

PEN-LINK

www.penlink.com



Unique Features of Pen-Link v8

Sole Source Justification for Pen-Link Software

Pen-Link, Ltd.
5936 VanDervoort Dr.
Lincoln, NE 68516

Pen-Link, Ltd. is a
U.S.-Based Small Business

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1. Sole Source

Pen-Link, Ltd. is the sole source provider of all Pen-Link Software and Systems, including Pen-Link v8 and LINCOLN Intercept Systems. We do not use agents, dealers, or distributors; our products can be purchased only from us.

Pen-Link v8 offers many unique features that set it apart from other Law Enforcement software applications on the market. This document presents some of those features. Please note that we are not claiming that all of the features presented in this document are unique to Pen-Link software. To the best of our knowledge, some are indeed unique. But some others may also be found in competing systems. However, the most salient point is that no competing system offers **all** of these features in **one** integrated package. This is a crucial point! Having **all** of the functionality in one package saves significant time and effort that is often otherwise spent exporting data from one system, ensuring that the export was full and accurate, manipulating the exported data it into a different format, importing the data a different system, and ensuring that data was not lost in the transfer. Analysts across the nation often spend hours per day in this export/import process. Pen-Link software offers a comprehensive set of features to help investigators and analysts spend their time investigating and analyzing, rather than manipulating data to move it from one system to another.

2. Hardware Interfaces

2.1 LINCOLN Interface

Pen-Link software interfaces directly with the LINCOLN Intercept Systems used by a wide variety of local, state, and federal law enforcement and intelligence agencies for pen register and wiretap intercepts. Pen-Link v8 is the client software for these systems.

2.2 Third-Party Intercept Platform Interfaces

Pen-Link software can load data files and audio collected by third-party intercept systems, like the DCS 3000, JSI Voicebox, Verint Reliant, and Sytech ADACS systems. These "Autoload" interfaces (a Pen-Link term) relieve the intelligence analyst from the manual intervention that is typically required when moving information from one system to another; e.g., exporting from the source system to a .csv file, then using Excel to edit the data formats to suit the destination system, then importing into the destination system, having to define the specific field mapping. There is none of this type of intervention required with Pen-Link's Autoload capability; the analyst simply exports a data file in the source system's native format, then loads it into Pen-Link. All the analyst has to do to import the data is select the file then click "OK."

2.3 Traditional DNR Interfaces

Pen-Link can interface directly with legacy Dialed Number Recorder equipment, for those rare circumstances where a pen register or wiretap (Title 3) intercept requires a local loop approach. Pen-Link interfaces with all DNR equipment still in use.

3. Software Interfaces

3.1 Autoloading Telephone Company CDR Files

Pen-Link has Autoload functions for every phone company that offers the option of fulfilling subpoenas through an electronic exchange of data. Many phone companies fulfill subpoenas for toll records or other types of call detail records (e.g., switch dumps) by supplying the data in a file, rather than on paper. For every phone company that offers this option, there is at least one file format; often multiple formats, depending on the nature of the request. Pen-Link recognizes these formats; it can process a file, recognize proprietary codes, parse the contents into the appropriate fields, and populate the database. All automatically (hence the term "Autoload"). The user is not required to spend time defining data formats, data types, field orders, etc., as is often the case when loading data from an external source into various intelligence applications. The user simply selects the source data file using a standard Windows Open File dialog box (e.g., just like loading a Word .doc file). Pen-Link's "Autoload Phone Company File" function currently supports over 170 different data file formats provided by telephone companies. As new formats surface, we update the software to recognize them, and make these updates available to our end users, free of charge, through our website.

3.2 Loading Telephone Company Subscriber Files

Many phone companies fulfill subpoenas for subscriber information by providing the data in a file, rather than on paper. For every phone company that offers this option, there is at least one different file format. Much like the Autoload feature, Pen-Link's "Pen-Lookup" feature can automatically process all of these subscriber file formats and load them into the intelligence database, with no editing of file formats, "cleaning up" of data, or any of the other things that often waste an analyst's valuable time when importing data into an intelligence application.

3.3 Interfaces with Federal Intelligence Databases

Pen-Link is widely used in U.S. federal law enforcement. Pen-Link Software includes automated functions to export call and subscriber data to, and import from, national intelligence databases used by various federal law enforcement agencies, including FBI's Telephone Applications system, DEA's M204 Tolls system, DHS/ICE's (formerly U.S. Customs) Telecommunications Linking System (TLS), and the U.S. Marshals' Warrant Information System (WIN). These interfaces help to automate the process of moving call and subscriber data back and forth between the central system and Pen-Link, not only removing the time-consuming aspects of traditional manual import and export, but also facilitating the sharing of intelligence both within an agency and among multiple agencies.

