SkyLock™ Product Description

Locate. Track. Manipulate.

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VERINT

POWERING ACTIONABLE INTELLIGENCE®

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Introduction

In recent years, mobile phones have become one of the most popular means of communication. As a result, they have also become a very important source of information about subscribers that use them.

As cellular interception technologies and methodologies continually evolve and improve, the type of information that can be extracted from mobile phones and networks, as well as its quality, is becoming more comprehensive and varied. These technologies provide valuable information, which can be used for various activities, such as law enforcement, national security, search and rescue and so on. One of the most critical pieces of information is a subscriber's location.

There is no doubt that extracting the subscriber location information as well as controlling his network services in real time can greatly assist operational agencies in improving their daily activities. However, even with today's tools, gaining accurate, real time or near-real time location intelligence from cellular networks is not an easy task. Cellular networks are complicated and subscribers' information is not easily accessible. Retrieving this information from the network, if possible, can be time consuming, is potentially costly and, in many cases, does not provide a global view (meaning, once a subscriber is roaming, usually an accurate location at the cell ID level is not available). In addition, in most cases mobile operators are not willing to cooperate with operational agencies in order to provide them the ability to gain control and manipulate the network services given to its subscribers. In short, dependence on cellular networks is great, and will significantly affect potential operational success.

Verint's SkyLock is a global geo-location solution which was designed and developed to address the limitations mentioned above, and meet operational agency requirements.

SkyLock is part of Verint's extensive tactical portfolio and can be implemented alongside other solutions that together, as a suite, can contribute to the success of any operation. One example of this is to use SkyLock together with ENGAGE GI2 in order to first identify a target's cell location, and then use Verint's GI2 (or any other tactical off-air cellular identification and interception device) to identify the precise location of that target.

SkyLock Overview

SkyLock is a real time and independent location finding solution for GSM and UMTS subscribers, which enables operational agencies to retrieve subscriber location information on a global basis, including the case of inbound/outbound roamers and foreign countries, all subject to license limitations.

SkyLock presents subscriber information on a Country/Network/LAC/Cell level, and may constitute a platform for various agencies to locate and track people of interest, such as criminals or terrorists on the one hand or survivors of natural disasters on the other.

SkyLock's location finding capabilities are based on the ability to send and handle standard signaling messages (MAP messages) through the international SS7 network. This solution does not require any special hardware or software installation neither in the cellular network nor in the mobile phone. In spite of that, it can track virtually any subscriber in the world, in a covert way, even if the subscriber's mobile phone is not GPS enabled.

SkyLock was designed to ensure our customers security and privacy, and to ensure sensitive information not be traced by unauthorized personnel. This solution also includes a user authentication and management module which can be managed by the system's administrator. All queries done by the customer are under its full responsibility and in using the solutions Customer should comply with all laws and regulations.

Benefits of SkyLock

- A Complete and comprehensive solution with local as well as worldwide tracking capabilities. Includes well proven modules and capabilities which allow the operator various analytics capabilities

- Provides GSM /UMTS subscribers' location up to a cell precision

- Independent Solution – Our proposed solution is based on SS7 hubs maintained by Verint and its partners, and spread in many locations around the world, and thus does not require local communication service providers' collaboration.

- A fully committed solution with a predicted hit rate of 70% and above

- No need for software or hardware changes neither in the network core elements nor in the localized mobile phones

- Covert & Secure solution which minimizes the risk of source tracing;

- All queries are performed using intelligent routing that masks the queries, making it virtually impossible to monitor or trace the SS7 commands in any manner

- Easily interfacing with additional tactical solutions e.g. ENGAGE GI2™ and ENGAGE PI2™

SkyLock Package Options

The SkyLock package enables locating subscribers on a global basis. The basic SkyLock package outline and the optional additions to it (priced separately) are described below:

Basic SkyLock Package

- Locating local subscribers with a cell level accuracy in their home country (Managed Service*)
- Locating local subscribers with a cell level accuracy in up to 5 predefined neighboring countries to the home country (Managed Service*)
- Locating local subscribers with a country level accuracy in the rest of the world (Managed Service*)

Optional Additions to the Basic SkyLock Package

- Locating subscribers around the world with a country level accuracy (Non-Managed Service**)
- Locating subscribers around the world with a cell level accuracy - This is dependent on the installation of an SS7 local hub at a local telecom operator (Non-Managed Service**)
- Adding countries to the Basic SkyLock Package, under the same terms (Managed Service*)

*Managed Service - committed professional service support and a successful hit rate of above 70%

**Standard Service - No committed professional service support and no committed successful hit rate

Note: The above optional additions to the basic SkyLock package are priced separately.

SkyLock Technical Aspects & Features

The following chapter provides a detailed description of SkyLock.

SkyLock Components

SkyLock platform, integrates management modules with SS7 gateways, analysis algorithms, databases and mapping engines to deliver an end-to-end location identification solution. The solution includes the following components:

- **Application Server –** The server communicating using secure IP connection to the worldwide Skylock SS7 network hubs, perform the required actions based on the Skylock user requests, converts cell ID global number to location coordinates , store it in the database, makes it available to the users' workstation and manages the target.

- **Workstation**: Local or remote client through which a user can provision the application server and view subscribers' information and location on a map

- **Local SS7 Hub (optional)**: A network server (SS7 Hub) is installed either at the customer site or at one of the mobile service providers inside or outside the country. In both cases, an interface to the SS7 network is required.

  This local hub is a dynamic SS7 gateway, based on standard cellular signaling system (SS7), which connects seamlessly to the mobile network multi-capability functional nodes: HLR, MSC\VLR, SMSC\FDA, SCP (Intelligent Network), USSD & OTA and provides subscriber location around the world on a country/network/LAC/cell ID level as well as sends SMS text messages to the networks.

