder information).
    - Notifies the alarm monitoring company when a unit has been dispatched.
    - Notifies the alarm monitoring company when the first unit arrives on scene.
    - Notifies the alarm monitoring company when the call has been closed.
    - Provides the ability for the dispatchers to send or request additional information from the alarm company.

  Once an alarm call is received from ASAP it is immediately directed to the appropriate Dispatchers Status Screen and a message is sent notifying receipt of the alarm. The Dispatch command screen shown below is in its Dynamic Display format. Please note the blue text in the top of the screen- that is information sent through ASAP. The blue line in the yellow section of the screen confirms the acceptance of the alarm and notes that a confirmation has been returned to the alarm company.



The dynamic display illustrated above is available for all CFS and provides a real-time chronological listing of every single transaction that has happened on a specific event from the newest activity to the initial call creation.

The ASAP alarm messages would be routed through KCIC and then via NLETS. Please note that KCIC must first be capable of supporting the new ASAP message formats (ALQ-Alarm Company date sent to PSAP; ALR-Response from PSAPS to alarm company) before the interface can be placed in operation.

- **CAD-to-CAD data sharing for both Fire and Police calls**. The Versadex CAD-to-CAD data sharing interface allows CAD users to exchange call and information with external agencies that use a separate CAD system – regardless of the CAD vendor. For example, a fire can notify and request mutual aid assistance from a neighboring fire or even request the assistance from other services for combined incidents such as a serious car accident. Call information can be exchanged automatically by call type with optional filtering by incident location (e.g. border areas) or the dispatcher can manually transfer call information to another.

Additionally, the interface allows unit information to be exchanged between CAD systems making the availability and AVL locations of units known to other agencies. This is particularly useful between agencies that have mutual aid agreements as it provides the ability for the other agencies to quickly determine the availability of other units. Through the interface, CAD users have the ability to send and receive unit assistance requests from external agencies. The unit assistance requests can happen automatically by configuring the external units into the dispatch run card recommendations. As your dispatcher dispatches an external unit to their call, the request is automatically sent to the external and if accepted, the dispatcher is advised and can take control of the unit.

The automated CAD-to-CAD interface reduces call processing and response times as it improves the communications between dispatch centers and eliminates the need for telephone calls.

Versaterm has experience interfacing CAD-to-CAD with various other CAD vendors either directly or through an Enterprise Service BUS (ESB). Our standard data exchange consists of a NIEM compliant XML transfer; however, we can also transform into another vendor's format if required.

Once the minimum required information (Address and Type Code) is entered, the call taker can save the call and it will automatically be routed ('pended') to the appropriate dispatcher based on location. The call taker can continue to add/supplement additional details to the call after the call has been pended and/or dispatched. Both the call taker and the dispatcher can view and update the call and/or update/control units at the same time. The dispatcher is made aware of the updates from other operators.

Once the dispatcher has control of the Call for Service they have a myriad of actions that they can initiate to effectively control and manage the agencies response.

Resource Recommendation

Once a Call is created and sent to the Dispatcher the CAD is capable of generating automated response recommendations—that is, a computer-generated list of suggested police, fire and EMS units ('apparatus') and special services to dispatch to a call. The recommended apparatus are prefilled in the Dispatch window available from the Call screen and can all be dispatched with a single keystroke.

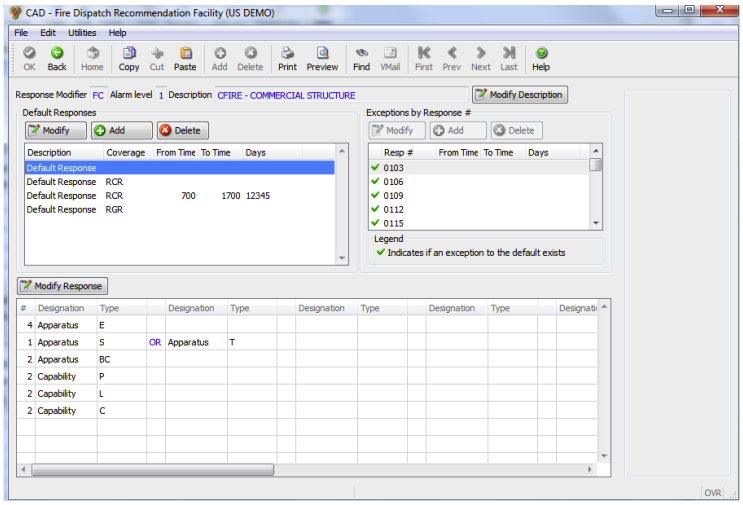
The determination of who to send can be quite complex but primarily the CAD uses the following criteria for unit recommendation:

- call type
- coverage area and zones
- units/Apparatus types required
- Capabilities dispatch (Unit/Apparatus or individual with specific skills or equipment)
- AVL Recommendation and Routing.

For Fire resource recommendation the following additional criteria is also supported:

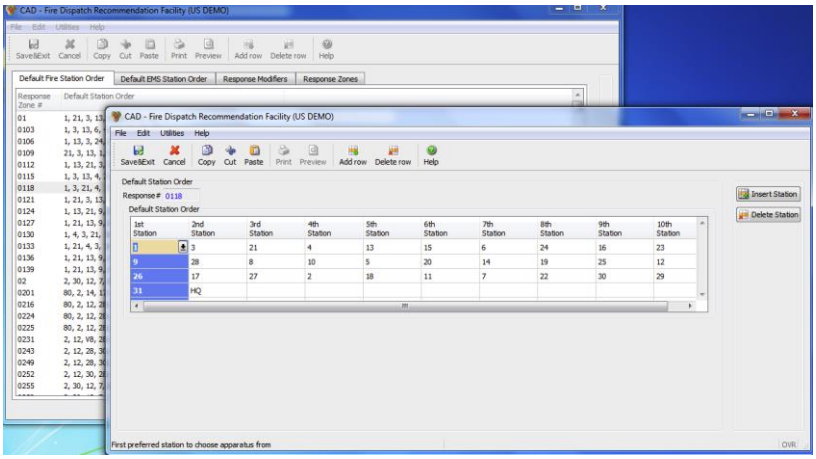
- For each type of incident, the system can be configured to recommend any combination of unit type and capability (personnel skill and/or vehicle equipment).
- A default recommendation can be configured for each type code, with exceptions by area and/or specific locations. For example, an extra engine may be added for certain incidents occurring on the freeway or additional units added for fire incidents at a high-rise.
- Additionally, recommendations can be altered by time-of-day/day-of-week. For example, it is possible to configure an alternate response for incidents occurring at a mall or a school during mall/school hours. It is also possible to indicate the order in which the system should search for units. For example, recommend the Squad if it is available, if not recommend the Truck.

The following screen shot illustrates a sample response for a Commercial Fire (4 Engines, 1 Squad or Truck, 2 Battalion Chiefs, 2 pumper capabilities, and 2 ladder capabilities).



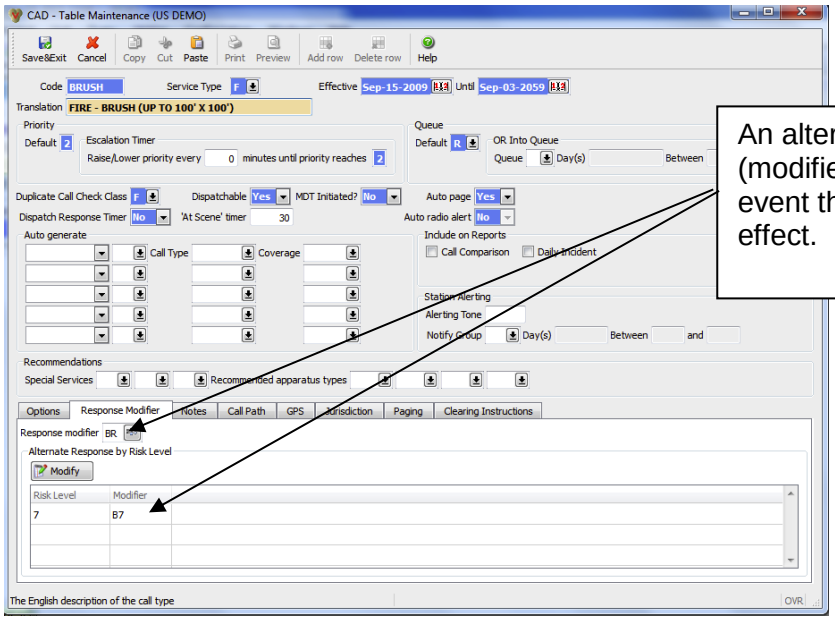
The system allows for up to 10 capabilities (unit equipment and/or personnel skill) to be assigned to each unit along with up to 10 secondary unit types. Dispatchers can easily modify the characteristics of a unit 'on the fly' as operational conditions change. For example, if a paramedic is no longer available, dispatch can change the unit capabilities from ALS to BLS.

Default station orders are defined for each Response Zone to indicate the order in which the system searches for the required units. The following screen shot illustrates a sample station order.



In addition to configuring the default station order for each Response Zone, Versadex supports the ability override the default station order based on specific unit type/capability. For example, in order to recommend an engine from the opposite direction on freeways, an exception would be made forcing them to be recommended from an alternate order.

Versadex has the capability to define Risk Levels ("degraded modes") to modify response plans by type code either -wide or for a specific geographical area. The following screen shot illustrates the configuration for a brush fire type code having an alternate Response Plan when a Risk Level of 7 is in effect. Risk level descriptions are determined by the agency.



The Response Plan for B7 would include an additional engine (either -wide or for a specific geographical areas).