3.4 Interfaces to Public Records Providers

3.4.1 ChoicePoint Interface

ChoicePoint is a commercial provider of various public records data. Various ChoicePoint services are used by law enforcement agencies across the nation. Pen-Link's Pen-Lookup function offers a batch lookup interface to ChoicePoint's Phone Link service.

3.4.2 NeuStar Interface

Today's analysts face a growing challenge when working cases that involve a lot of telephone data; tracking down subscriber information for wireless phones whose numbers have been ported. If a subscriber has ported his or her phone, traditional methods of identifying which phone company to subpoena for subscriber information are less effective, because the phone company identified by the area code, exchange, and number range is no longer the actual provider. The analyst now has to track down which phone company the number was ported to. And the number may have been ported more than once!

NeuStar, formerly a subsidiary of Lockheed Martin, is the administrator for Number Portability within the North American Numbering plan. NeuStar maintains a database of ported numbers, including which company is the current service provider for any given ported number. NeuStar offers a voice-interactive phone-in system for law enforcement to use to query the database. More recently, NeuStar has offered a network-based system, where law enforcement users can log in and perform queries of the ported number database.

We are currently in the process of engineering an interface, directly in Pen-Link software, to NeuStar's network-based query system for ported phone numbers. The interface will let the Pen-Link user perform batch queries (i.e., submit multiple phone numbers in a single query) directly from within Pen-Link. Given that Pen-Link already automatically identifies phone numbers in the system that lack corresponding subscribers, this added NeuStar interface will make great strides toward automating and simplifying the process of tracking down subscriber data for ported telephone numbers. The time savings to the analyst will be significant.

Other commercial products may appear on the market that interface with the NeuStar network-based query system. But none will offer the additional processing and analytical capabilities that already set Pen-Link apart.

The NeuStar interface is currently under development. When it is completed and released, your agency will receive the update free of charge. (Please note, however, that using NeuStar's services may require payment to NeuStar.)

3.4.3 LexisNexis Interface

LexisNexis is another provider of extensive public records data and related services and is widely used by law enforcement agencies across the United States. We are currently in the process of developing interfaces to various LexisNexis services. Pen-Link users will have batch lookup capabilities. Even more exciting is the effort to develop a *live* interface that will query LexisNexis database as phone numbers are being collected during pen and wire intercepts, or loaded from CDR files.

The LexisNexis interface is currently under development. When it is completed and released, your agency will receive the update free of charge. (Please note, however, that using LexisNexis services may require payment to LexisNexis.)

4. Analytical Capabilities

Pen-Link, Ltd. has been in the telecommunications intercept and analysis business for 20 years. Over these two decades, we have accumulated much knowledge and experience in the methods of Call Detail Record Analysis, making our software second to none in the analysis of telephone call traffic. In fact, it would not be unrealistic to claim that Pen-Link is the yardstick by which other applications are judged when it comes to collecting, storing, and analyzing telephone information. Other applications advertise “Pen-Link Like Functionality.” We do not have to make such a claim; our applications *define* Pen-Link functionality. Some of the analytical capabilities brought to bear by Pen-Link are as follows:

A Pen-Link Call Listing report showing call details along with information linked automatically from other databases; the name of the subscriber for the Number Dialed, and the Dialed City, State, and Country.

4.1 Flexible Reporting

Pen-Link offers the user the flexibility to create their own custom analytical reports across 16 different reporting categories, making it easier for the intelligence analyst to drill down through their data the way they want. Other applications come with only a static set of reporting features, requiring additional payment for development of customized reports.

4.2 Auxiliary Intelligence Databases

Pen-Link offers four pre-loaded and maintained (free updates) databases that augment telephone call intelligence shown in Call Listing, Call Frequency, and Special Analysis reports. These features will not be found in competing products.

- ➔ Pen-Link's **City-Link Database** automatically identifies the probable location – by city, state, and country – of any phone number within the North American Numbering Plan (United States, Canada, and Caribbean Nations).
- ➔ The **International Database** performs a similar function for any telephone number outside of the North American Numbering Plan.
- ➔ The **Operating Company Number (OCN) Database** automatically identifies the Telephone Service Provider that controls any phone number in the North American Numbering Plan, simplifying the process of determining what phone company to subpoena for subscriber and toll information.
- ➔ The **Cell Tower Database** makes it possible to identify the cell sites and sectors used by a targeted telephone during calls captured through a pen register or wiretap intercept. In this way, the analyst can track the location of a targeted phone during any particular call, or across a historical listing of calls.