  The network server was designed according to GSM standards. Internal functions in the node and all interfaces with the GSM/UMTS/IMS network are designed using these standards:

  - MAP – ITU MAP versions 2, 3 and ANSI IS41 D

  - INAP – INAP CS-1, CS-2

  - CAP – CAP versions 1,2,3

- **Worldwide SS7 Hubs**: SkyLock global infrastructure consists of SS7 hubs which are spread in various locations around the world.

  This local hub is a dynamic SS7 gateway, based on standard cellular signaling system (SS7), which connects seamlessly to the mobile network multi-capability functional nodes: HLR,

MSC\VLR, SMSC\FDA, SCP (Intelligent Network), USSD & OTA and provides subscriber location around the world on a country/network/LAC/cell ID level as well as sends SMS text messages to the networks.

The network server was designed according to GSM standards. Internal functions in the node and all interfaces with the GSM/UMTS/IMS network are designed using these standards:

SkyLock Implementation Modes

SkyLock offers the following optional implementation modes:

- **Basic installation (basic feature):** The application server is installed locally at the customer's premises, or in any other location of its choice, and is connected to worldwide SS7 hubs, maintained by Verint via a secure IP connection (IPsec). Through these hubs all signaling messages are sent and received to the mobile operators.

  By using Verint's web-based GUI, customers can send location queries for a specific target (based on his MSISDN or IMSI). In this mode, SkyLock is simply a service enabler which provides the ability to locate subscribers in real time, and send them spoofed SMSs.

  Note: All data concerning queries performed are stored in a database in the application server.

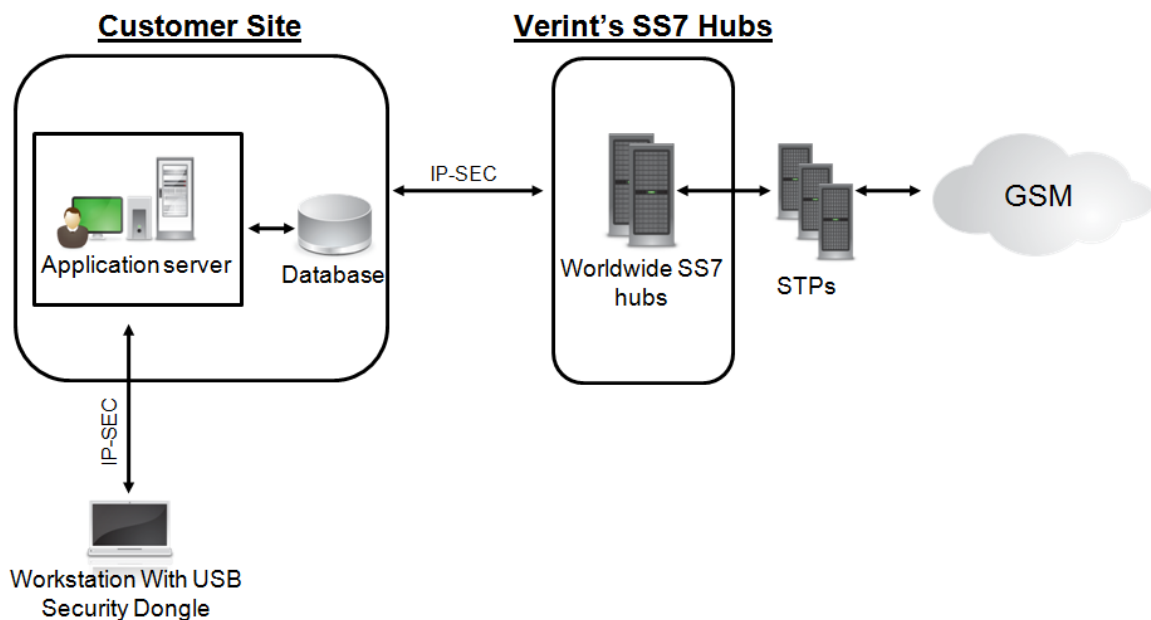The cloud installation is presented in the following diagram:

Figure 1 – Basic Installation

Advanced installation at a cellular operator (advanced feature): A local SS7 hub is installed and connected via a secure IP connection (IPsec) to the local operator through which all signaling messages are sent and received. This option requires full local collaboration.

Note: the application server and the isolated database are installed in the customer's premises.

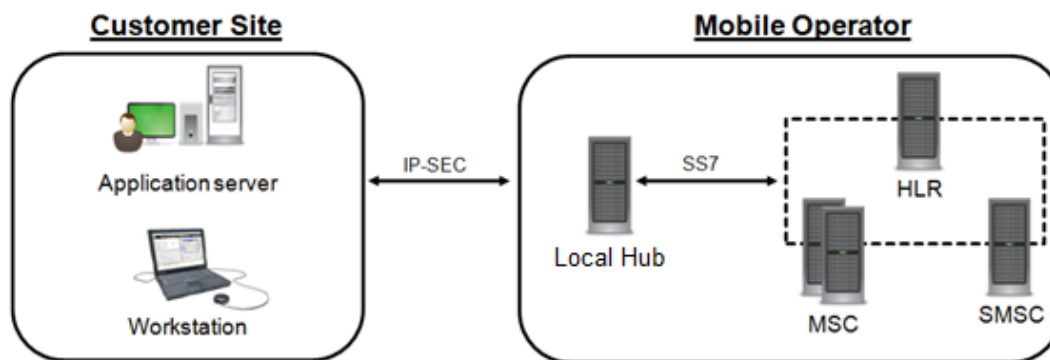Sky connectivity via local operators is shown in the following diagram:

Figure 2 – Advanced Installation

SkyLock Modules

The SkyLock is based on five main modules:

1. **Track** – Provides the ability to covertly send single or multiple tracking queries to mobile operators, via the SS7 network, in order to extract a subscriber's location.