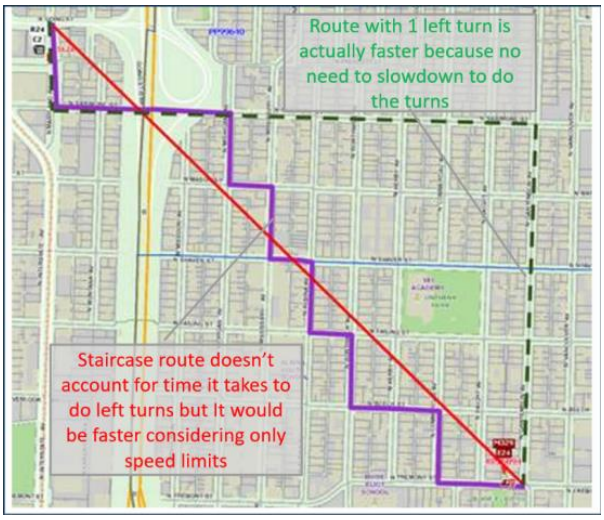
Users with the appropriate security levels can easily enable and disable Risk Levels from within the Versadex CAD application.

Additional examples from other departments include:

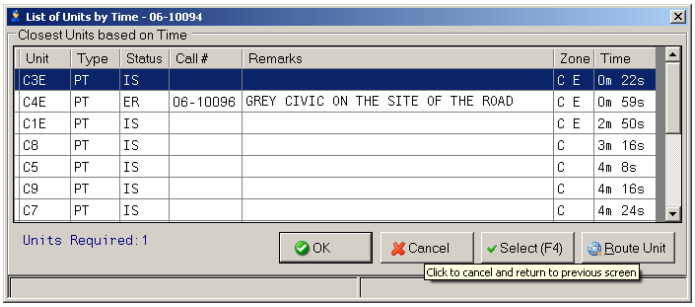
- Disaster such as an earthquake where only the most critical EMS calls would recommend units whereas other calls would be re-queued and triaged by a response chief.
- Significant weather events such as a hurricane or an ice storm where fire calls that normally receive 2 or 3 apparatus would only get one recommended and the responding units can request additional resources on arrival based on findings. For example, a Smoke Structure call normally receives an Engine and a Truck however when this risk level is in effect, they only receive an Engine.

The Versadex Automatic Vehicle Routing and Recommendation (AVRR) module can also be used to provide AVL based dispatch recommendations for police, fire and EMS units. AVRR determines the time (and distance) required by a Unit to get from its current location to the call for service by calculating the route based on the underlying street network.

When calculating a route the AVRR takes into consideration speed limits, obstructions, and road restriction such as one-way streets, medians and road closures. Recently, even the cost related to left vs right turns can be taken into consideration (see image to the right).

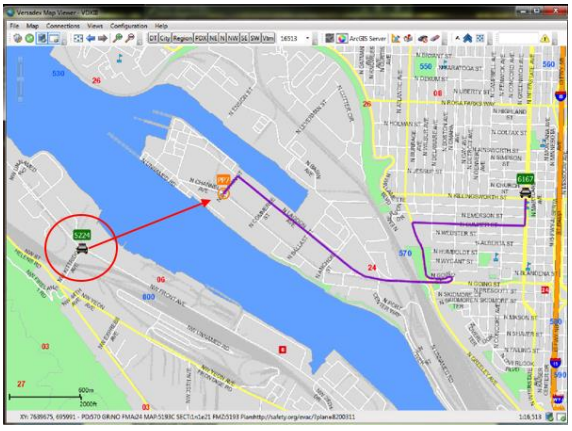


When executing the dispatch command to recommend units based on AVL locations the following screen will display showing the dispatcher recommend resources based on "time".



The dispatcher can also display the recommend route for the selected unit and also generate detailed directions.

In the screen shot to the right, we have illustrated how CAD will find the closest unit by travel time. The unit circled in red is closer to the incident however they cannot drive across the water to reach it. The unit with the purple routing line is in fact the closest unit and will be recommended.



The Versadex AVRR also provides a method in which the can apply speed factors to one or more street segments. The speed factor can be used, for example, to block a street (reduce speed to 0) or reduce the speed for a factor (e.g. 50%) for rush hour, speed bumps, etc. These factors can be configured for specific date/time ranges.

Our latest CAD release also provides Fire Departments the ability to **assign Time and Distance Penalties** as part of the AVL Unit recommendation**.** These are penalties that add time or distance to the existing time or distance a Unit/Apparatus is from a call. By doing so an apparatus that is actually farther away from a call may be recommended because an apparatus that is close has been given these penalties.

Time and distance penalties can be assigned to an apparatus itself, all apparatus at a station, status codes, apparatus types, and capabilities. This can have several implications such as:

- Penalizing an apparatus type or capability that drives slower. For example, a ladder truck is difficult to maneuver out of a station and is penalized to account for the extra time it takes to get enroute to the call.
- Penalizing a status code that takes longer. For example, an apparatus that is “at station” could be penalized to account for the time it takes fire personnel to prepare and leave the station while an apparatus that is ‘returning to station’ doesn’t require the extra time because it is already on the road.
- Penalizing apparatus from stations that are not dispatched automatically but are dispatched only in cases in which extra help is required (e.g. mutual aid). For example when a station is asked to provide mutual aid support to a neighboring fire jurisdiction, you can add a penalty to those apparatus to account for the time it takes to contact the mutual aid station and request assistance.
- Penalizing apparatus from jurisdictions that have volunteer fire stations. In order to account for the time it takes for volunteer firefighters to arrive at the station before dispatch, you can assign a penalty to the station.

Additionally, detailed turn-by-turn directions can be generated for viewing by the dispatcher. This same functionality is also available in the Versadex Mobile solution that will be discussed later in this document.

The Versadex CAD can also be configured to automatically recommend special services. Special services are public or private services that may need to be dispatched to police/fire/ems calls in addition to regular response units—for example, tow truck services, public works, animal control, private ambulance services, coroner, etc. Typically these are agencies or services for which the does not physically dispatch or is not an included in the CAD system.

Two types of special services can be considered:

- rotational services (Tow Company’s; Private Ambulance)
- non-rotational services (Public Services/Public Works)

Versadex Mobile Workstation Environment

Versadex MWS functionality includes:

- **Separate Police and Fire applications**
- **User Definable Screen layouts**
- **Touch Screen enabled for one hand operation**
- **Single sign-in to access CAD, RMS, and remote system interfaces**
- **Integrated Mapping with AVL**
- **Dispatch related transactions, dispatch receipt, status updates, Busy time updates, on-view and Traffic stops**
- **Access to other unit's status and AVL location display of all units on a single call.**
- **Previous location history for all CAD and RMS events through a hyperlink**
- **Premise hazards at or near dispatched location**
- **Simultaneous Information checks or requests on names, addresses, vehicles, property, etc. against local RMS, Agency, Regional, Stat/national data bases**
- **Mugshot/DL Photo display**
- **Messaging transactions using short conversational messages to dispatchers, other units, supervisors, and even key locations within the department**

Versaterm has been an industry leader in providing integrated Mobile Workstation solution for many years. Versaterm has led the way in providing desktop-like functionality for officers in their vehicles.

We first introduced the **Versadex Workstation** solution for dispatch support in the late 1980's. We were one of the first to provide an innovative wireless law enforcement field reporting module called **Mobile Report Entry (vMRE)** in 1994. Back in those early days, Versaterm was not only providing seamless integration but we were doing it over the very limited wireless network infrastructures of those years.

Since that time, hardware, networks and user-needs have evolved. In 2013 we released our **vMobile App** which extends access to the Versadex RMS and CAD) system on a wide range of mobile devices.

Versaterm's Mobile Workstation (vMDT) is the extension of the power of the Versadex CAD directly into the field. There are also separate Fire/EMS and Police MWS applications due to the differences in functionality required by type.

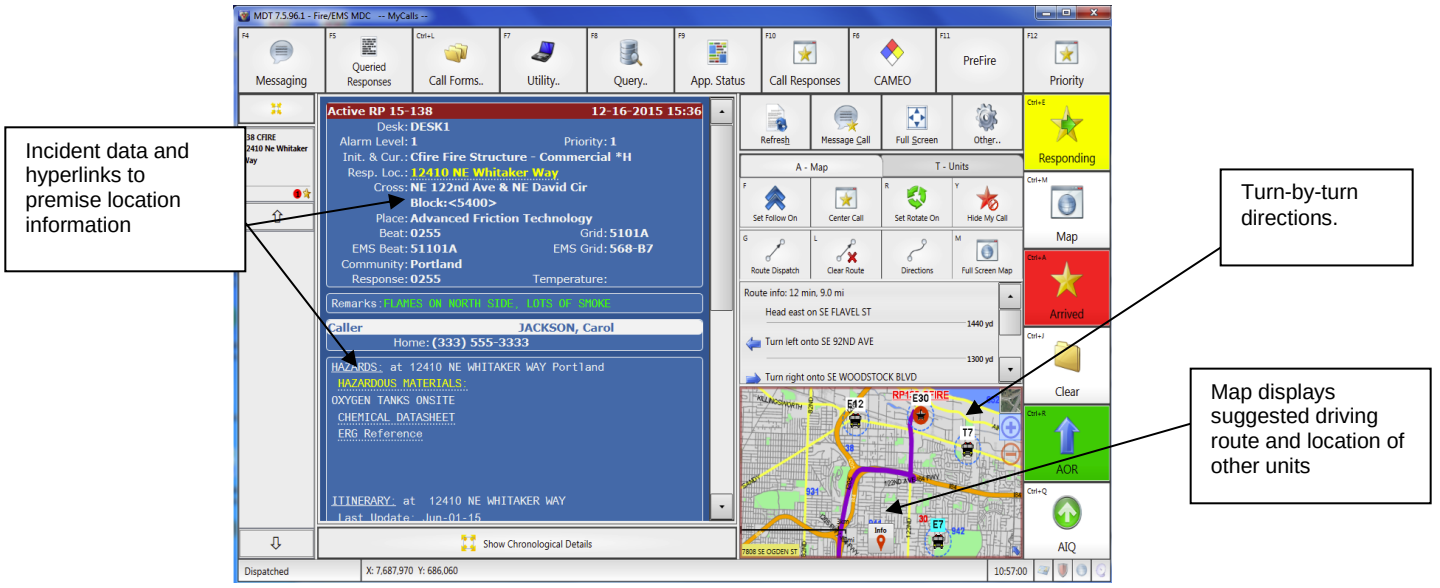
The applications are designed for the mobile environment; it is intuitive and easy to use. It requires just one hand to operate – no mouse. It supports touch screens with buttons large enough for a gloved finger in a fast moving vehicle.