2. **Automatic -** A powerful rule based engine from which users can define key criteria to automatically track a subscriber, and receive alerts when specific pre-defined conditions occur.

3. **History -** Collects and presents all SkyLock query results.

4. **Reports** – Analyzes and presents SkyLock query results according to various selectable criteria

5. **Admin** - Hosts all the administration logic and assists in managing the system access permissions, various internal management functions and control of individual user queries

Track Module - Locating targets with cell level accuracy

The Track feature provides a dynamic and flexible querying mechanism through which the subscriber's information is obtained. These queries can be sent in the following ways:

- **Target -** By sending a one-time query, the subscriber's location is obtained and presented in real time via Verint's web-based GUI. This information can then be used by operators, such as LEAs, in order to set up their forces in the target's area.

- **Mass** – Enables the import of an external cell phone number list in order to carry out complex queries.

- **Fwd request** – Checks if a number was forwarded and enables continuing the query process even if the target forwarded his calls to some other number/phone.

In addition the operator can choose between 2 possible queering mechanisms:

- **Passive -** collects data which is already stored within the network. This data is valuable as it allows retrieving the target's whereabouts at its last location update with the hosting network.

    In principle, location updates occur every time the subscriber sends\receives an SMS or a call, initiates a data session, switches to another MSC, or due to periodic location updates initiated by the hosting network.

- **Online –** sends an active query to the hosting network, forcing it is to trigger a location update towards the subscriber and retrieve the most updated information regarding his location and status.
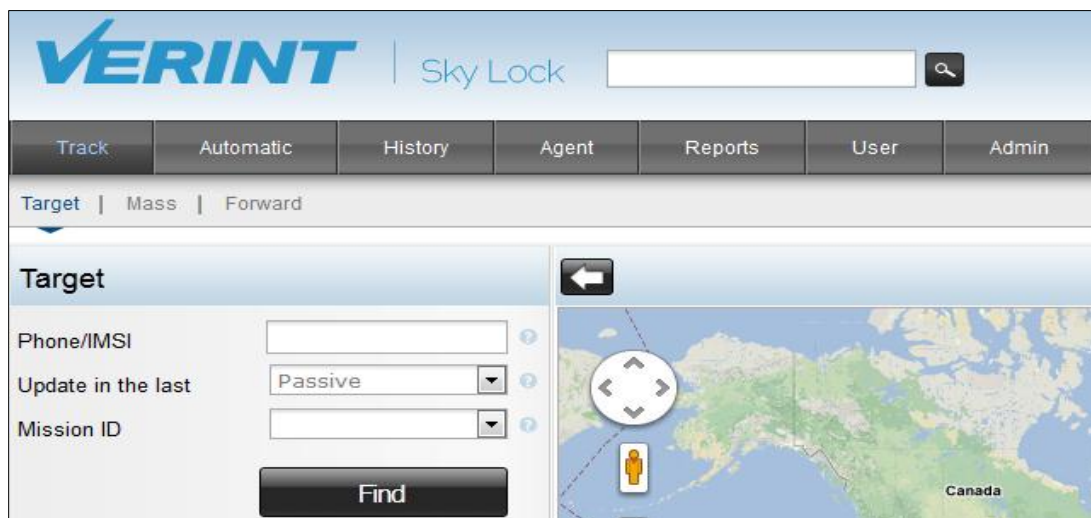

Figure 3 – SkyLock Track screen

Automatic Module – Geo-Fencing and Tracking targets movements over time

The Automatic feature enables the user to submit complex recurring queries. These queries can be sent in the following ways:

- **On Alert -** Warns the user if predefined presently switched off cell phones are switched back on

- **Country-Pop –** Warns the user if a target enters or leaves a selected country

- **Fence –** Warns the user if a target approaches or withdraws from a pre-selected area

- **Proximity –** Warns the user if the distance between 2 targets exceeds a predefined parameter

Figure 4 – SkyLock Automatic screen
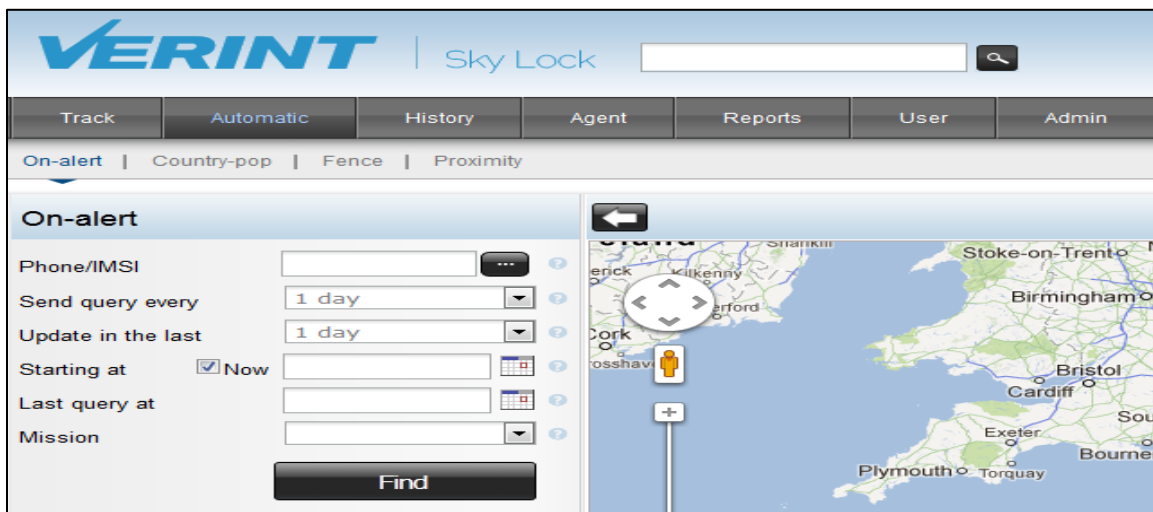
History Module - Recalling targets past movements