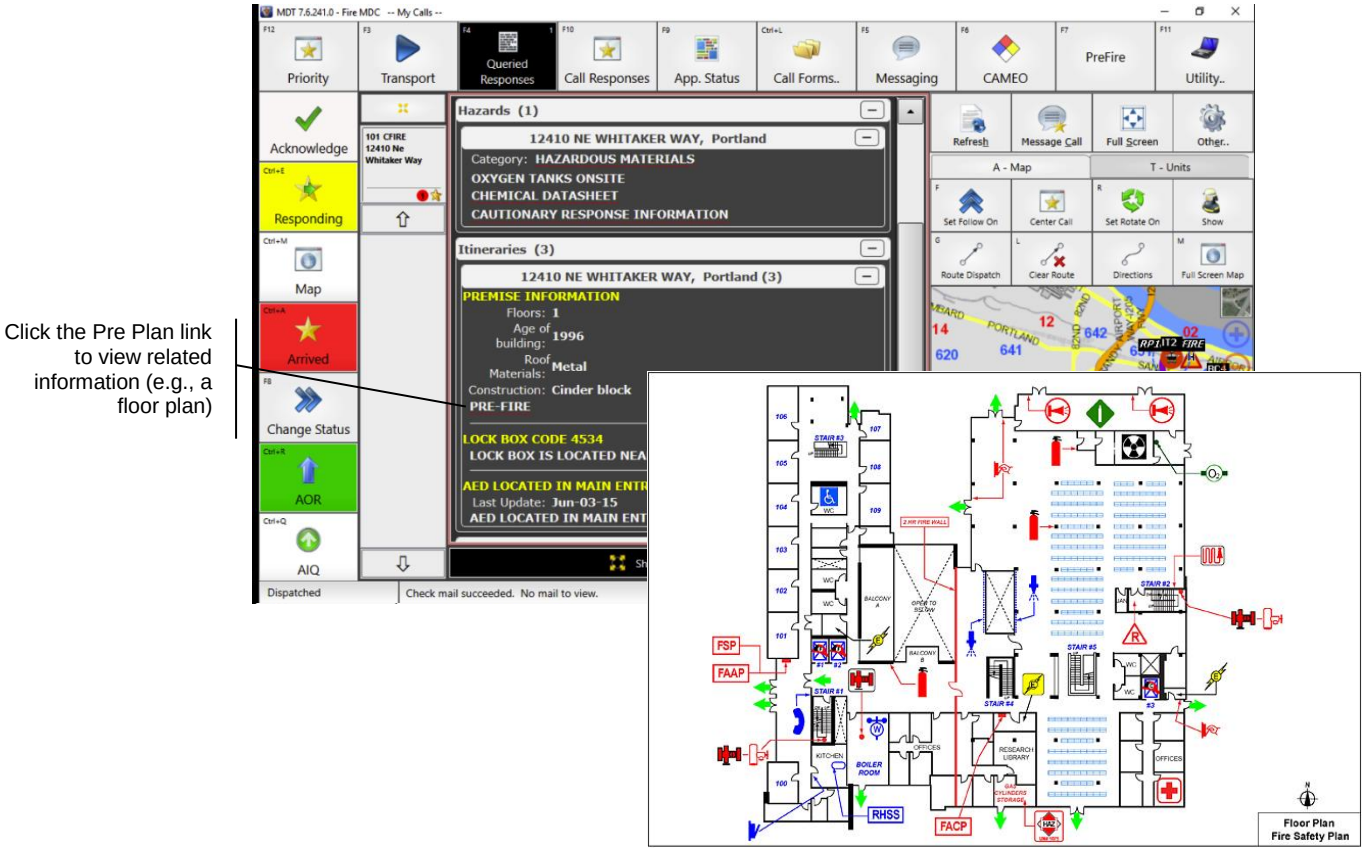
The **Versadex vMDT** is intended to be installed on a Windows device running the Windows 7 (and above) operating system and enables the responders to perform the majority of system inquiries and status updates right from their vehicles. This is by far the most popular choice for Versadex mobile deployments as the application is designed for the vehicle supporting large buttons for touchscreen use with daytime and nighttime settings. The MWS includes a Designer application that allows your administrator to fully configure the screen layouts with the flexibility of creating separate layouts/builds by user/unit function (Police vs EMS vs Fire).

The Dispatch View provides the responder with basic information about the incident along with hyperlinks to premise related information (preplan, hazardous materials, lockbox codes, etc.), turn-by-turn directions, an interactive map

displaying the suggested driving route and the location of the other vehicles and a chronological view with real time incident and unit updates.

The following screen shot illustrates the Dispatch View:

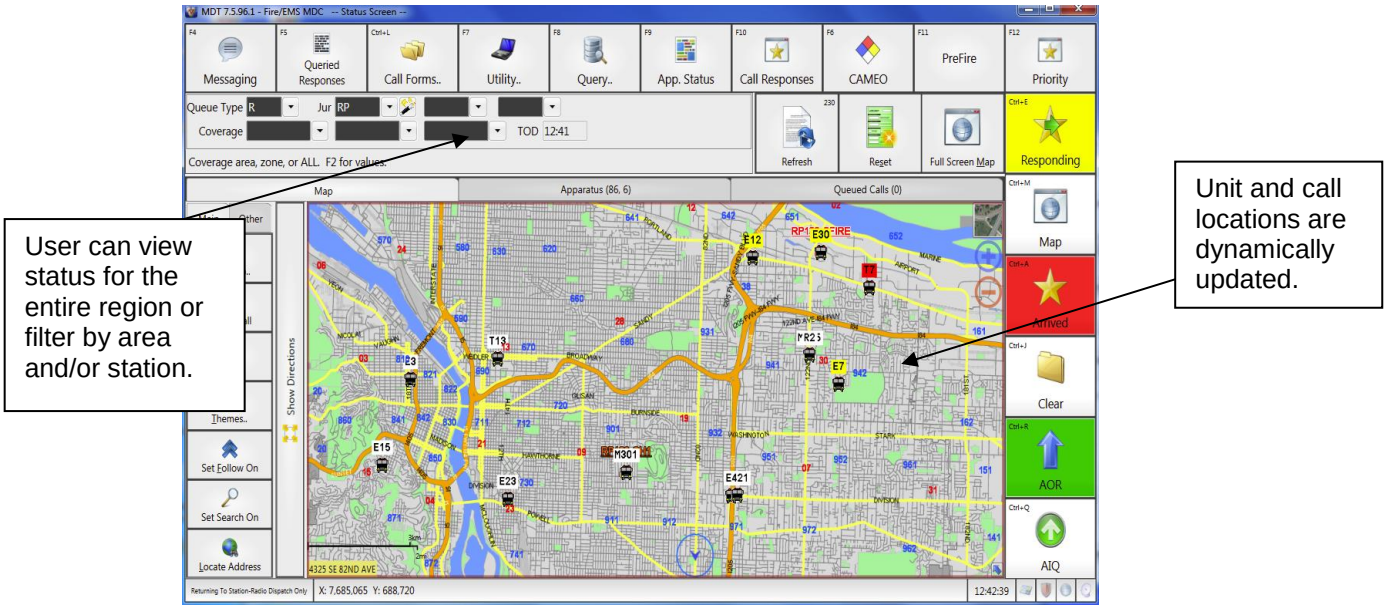




The Status Screen View increases situational awareness to the field units by providing them with a dynamic display of active AVL unit and current call information. The field units can view unit status/location and call details for the entire region or filtered by area, beat, district, station(s) or battalion. The user can display the requested information in a synopsis format or plotted on the map.

The Versadex MWS also supports Automatic Vehicle Location (AVL) where the map will dynamically display the current location of your Units/Apparatus as well as the updated location of other responding Unit(s) assigned to the same call.

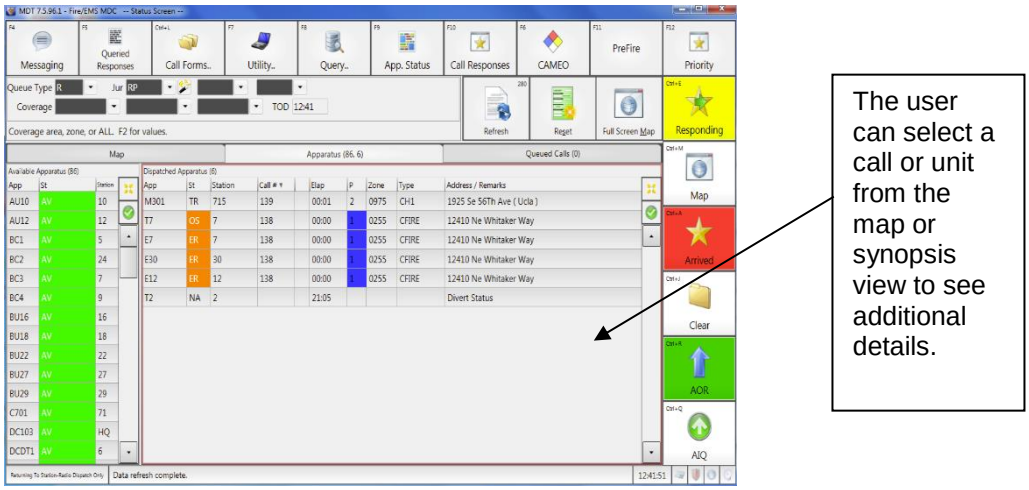
Officers can view the dynamic update of unit positions on the map-based Status Screen.



In addition, both Police and Fire/EMS MWS's can also display the traditional Status screen view which provides a dynamically updated synopsis of ongoing operations. This Status screen is identical to that used in CAD. It allows users to track and interact with Available apparatus/units, Queued Calls, and Dispatched apparatus/units. The Status screen view is comprised of three separate windows:

- Available apparatus
- Queued calls
- Dispatched apparatus

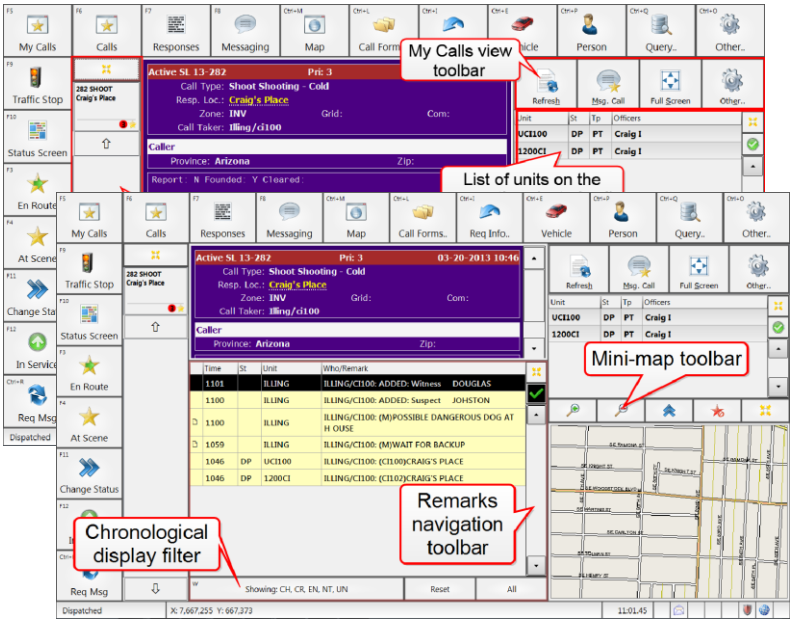
In order to support combined operations a Cross-service Status Screen is also available so that the status of all Police, Fire and EMS units/events can be monitored.



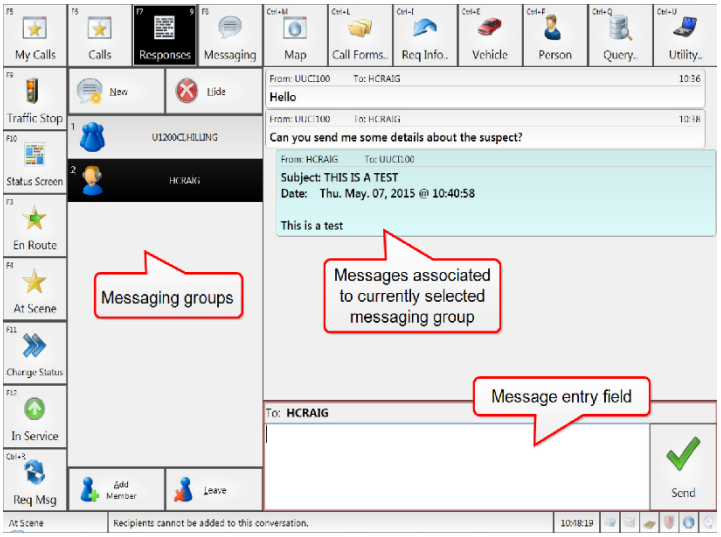
The My Calls View features its own toolbar with menu options for reading and managing dispatch information.

My Calls view can appear in a regular view or in a chronological display. When viewing chronologically, information is automatically updated. This chronological view is exactly the same view that is available to the dispatcher.

On the My Call Screen they can view a list of all units assigned to the specific call or see them dynamically updated on the integrated map. The officer selects the specific tab identified below to determine how they would like to view the assigned units.

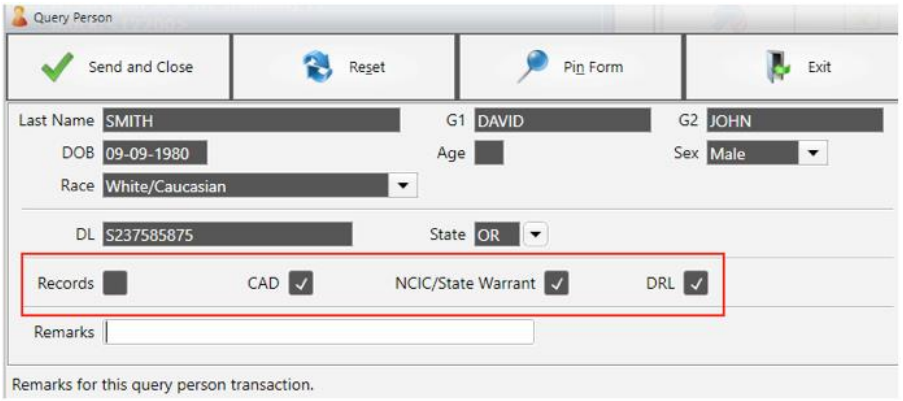


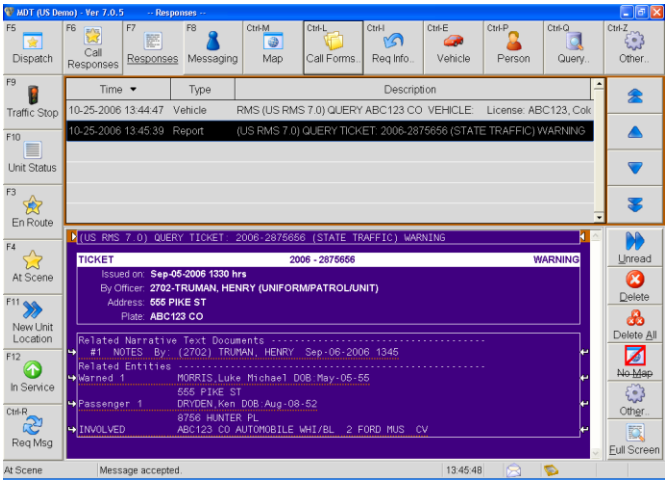
The MWS application also includes a messaging facility that allows officers to communicate with CAD desks and other units/apparatus equipped with the Versadex MWS application. Agencies with cross-service integration enabled can message MWSs of others services. Messaging functions as normal, the user only needs to enter the Unit/Apparatus ID of the cross-service unit that they want to begin messaging.



Throughout the incident or at any other time, the Police MWS can also provide field personnel with unparalleled access to information. The Police MWS is designed to 'enter once and query many'. This enables the user to enter a name for example and then simply check off the database sources they wish to hit with the query. That means through a single form, they can get RMS, State, NCIC or any other data source for which an integrated transaction is provided (see example screen shot below). To make it even simpler (and safer), the Versadex MWS support driver's license scanning right in the application so the officers can simply swipe the cards and keep their attention focused on their contacts.

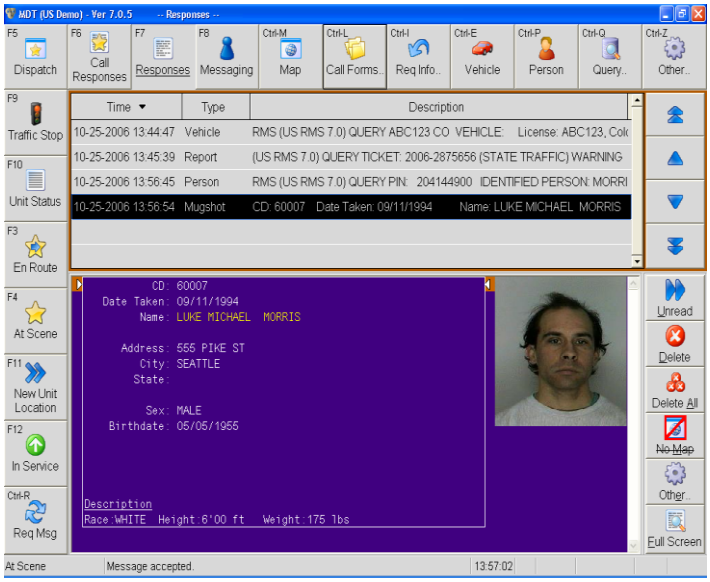
Even though the officer sends a single query transaction, responses from all of these source databases are treated separately. That means if one system is slow to respond or temporarily unavailable, it will not delay the other responses from reaching the officer. The MWS will also allow the officer to continue working in other areas while queries are being processed.





All responses will be individually returned directly to the officer's workstation in an easy to read window especially designed to enable the officer to quickly scan the response and move on. Many responses will themselves include drill-down or hyperlinks that facilitate further data-mining.

For example, if you query a plate, and you have the Versadex RMS it will return all incidents (cases, tickets, field interviews) in which the vehicle or person was involved. . A hyperlink list with all the events will appear so the officer can retrieve details on vehicle occupants, warnings/charges issued and any recorded notes. If a Mugshot or Driver's License Photo is available, the Officers will also be able to view the Photo on their MWS display.