The History module enables simple recollection and filtering of all SkyLock query results, alerts and notifications. This includes single queries as well as automatic (recurring queries).The main SkyLock functions which rely on the history module include:
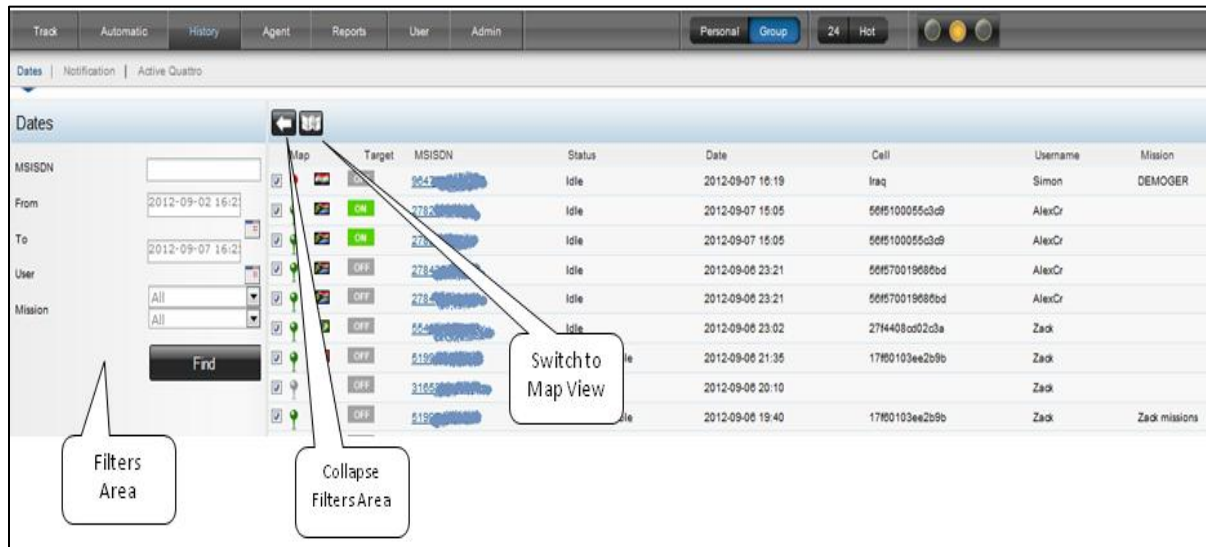
Figure 5 – SkyLock tabular History screen

Figure 6 – SkyLock map History screen

- **Route -** Presents the route of a target, up to the last 8 queries, plotted in chronological order. This module enables tracking a target's movements over time.

Figure 7 – Route module screen

- **Pointer -** Enables the user to detect if past target locations are nearby, and if so -   This module can be used, for example, to protect a VIP figure from approaching targets, or to track a meeting between several targets in real time.
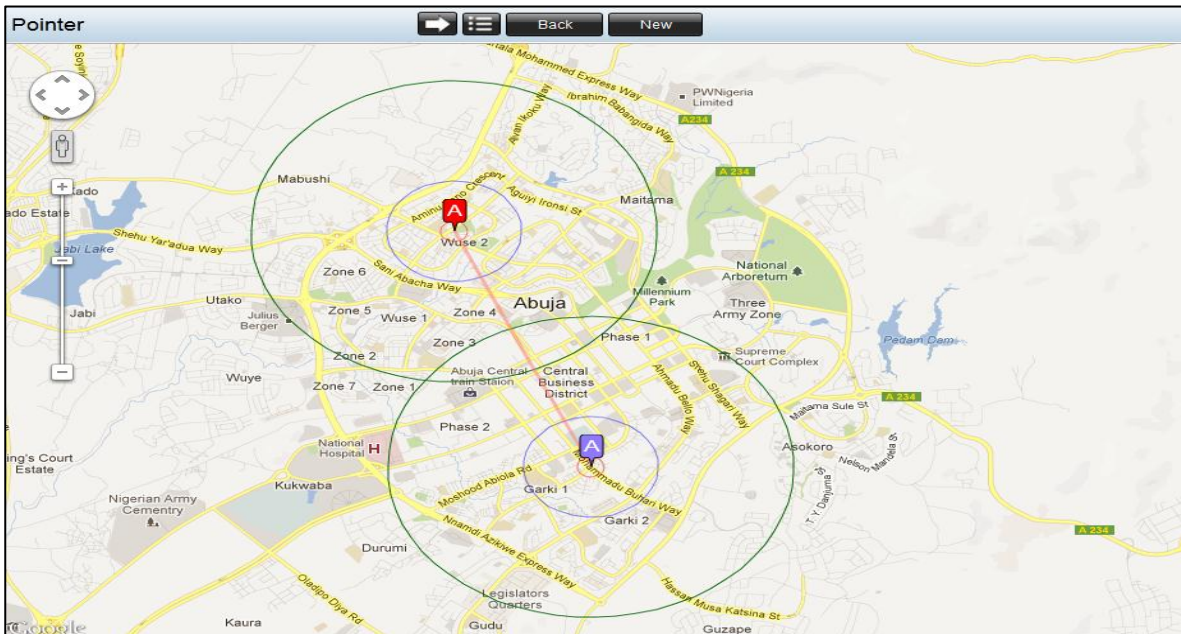
Figure 8 – Pointer module screen

Reports Module – Analyzing targets behavior over time

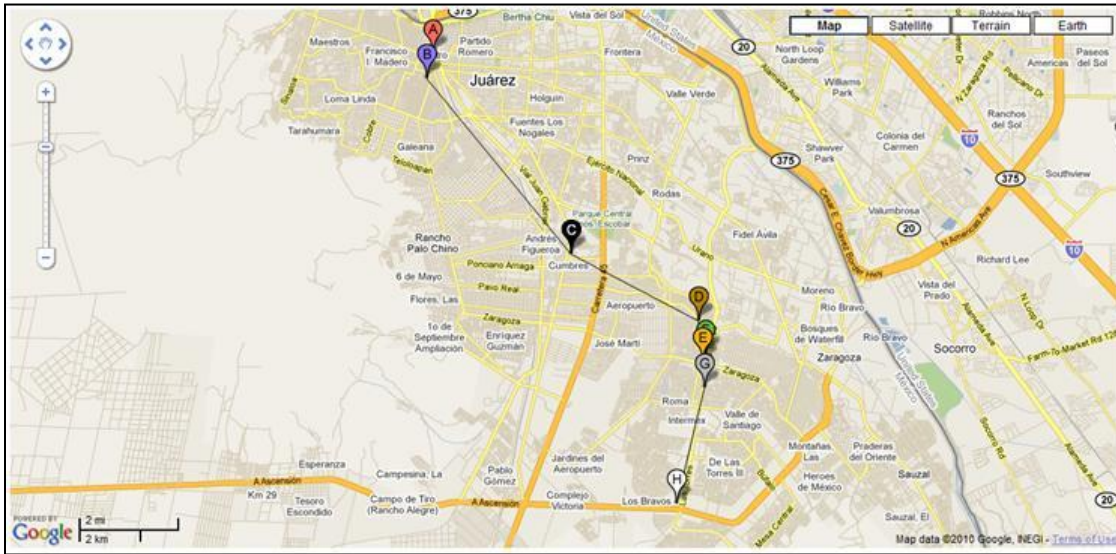The Reports module enables the user to execute a complex analysis of subscriber behavior (based on past queries). In addition, this module provides information and statistics about SkyLock users and general functionality.

The Reports module includes the following features:

- **All Tracked Data -** A report about every query result made a user or group of users

- **Target Analysis** - Summarizes queries for a full perspective of the target's actions

- **Notification** - Information about all notifications from automated queries

- **Active Quattro** - Information about all active automated queries

- **Statistics** – Statistical data of SkyLock users/group activities

- **Processing Report Data (top right side of the screen**) – Printing and exporting tools

Figure 9 – SkyLock Reports screen

Admin Module – Managing SkyLock users and functionality

The SkyLock solution is designed to ensure customer security and privacy and to make sure that sensitive information available only to unauthorized personnel. By using the SkyLock administration module, the system administrator can easily manage system access permissions and internal management functions as well as control individual user queries.

The system provides a full set of system maintenance and control functions to manage access permissions, passwords, various internal management functions and control of individual user queries (budgeting, limitations, etc.) It also includes tools to enable work to be carried out in the most security-conscious situations, using nicknames, hidden numbers, etc.

For example, The System Administrator can define a list of cell phone numbers to block from being traceable via the system. To create/edit the list, press "New" at the bottom of the window, and type in the MSISDN numbers to include. One can mark all numbers for deletion, or mark individual numbers, and press delete to remove them from the list.

The administrator can also define a nickname for a particular number, for convenience or in order to protect the real identity of a target in question (for surveillance cases, counter-surveillance, etc.). By clicking "New", the Admin selects a MSISDN number, applies a nickname to said number, and then decide whether to allow all users see the identity/number or to conceal it, per administrator's discretion. This way, a nickname can be used that no other user would be able to identify neither who is tracked nor its number.
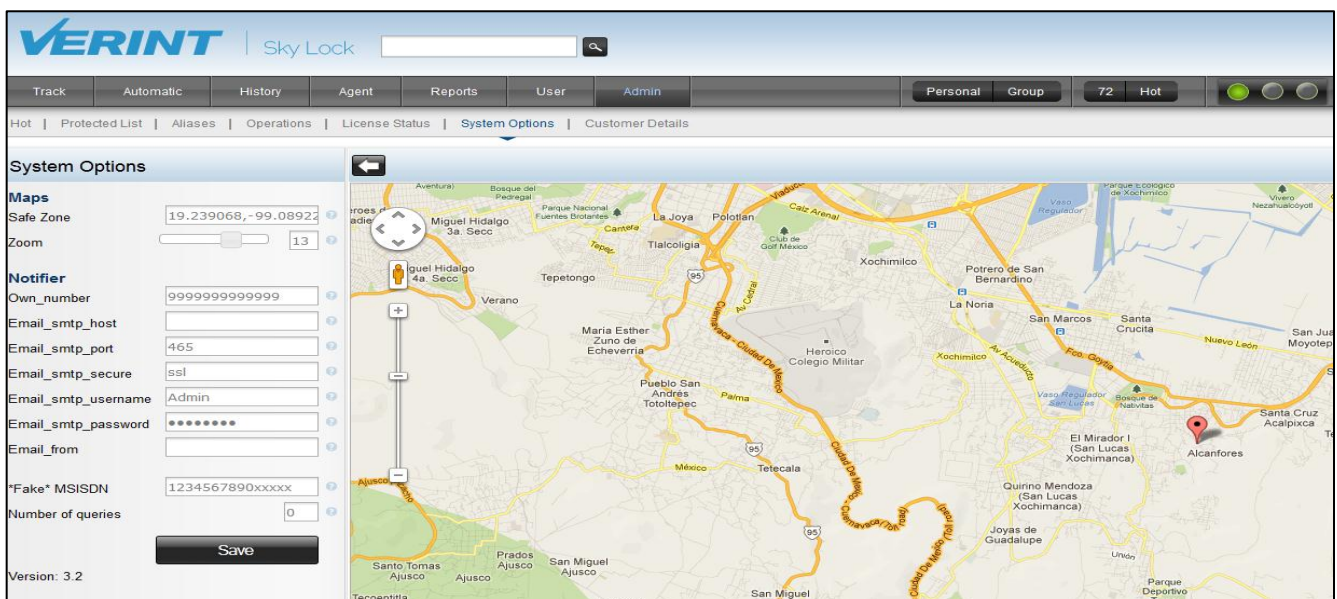