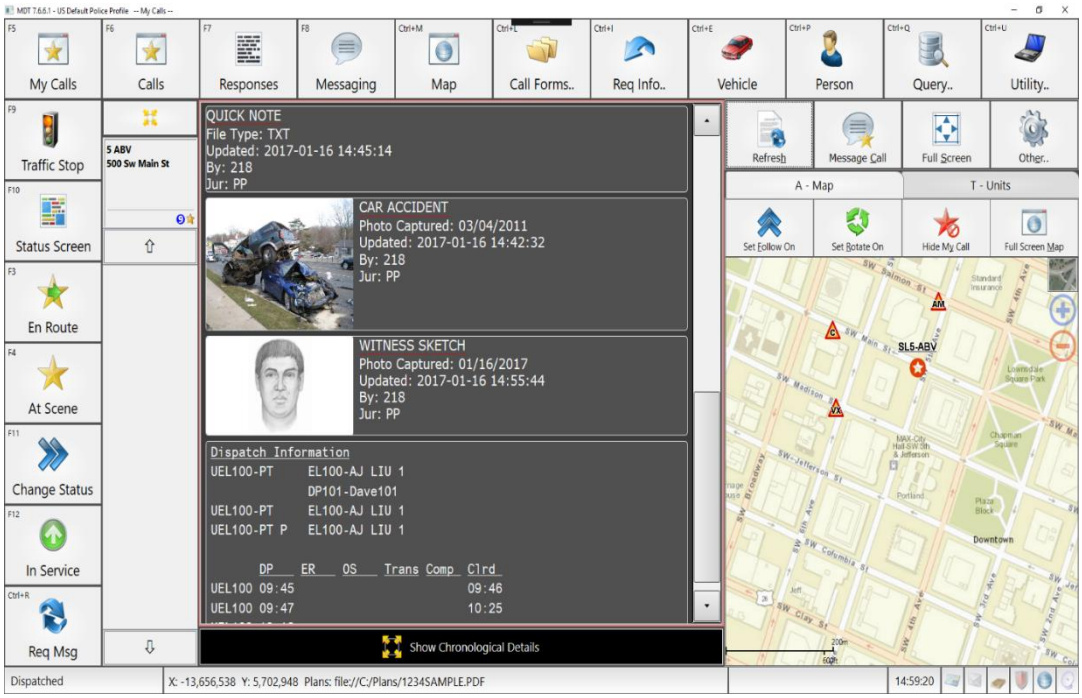
Other integrated MWS features include:

- Self-initiated calls for service (i.e. traffic stop)
- BOLO bulletins
- Duty Roster
- Notepad Info
- Officer Schedules
- Case Management Workload Queue

Recent enhancements to Versadex MWS are detailed below:

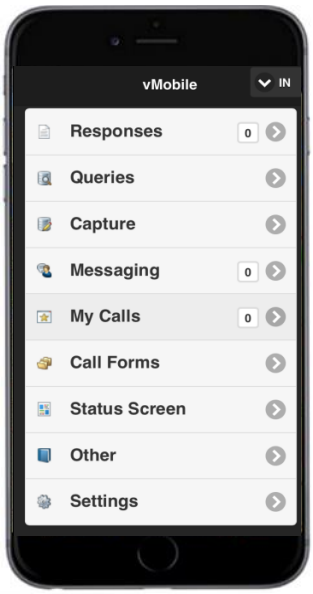
Users can now add photos, videos, documents, and more to Calls.

- Attachments can be added from the MDW
  - Max file size of 5MB if using RF Server, for web sockets the max file size is configurable.
- MDT can view attachments to calls
  - When retrieving a call or dispatch attachments will be automatically send down
  - Images displayed as thumbnail with link to full image file

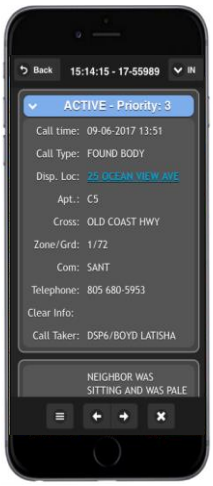


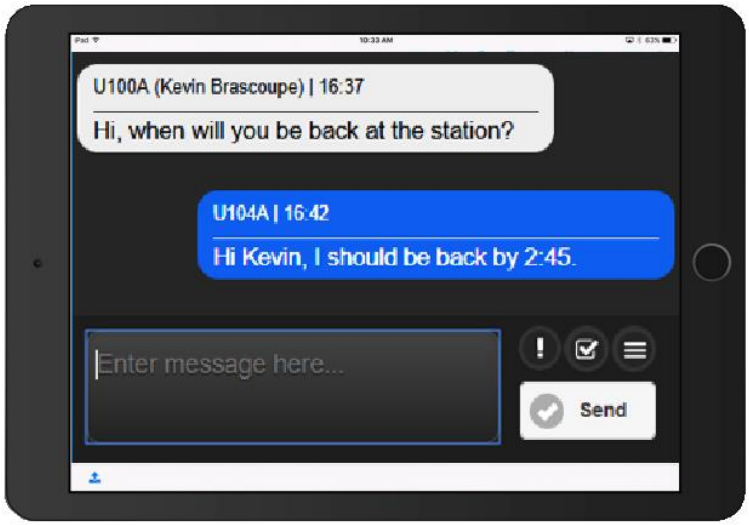
The **Versadex vMobile** is meant for handheld use, on devices such as smartphones or tablets. Currently, it is certified for Android and IOS and operating systems, while being device agnostic.

The Versadex vMobile enables field units to increase situational awareness with the ability to monitor current operations directly from their handheld device.

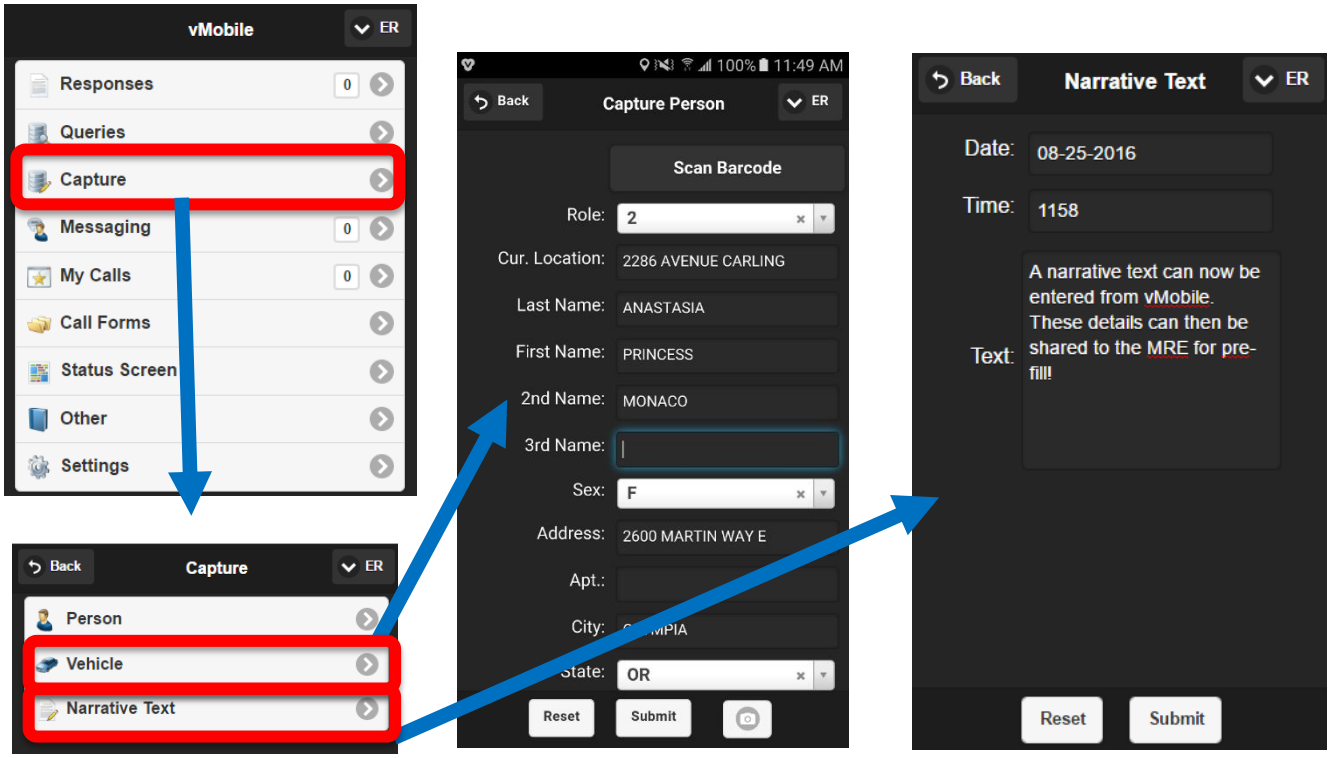


vMobile also allows responders to stay connected while they are away from their vehicle. Using their handheld device, they can receive dispatches, view premise information, update their unit status and message other units or dispatch. The following screen shots illustrate a sample dispatch viewed on the responder's handheld device (left) and a sample of the messaging capability viewed on a larger tablet device. Notice, that due to the solutions responsive design, the UI automatically adjusts to the size and position of the mobile device.

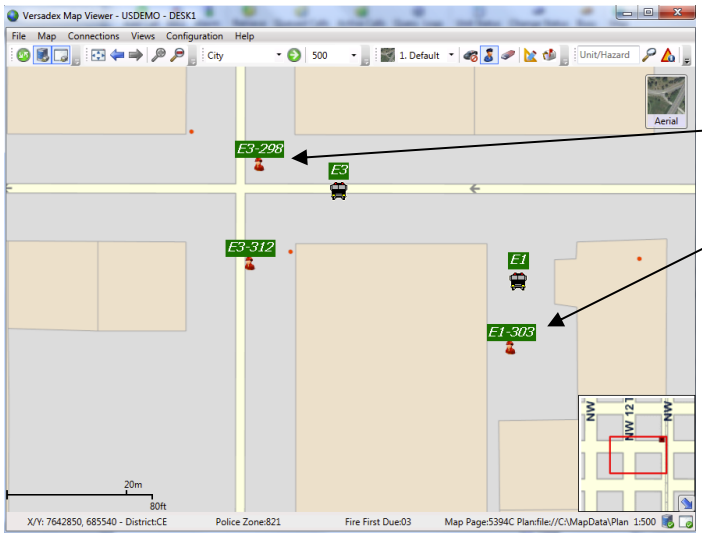




The **vMobile Capture** feature is quickly becoming one of the most beneficial tools to officers in the field. The functionality allows officers to quickly capture key information from an Incident/Event for later use on Reports and/or Investigations. With this new capability, Officers can effectively and efficiently collect Person, Vehicle and Narrative information directly about the scene from anywhere. The images below highlight this key functionality.