Figure 10 – SkyLock Admin screen

SkyLock Results

Information Results

The Track and Automatic modules provide location information on a country/network/LAC/cell level as well subscriber's status information. The following layers of information are available through the SkyLock GUI for map and tabular views:

- **Location information:**

  - Subscriber's global location, which includes the hosting country and network

  - Hosting LAC and cell

  - Cell coordinates (if available) of the marked spot on the map

- **Subscriber's additional information:**

  - Subscriber's MSISDN – if the IMSI number was entered

  - Subscriber's IMSI – if the MSISDN number was entered

  - Date – the date (and time) of the last update of the subscriber's status

  - Last Action – how recent (in minutes) the data is from the subscriber's last action (send/receive a call/SMS, made a location update etc')

- **Subscriber's status:**

  - *Absent* – the subscriber's mobile phone was turned off for more than T time and the network don't have any information regarding his location (usually the T time is 24 hours).

  - *Not reachable* – the subscriber's mobile phone cannot be found due to an error in the phone, for example in case the battery was removed during use.

  - *Busy* – the subscriber's mobile phone is in use

  - *Idle* – the subscriber's mobile phone is registered onto a GSM network, whether in use presently or not.

  - *Error* – the subscriber's mobile phone cannot be found due to an error in the GSM network

Map Results

- **Three Circles presentation of the target location**

  - *Green* - presents the maximum coverage area of the Cell

  - *Blue -* There is a ~70% chance that the target will be found within the Blue circle

  - **Red -** There is a ~50% chance that the target will be found within the Red circle

The radius displayed on the Google Map is calculated based on all available information of the specific cell (signal strength, BTS elevation, proximity to other BTSs, density of BTSs and others).
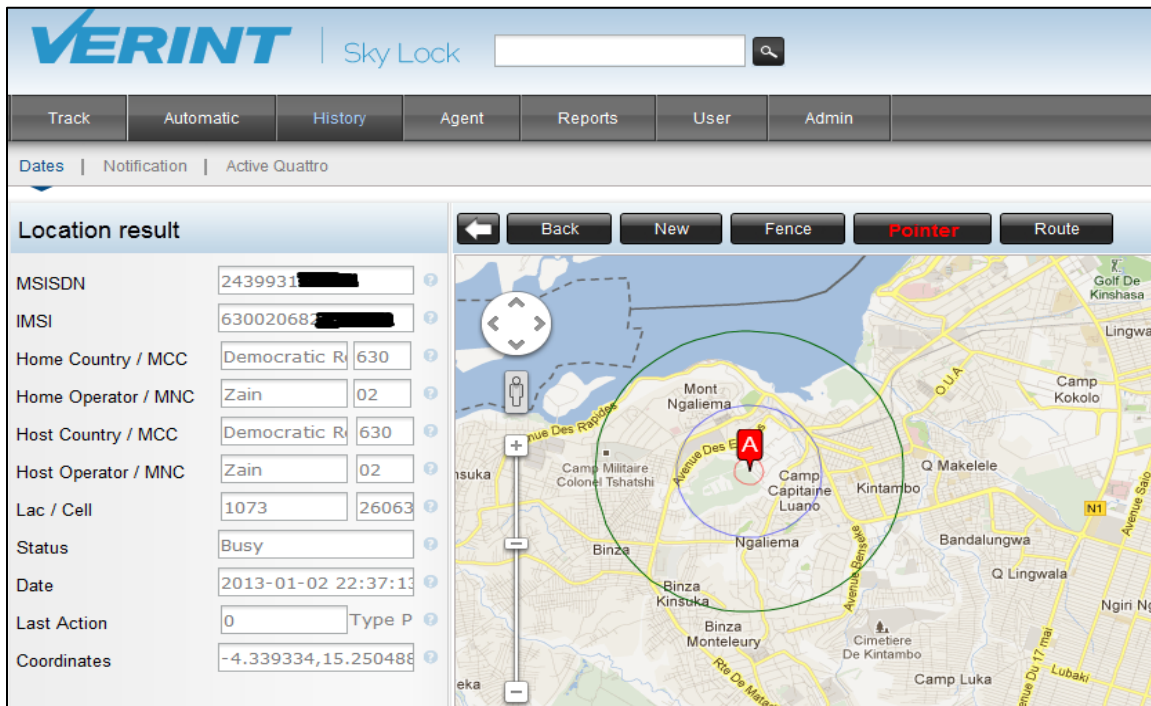

Figure 11 – SkyLock Results screen

Converting Cell ID to GPS coordinates

SkyLock location results received from the interrogated network is the Global Cell ID (CGI). The CGI is a unique number identifying the serving cell, which consists of the MCC (country code), MNC (network code), LAC (location area code) and cell ID.

In order to translate the CGI into a geographical location and preset it on a map, the use of a Cell ID database is mandatory. The database is stored in the system application server.