Additionally, Versadex vMobile provides an extra level of responder safety, as it is AVL enabled which allows operations to locate and track individuals. The following screen shot illustrates responder locations on the dispatcher's MapViewer.

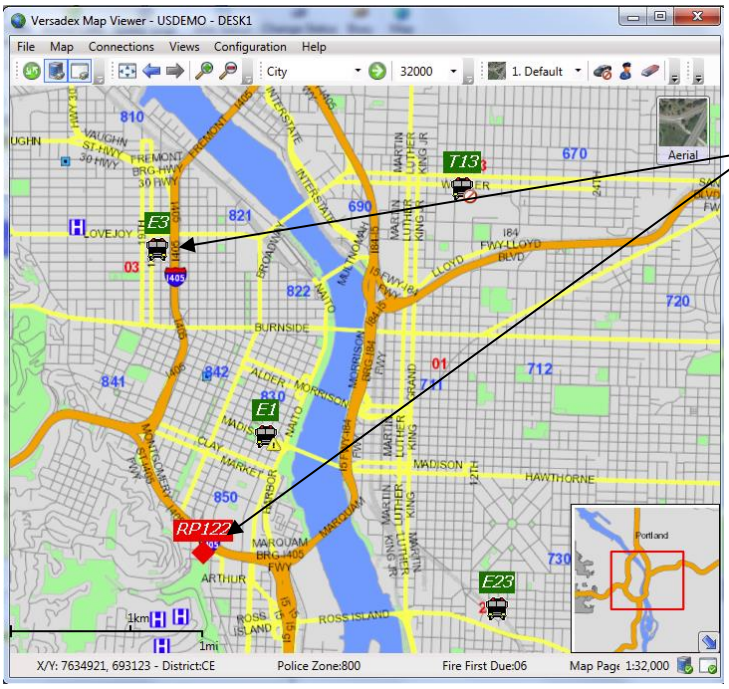


vMobile extends the ability to track Geo locations of individuals.

vMobile can also be fully integrated with the Versadex RMS solution providing query capabilities similar to those provided in the MWS environment. The following display show the results of a query into the RMS and the ability display an associated mugshot.

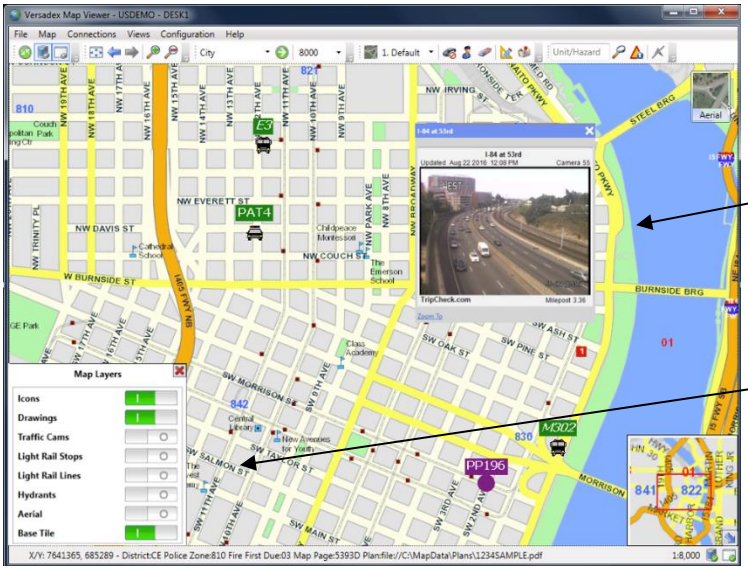
GIS and CAD Mapping

As you have already seen the Versadex CAD/Mobile supports fully integrated CAD/Mobile functionality. The Versadex system is based upon ESRI toolsets and provides support for the latest ArcGIS Runtime, thereby providing advanced, built-in mapping and AVL capabilities. ESRI's ArcMap tools are used to create map packages providing the powerful visuals within the Versadex MapViewer. The MapViewer assists the operators in validating locations, monitoring and locating vehicles and determining how to best deploy units based on the incident type and location. In addition to the mapping functionality already displayed the following screen shots illustrate some of the more commonly used mapping features.



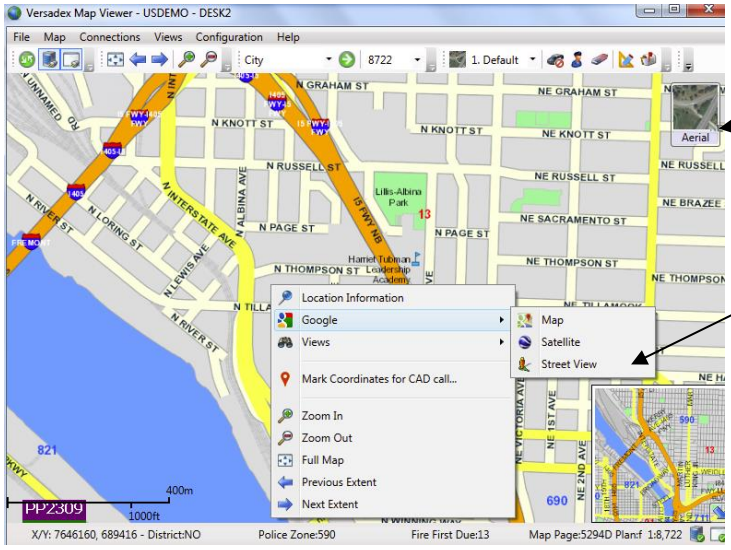
The MapViewer displays incident and unit locations.

In addition to local GIS layers, the MapViewer has the ability to display layers from external sources where the data is updated frequently (e.g. hydrants, real time traffic feeds).

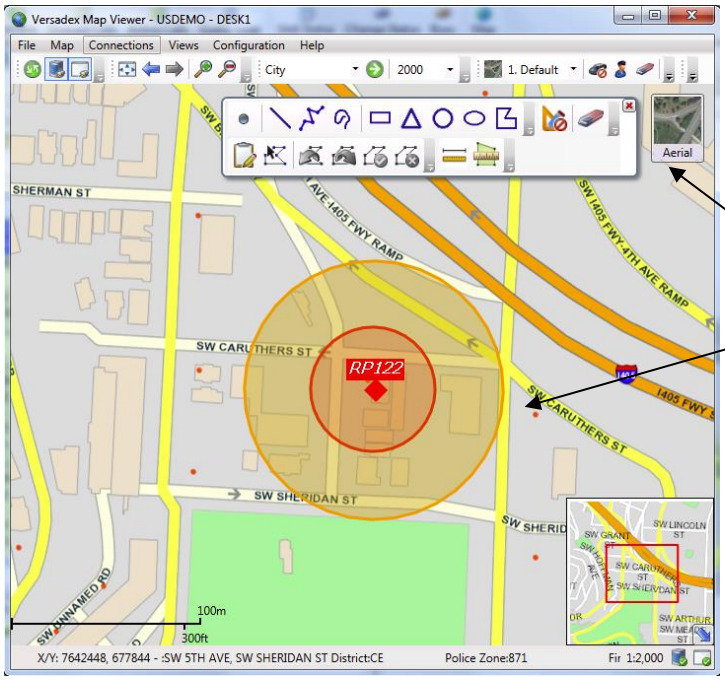


Ability to link in data from external sources where the data is updated frequently (e.g. hydrants, real time traffic feeds)

Users can chose which layers are displayed.



Display locally available Aerial digital maps and/or Integration with Google Maps and Street Views provides an enhanced view for the operators and responders.



Various drawing and measuring tools are available which can be useful for measuring the square footage of an area/building or drawing staging locations or hot/warm zones around a location.

In addition to these measuring tools, one of the useful tools that our mapping system enables is GeoFencing. A geo-fence is a virtual perimeter for a real-world geographic area. The CAD can be configured to create a geo-fence radius around an incident. The use of a GeoFencing is beneficial because it increases officer safety by alerting users when a unit enters or leaves a designated area such as an area deemed to be unsafe. Now, when an enroute unit crosses the fence, it can be time stamped as “AVL Arrived”. The actual Arrival Time stamp is still reserved for the police officer/fire fighter to determine. However, this tool informs all parties that the unit is there, even though it may still be preparing to engage in the incident. This is also useful when police officers/firefighters forget to hit the arrived key. We will continue to take further advantage of GeoFencing in the future and are currently talking with our customers as to how this could be best utilized.

In addition, as described below the Versadex CAD and Mobile applications fully support the use of AVL.

The Versadex CAD also supports Automatic Vehicle Location (AVL) technology in order to:

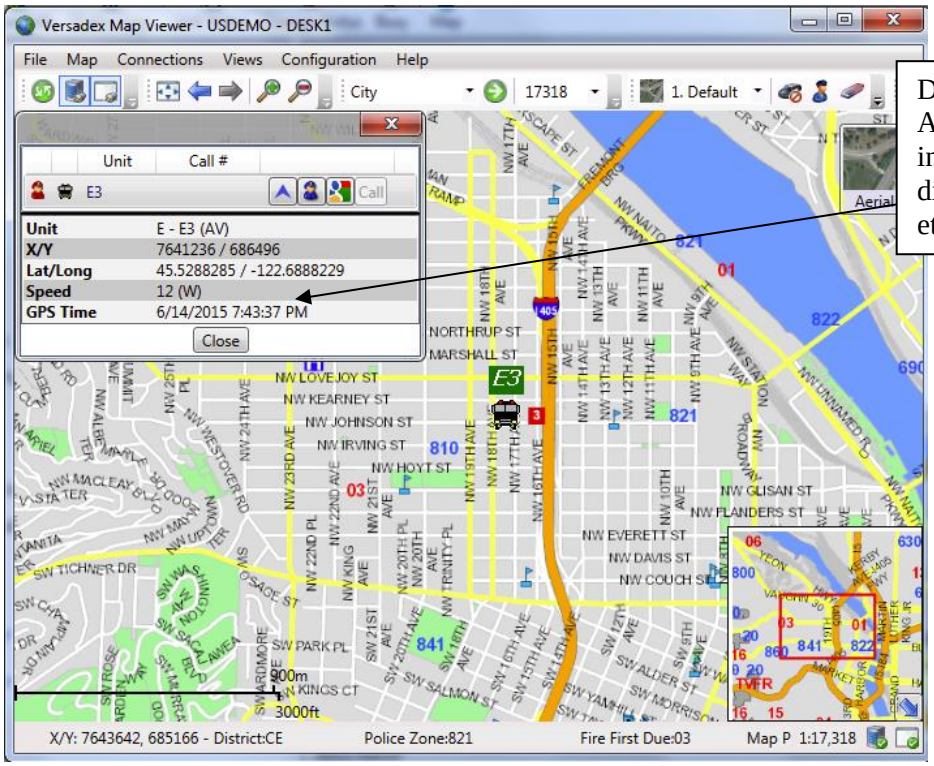
- Track Units and Officers on CAD MapViewer to insure officer safety;
- Initiate Dispatch recommendations based on Unit location
- Playback historical Unit and Event locations in order to facilitate improved deployment or as an investigative tool.

The AVL functionality facilitates immediate in-car visual display as well as integration with the CAD dispatch recommendation algorithm. Each transaction sent from the mobile will include the GPS coordinates which are appended to each transaction. This approach reduces the load on the wireless network by linking the coordinates to existing transactions rather than broadcasting additional messages across the wireless network.

The AVL can be tuned to generate GPS transactions based on distance travelled, unit status, etc. Further the CAD can change the reporting frequency by incident type and status on the specific incident. For example, the CAD can be configured so that a unit enroute to a call will transmit GPS coordinates much more often than a unit "at rest" and a unit involved in a "vehicle pursuit" can transmit even more frequently.

AVL coordinates can be generated in a number of different ways:

- Independent GPS device through an MDT or from a mobile device
- Generated by Portable and Mobile Radio's
- Smart Phones/Tablets

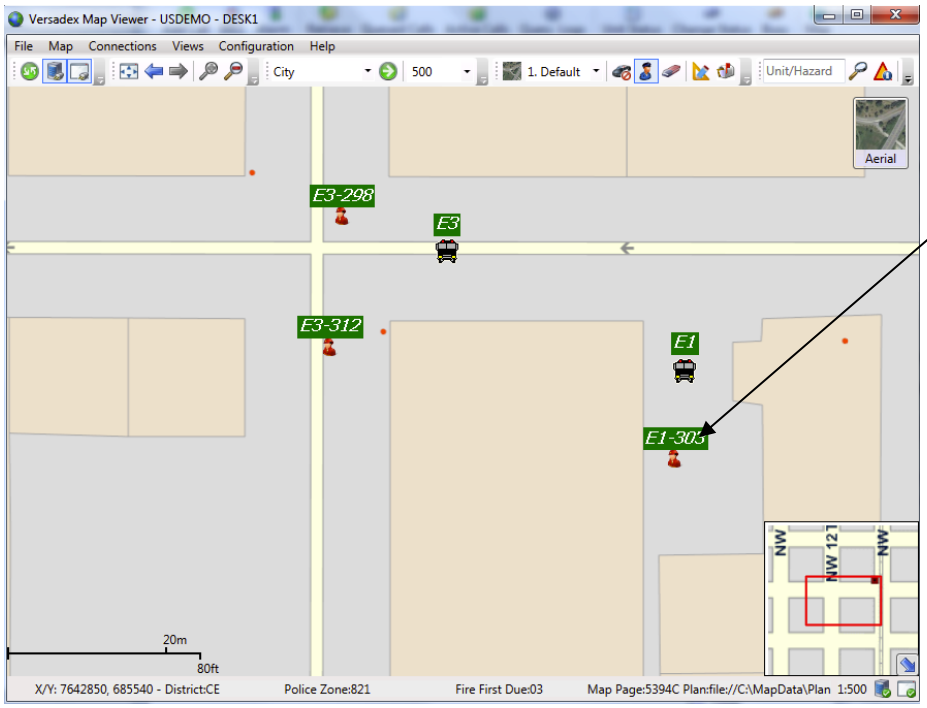


In the CAD Communications Center, a dispatcher can watch on their map display the current location of the unit (represented by an icon on the map), the incidents location, as well as all of the other units and incidents under their control. As Unit status is updated and new coordinates delivered, the unit icons will also dynamically update their location on the map display.

In order to minimize time and bandwidth the base map graphics are stored directly on the mobile computer in an officer's vehicle. The only information that is sent to the mobile unit will be the GIS coordinates for a calls location and status updates with GIS coordinates of all vehicles dispatched to the same event.

The CAD can also monitor and track the location of AVL equipped vehicles but also Individual Officers. Officer GPS coordinates can be sent via a GPS enabled radio system or from a hand-held mobile device running an app like the Versadex vMobile software solution- a description of vMobile is included in the following pages. A dispatcher can now not only see the Unit's location but also the location of the Officer should they leave their vehicle.

Dispatcher/Supervisors can visually track all Units on the map display depending on the type of call or a single unit may want to be individually tracked. After selecting a unit to track, the MapViewer will follow the unit, auto-.size the map display as necessary to keep the unit centered and scales the map as necessary to keep the unit, the call and any other units on the call visible. Other calls and units are hidden while tracking a specific unit.



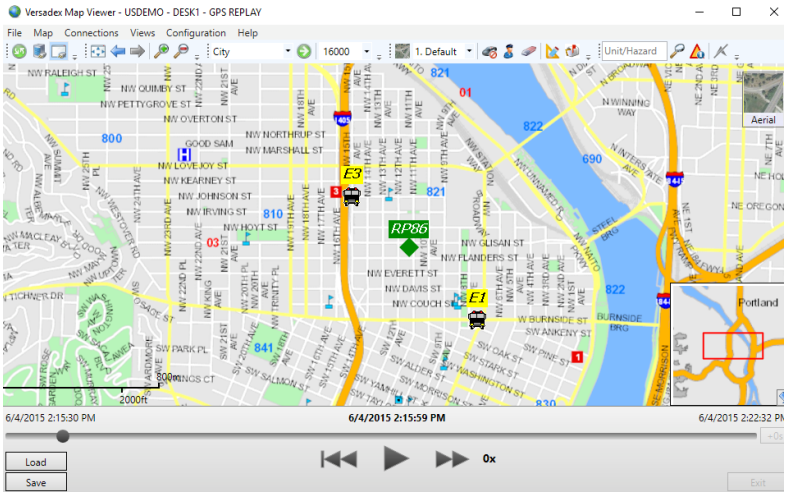
Mobile GPS coordinates from a radio system or Versadex vMobile provides the ability to track AVL locations of individuals.

The Versaterm CAD also provides two types of easy to use AVL/GPS playback utilities. These GPS Replay Utilities provide a map-based playback of vehicles and call locations based on a specified time period. It uses information from the Versadex CAD application and the MWS to display event data of a historical nature. The replay utilities include:

- **Instant AVL/GPS Replay**- function is provided to display the status of units and events during a recent past time period. Typically this utility is used by communications supervisors to review unit assignment and deployment decisions that occurred within a preconfigured near past time period. The time period is users configurable (e.g. the last 15, 30 or 60 minutes).
- **Standard AVL/GPS Replay**- This playback utility is primarily used to support investigations and isn't time constrained like the Instant playback utility. A user can select a range of dates, times and units for replay. For example, an agency might want to look at the path travelled by a specific unit, on a specific day, during a specific period of time during which the unit was involved in an arrestee transport.

Both replay utilities provides a user with the ability to control the playback much like the controls on a DVD player.

The controls include start/pause, stop, and jump one frame forwards/backwards. The utility also has a progress slider that enables you to rewind and fast-forward during the playback and a speed slider that control how fast data is sent to the MapViewer.



For address/location validation and history, the same ESRI data (single source) used for mapping is transformed into the Versadex system to provide not only extremely fast processing times but also to support the unique emergency responder needs such as phantom intersections (e.g. overpasses), Soundex, alias street names, reference points, etc.

The Versadex GIS Interface (VGI) is provided to help transform your local data into Versadex. The VGI will verify the source GIS data and transform it into properly structured load files for the Versadex CAD. Once complete, the data is loaded and can be placed into production by the CAD administrator without impacting the users (takes less than 1 second). The Versadex CAD supports two versions of the GIS data; so, should

an issue arise with the latest load, the CAD administrator can quickly revert to the previous version (less than 1 second).

Additionally, within Versadex CAD, the Versadex Street Index facility allows the CAD Administrator to manage the geofile directly where they can query to verify a location, print reports, maintain streets, intersections and ranges along with "common place names" (e.g. Starbucks). The ability to maintain the geofile, directly in Versadex, is a valued feature as the source GIS may not be as up-to-date as required for emergency response. The CAD Administrator can identify the geofile data that was manually added and merge that into the new (refresh) load from the source GIS with the ability to identify duplicates.

The Versaterm vCAD has two specific functions that can be used for remote access and status monitoring. They are:

- Browser Based Status Monitoring and Dashboards
- Browser Based WebCAD

The following is a brief description of both these functions:

Status Monitoring

Once a call for service is received and entered into the Versadex CAD it will automatically be routed and stored into several different queues. Queues can be configured by dispatcher or by any other assignment – for example a call back queue. Calls can be held for a specific time or 'stacked' for a specific unit. In addition, calls can be routed/queued based on their location, call type and ultimately type of service required (police, fire, ems).

Primarily these queued calls will be displayed on a separate but integrated CAD Status Screens. These status monitors which are full-color displays, with optional visual and audio aids, provide a dynamically updated synopsis of ongoing police, fire and ems events.