The leading databases are described below and can be used with SkyLock in order to provide the subscriber's location on a map view:

- **Open-source databases:**

  - Google: The database can currently provide coverage for over 15 million cells

  - Ericsson: The database can currently provide coverage for over 15 million cells

  - Opencellid (org): Estimated to contain one million cells

  - Cell Spotting

- **Commercial databases:**

  - Navizone: The database can currently provide coverage for over 11 million cells.

  - Location API: The database can currently provide coverage for over 11 million cells.

Note: there might be instances in which the Cell ID location commercial databases vary in their accuracy and coverage area. The conversion into coordinates is provided AS IS and Verint makes no commitment with regards to the accuracy and coverage area. In order to improve the accuracy where necessary, Verint recommends that Customer takes the following steps:

- *Manually update the cells' locations from end-user/operator sources via a CSV file import option.*

- *Enriching the commercial services database with the missing area information using of the shelf commercial tools (drive test).*

In case that the coordinates are not accessible, which makes map display impossible, the system provides other useful data, which may include the cell id.

SkyLock Typical Workflow

SkyLock typical workflow comprises the following key steps:

- **Queries** the network for the subscriber's location, based on the subscriber's mobile subscriber number (MSISDN).

- **Retrieves** the subscriber's location at the country/network/MSC/cell level.

  Note: GPS coordinates are available using internal data or commercial services.

- **Displays** the subscriber's geographical location on a map view, together with additional valuable information, such as phone status (on/off, busy/not busy), hosting country, hosting operator, MSC (switch) and the subscriber's IMSI.

- **Feeds** and uses other tactical services, such as GI2.

Figure 12 – SkyLock Typical Work Flow

SkyLock Privacy & Security

Recognizing from day one that privacy and security considerations are critical to homeland security and lawful interception, the SkyLock solution has been designed from ground up to ensure total iron-clad security and privacy in each part of the solution.

In the design stage, special focus was put onto the relevant security and privacy considerations for each phase of operation and activity, to ensure that best-of-breed resources would be applied, while maintaining streamlined operation and ease-of-use. From the security/privacy standpoint, the solution can be viewed as comprising the following blocks or layers:

- Remote connection of users
- Connection from the customer site (users and connections)
- SkyLock worldwide SS7 Hubs
- SkyLock work processes

Remote connection of users

Users can remotely access the solution securely via a secure, encrypted VPN tunnel. This VPN is based on the Checkpoint Abra system (all self-contained in a USB dongle) to provide a secure virtual workspace by segregating the virtual workspace data from the remote PC or other device. The built-in hardware and software encryption protects data the entire time, regardless the user's location.

Connection from the customer site

Users at the customer site securely access the system from their workstations, via VPN software which creates a secure, encrypted link. The redundant database servers are deployed on separate machines, connected to the SkyLock server in a manner which ensures that they are logically isolated from the server.   This ensures that even during maintenance activity done via remote access (under full authorization and control of the customer's SkyLock Administrator), the remote maintenance staff are unable to access the database (by simply removing the cable connecting the 2 servers).

SkyLock worldwide SS7 hubs

The SkyLock worldwide SS7 Hubs are securely connected to the application server at the customer site via an IPSec-based link. This secure connection ensures that nobody will be able to locate or decrypt the data transferred via this connection at either end. No customer or subscriber and target data of any sort is being stored on these Hubs. They are strictly used as SS7 gateways to transform user queries into SS7 queries.

SkyLock Work Processes

The SkyLock employs a series of protective layers which are used to completely hide and mask the tracking process.

All data related to queries, suspect lists, phone numbers, query results, etc. are stored only on the database server, located at the customer site.   All queries are performed using intelligent routing that masks the queries. This makes it virtually impossible to monitor or trace the SS7 commands in any manner.

This is accomplished by using different IP and Global Title addresses (including some parts that have been altered for "camouflage") during the query process. This makes any attempt to reconstruct the query process very complicated. Further, the query process is split into a number of different stages, making the reconstruction of the full query process extremely difficult, if not impossible. Finally, the SkyLock solution also transmits a large number of false queries to numbers that do not really exist, which makes it even more difficult to identify which numbers were actually traced.

Clarifications

- Verint will use commercially reasonable efforts to support 100% coverage of the Mobile operators in the country. It is possible that at certain times coverage will not be supported for 100% of the network nodes. This can happen due to the mobile operator's re-alignment of Network elements, nodes, Cell towers, network maintenance procedure and temporary re-routing of network traffic, etc.

  Verint will use its best commercial efforts to overcome such scenarios.

- The system might not be able to locate some of the targets due to non-standard: multi IMSI solutions, number portability, and other GSM bearing services.

  Verint will use its commercially reasonable efforts to overcome such non-standard scenarios.

- The system will convert Cell ID to coordinates only to the extent such information is available.

  Note: there might be instances in which the Cell ID location commercial databases vary in their accuracy and coverage area. The conversion into coordinates is provided as is and Verint makes no commitment with regards to the accuracy and coverage area. In order to improve the accuracy where necessary, Verint recommends that Customer takes the following steps:

  - Manually update the cells' locations from end-user/operator sources via a CSV file import option.

  - Enrich the commercial services database with the missing area information using of the shelf commercial tools (drive test).

- The system will present target information (such as location and status) only if such information is available, based on global roaming agreements. Location information may not be retrieved if

target is being hosted by an operator that blocks such queries or if a roaming agreement is not operational.

- The system will not present the location of Israeli subscribers in Israel, and USA subscribers worldwide (country code 972 and 1).

- Target's Location will be based on the target's MSISDN (public mobile number). In most cases the system will present IMSI and will allow locating a target also by entering his IMSI number.

- System queries can be blocked by mobile operators, making it possible to only partially locate the target or in certain scenarios even impossible to locate a target in a specific network. In such event Verint will use commercially reasonable efforts to provide an alternative solution.

  Operationally wise, it is recommended that System queries be used with caution and in highly important cases; this in order to minimize the risk of exceeding acceptable thresholds at the foreign mobile communications network for such activity.

- Verint reserves the right to end the system's life upon a six months' prior notice, with effect not before the lapse of 5 years of from the sale of a license to the System to customer. Operation of the System during its life period is conditioned upon ordering by Customer of continued maintenance and support services during the entire life span of the system, and timely and full payment of license, maintenance and support fees during the entire period.

Compliance with Laws and Regulations

The customer represents and warrants that in purchasing a SkyLock solution and using it, it shall comply with all applicable laws, rules, regulations order and any other legal requirement of the territories in which customer's activities hereunder are to be performed (the "Legal Requirements") and shall indemnify, defend and save Verint harmless from Customer's failure to do so. Without limiting the foregoing Customer agrees that in using the SkyLock solution (i) Customer will comply fully with the export control laws and regulations of the United States and Israel with respect to the commercial and technical data and information supplied by Verint, (ii) Customer and its employees and agents shall fully comply with all applicable privacy and national security related laws and regulations that are applicable to the use of SkyLock, including by way of obtaining consents and/or decrees to the extent required by law, and (iii) shall be solely responsible vis-à-vis third parties for such use and its outcomes.

Customer shall save, defend, indemnify and hold harmless Verint, its officers, directors, and employees from and against any claims, losses, liabilities, damages, costs and expenses (including reasonable attorneys' fees) (each a "Loss" and collectively "Losses") that such indemnified parties may suffer or incur with regard to or arising out of any claims in respect of operating the System not in accordance with any Legal Requirements.

Without limiting the foregoing, Customer irrevocably waives any and all claims or demands against Verint for (i) any limitations or inability to operate the SkyLock solution due to Legal Requirements; and (ii) any Losses suffered by the Customer, its officers, directors, employees and any one on its behalf in the event that operating the SkyLock solution will not comply with any Legal Requirement.

Summary

Despite advances in location technologies and intelligence-collecting techniques, LEAs and other government agencies are still challenged in regard to cost-effectively and efficiently locating targets. This challenge is even greater when the target resides beyond country borders.

Verint's SkyLock provides these organizations with a cost-effective, new approach to obtaining global location information concerning known targets. SkyLock is an independent, global mobile cellular area identification device that provides organizations with a covert means of acquiring the global cell ID of their suspects and sending them spoofed SMS.

Used together with other Verint solutions, such as the ENGAGE GI2 tactical solution, SkyLock enables LEAs and other government organizations to accurately pinpoint their suspect for apprehension, making it virtually impossible for targets to escape, no matter where they reside in the world.

About Verint

Verint® Systems Inc. (NASDAQ: VRNT) is a global leader in Actionable Intelligence® solutions and value-added services. More than 10,000 organizations in over 150 countries use our workforce optimization and security intelligence solutions to improve enterprise performance and make the world a safer place. For more information, visit www.verint.com.

Appendix

Mandatory Requirements for Customer Site

The following items and tasks will be purchased / conducted by the customer and are not part of the proposal. Verint will support in guidance and reference to the applicable information:

1. **IT cabinet (RACK) 19"** including ventilated front & back doors.

   Dimensions: 600 x 2000 x 1000 (WxHxD)
   Total free space inside the rack: 14 U

2. **SS7 Connection (Pending a local hub installation)**

   - SS7 or Sigtran connectivity (MTP and SCCP redundant)
   - Allocation of SCCP Global Title, SSN and MTP Point Codes with dual way access to HPLMN Ss7 network (publication at IR21)

3. **IP Network**

   3 static IP addresses (1 of which is configured as VIP) with Internet access.

4. **Power consumption ~2500W**

5. **** Database of all mobile cells in the country, in the following format:**

   - MCC: Mobile Country Code
   - MNC: Mobile Network Code
   - LAC: Location Area Code
   - CI: Cell ID
   - Cell GPS Coordinated
   - Cell height
   - Cell angle (direction)

** If a database with the data described above is not provided by the client, Verint will use public databases of mobile cells in order to enable SkyLock functionality in the requested area. In this case, Verint will not be responsible for the accuracy of the data provided by these public databases.

Mandatory Requirements for Telco Site

Note: This section is relevant to the case in which a local SS7 hub is installed at one of the local telecom operators in the customer's home country

6. **IT cabinet (RACK) 19"** including ventilated front & back doors.

Dimensions: 600 x 2000 x 1000 (WxHxD)

Total free space inside the rack: 14 U

7. **SS7 Connection**

SS7 or Sigtran connectivity (MTP and SCCP redundant)

Allocation of SCCP Global Title, SSN and MTP Point Codes with dual way access to HPLMN Ss7 network (publication at IR21)

8. **IP Network**

3 static IP addresses (1 of which is configured as VIP) with Internet access.

9. **Power consumption ~2500W**

10. **Database of all mobile cells in the country, in the following format:**
   - MCC: Mobile Country Code
   - MNC: Mobile Network Code
   - LAC: Location Area Code
   - CI: Cell ID
   - Cell GPS Coordinated
   - Cell height
   - Cell angle (direction)

List of HW to be delivered to the customer

All equipment & materials will be delivered (CIP) to the customer's airport (customer is responsible for releasing goods from local customs).

MF	ITEM	SUB ITEM DESCRIPTION	QTY
IBM	APPLICATION SERVER	IBM XSERIES SERVER	2
DK	SS7 UNIT (G31)	SIGNALING UNITS	2
SG	SWITCH		2
EATON	POWER PDU		2
CHECK POINT	UTM-1 132	UTM-1 132 IN CLUSTER MODE	2

Note: HW items list may include equivalent products based on availability