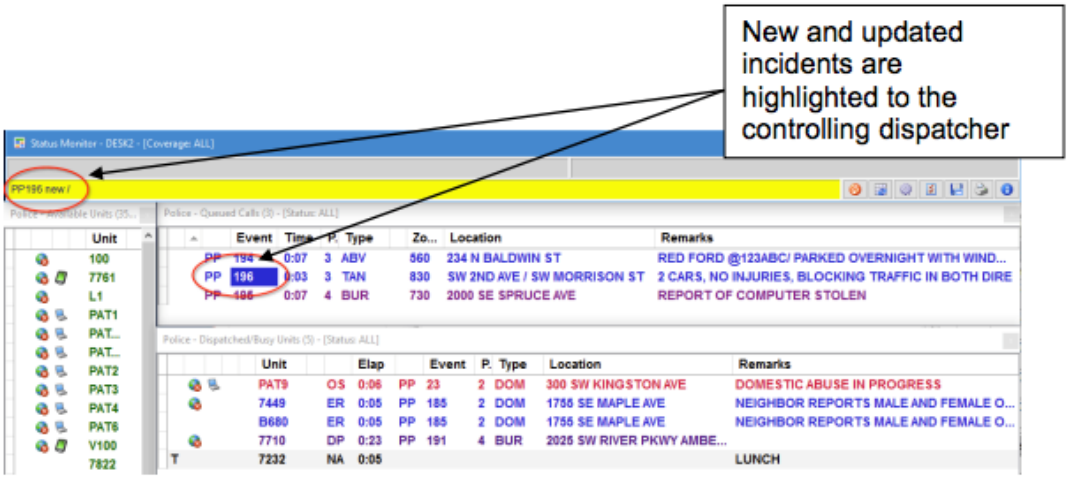
The Status Screen contains a marquee that can display the following:

- Push to Talk (PTT) requests
- Request to Talk (RTT) requests
- Unit updates
- Timers
- Call Updates

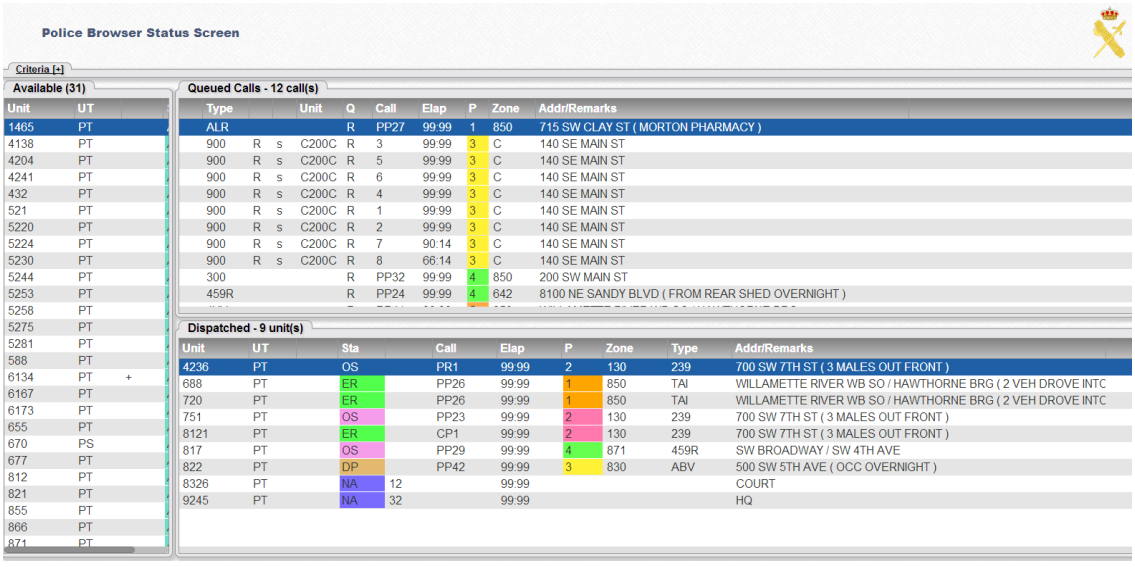
The Status Screen also contains between one and three other windows that can display the following:

- queued calls
- dispatched and busy units/apparatus
- available units/apparatus

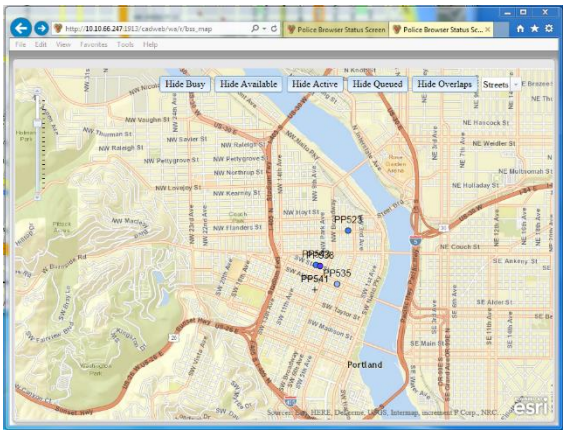
The individual status screens are also user configurable. Data to be displayed in each status screen can be configured, the order of the data elements, and a default sort order established. The only constraint is screen and font size. These configurations can be set by the agency or if permitted each individual dispatcher can configure their own individual display content governed by their sign-on/password.

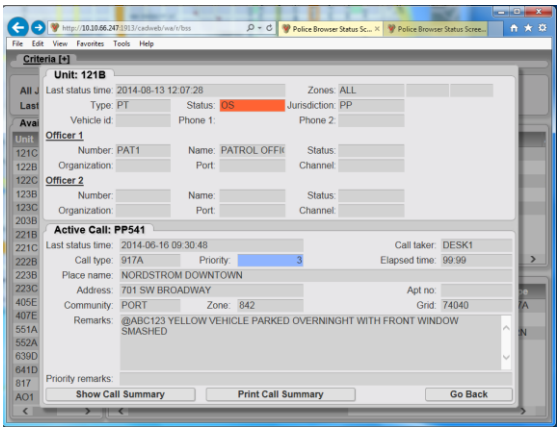


In addition to the traditional Status Monitors the Versadex CAD system also includes a Browser Based Status screen. This HTML5 based display is primarily designed to offer users selective CAD information in a non-mission critical environments were full CAD access isn't required.



The Web Browser based Status Monitor also supports an integrated map display. Clicking on a "call" or "unit" (either on status monitor or map) displays the relevant information.



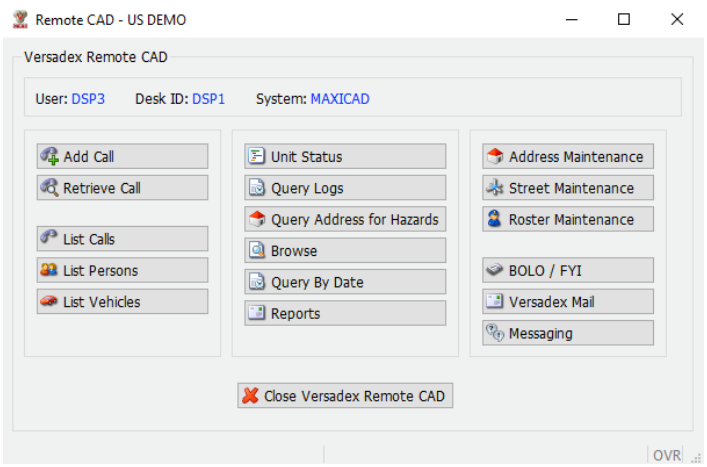


Dashboards that display current metrics using advanced visual displays and notifications are a recent addition to the Browser Based Status Monitor and more are being added. We have already incorporated CAD dashboards focusing on Call Volume, Unit Availability and Call times and are working on a System performance dashboard. These dashboards have configurable thresholds, measure for acceptable performance, and warn if thresholds are met. Our goal is to detect an issue before it becomes critical.

WebCAD

The Versadex CAD system also offers a **Remote WebCAD** module. The module provides a remote facility that supports CAD features without requiring a full Versadex CAD installation. Remote CAD operations can be physically separate from Comm center or Records operations. For example, Remote CAD might be installed in community policing centers, in store-front locations, at front desks, at volunteer desks, or in property rooms.

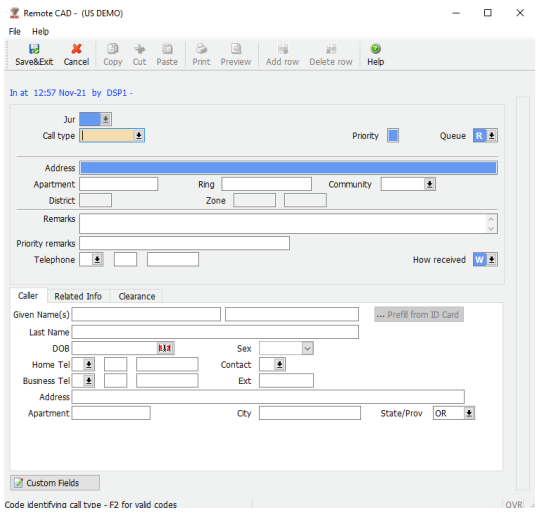
For example, for Police calls, users can add and retrieve calls, check unit status and CAD logs, view queued call lists (e.g., Regular, Hold, Active queues, etc.), and view calls with related persons and/or vehicles. Additionally, there are administrative functions available such as Address Maintenance (premise history), Roster Maintenance and BOLO/FYI.



For Fire calls, most functionality is available. However, for Fire calls, Remote CAD does not support the following functions:

- adding calls
- self-assigning calls
- viewing entities from a call
- viewing the list of queued calls with related persons
- viewing the list of queued calls that have related vehicles

The Remote CAD Call screen is similar to the Versadex CAD Call screen. It contains fields for recording information such as call type, call location, call remarks and clearing remarks, and complainant information.



Remote CAD calls that are not cleared immediately can be stored queues. For example:

- **TRC queue**—for minor, non-dispatchable calls that are not cleared immediately
- **Regular dispatch queue**—the regular CAD queue for dispatchable calls
- Or any other **site defined queues**.