4.3 Go Beyond Telephone Calls

Many people with a passing familiarity with Pen-Link software know that its forte is collecting, storing, and analyzing telephone call information; tolls, pen registers, and wiretaps. There are, of course, other systems on the market that also specialize in telephone information, and only telephone information. Not everyone knows, however, that Pen-Link's capabilities now extend far beyond telephones. For example, Pen-Link includes an Events Database, with corresponding analytical capabilities, as well as a set of IP databases, also with corresponding analytical capabilities.

- **Events Database.** The Events Database lets you store information about other case-related events. This database includes full multimedia support for photos, video clips, and audio clips. Event types are user-definable and can include such things as surveillance notes, GPS Tracking data, crime scene photos, surveillance video, evidence descriptions from trash searches, recordings from body wires or room bugs, tips from CIs, etc. Event types are limited only by the user's imagination. Event records also include free-form note fields for detailed entry of case notes, searchable by key word and key phrase database queries. Event reports provide built-in multimedia playback controls. You can even generate various Time Line graphics and GIS maps from your Event records.
- **IP Database.** Pen-Link now incorporates three new databases for IP (Internet Protocol) data: the Transaction Database, the Node Name Database, and the Node Subscriber Database. These databases are usually used in conjunction with a network packet sniffer to intercept a targeted subject's Internet activity (e.g., surfing, file transfers, emails). When loading the raw packet data, the system can *automatically* perform Reverse DNS Lookups to resolve domain names from intercepted IP Addresses, then Whois Lookups to get subscriber and contact information for the resolved domain names, providing actionable intelligence (names, phone numbers, addresses) from public data sources. These types of lookups (DNS and Whois) can take an analyst hours, even days to perform using traditional manual methods. With Pen-Link, they take minutes. From the captured IP data, the analyst can generate Link Charts of IP addresses, email addresses (who emailed whom and how often), and MAC addresses (machine-specific identifiers that would be used in conjunction with computer forensics to show that particular communications originated from particular hardware).

4.4 Automated Analyses

Pen-Link offers a suite of powerful "special" functions to help the intelligence analyst perform necessary and common analytical tasks that, when performed with traditional methods, can become tedious, error prone, and extremely time-consuming. The following list gives just a sampling of some of these special analyses:

- The **Subject Link** function will find any Call, Subscriber, Event, Seizure, and Case Management record that is linked to any particular Name, Key Word, Phrase, or Phone Number.
- The **Call Pattern Analysis** automatically identifies instances where particular sequences of calls occur; when they occur, how often they occur, and between which phone numbers and names. For example, this function would help the analyst determine how many times Joe paged Steve, then Steve called Barbara, then Steve called Joe back.
- The **Pattern Group Analysis** will perform tasks similar to the Call pattern Analysis, but focusing on call groupings rather than specific chronological sequences. This is useful in identifying possible patterns that do not always follow the same set sequence.
- The **Common Call Breakdown** automatically filters through the call data to identify any instance where multiple Targets are communicating with the same, "common" phone number. Results can

be displayed in a table, a cross-tabulated frequency matrix (a common analytical approach), or a graphical Common Call Link Chart (see below). This is a powerful tool in helping to identifying the key subjects in a social network, based on their communications. It is also a useful tool in quickly identifying new surveillance targets in an ongoing case.

- With a **Single Target Common Calls** analysis, you can quickly and easily determine what existing Targets in an ongoing case are linked to newly added sets of intercept Targets and Numbers dialed, through their common calls.

- The **Common Case Breakdown** automatically identifies instances where the same phone number (e.g., a dialed number) appears across multiple cases, indicating possible cross-case links or conspiracies.

Dialing Party	Target	Frequency	Location	Case
(402) 478-4211	SPENCER, JOHN	1	CONRAD, NEBRASKA	1
(402) 478-4211	SPENCER, JOHN	1	CONRAD, NEBRASKA	1
(402) 478-4211	SPENCER, JOHN	1	CONRAD, NEBRASKA	1
(402) 478-4211	SPENCER, JOHN	1	CONRAD, NEBRASKA	1
(402) 478-4211	SPENCER, JOHN	1	CONRAD, NEBRASKA	1
(402) 478-4211	SPENCER, JOHN	1	CONRAD, NEBRASKA	1
(402) 478-4211	SPENCER, JOHN	1	CONRAD, NEBRASKA	1
(402) 478-4211	SPENCER, JOHN	1	CONRAD, NEBRASKA	1
(402) 478-4211	SPENCER, JOHN	1	CONRAD, NEBRASKA	1
(402) 478-4211	SPENCER, JOHN	1	CONRAD, NEBRASKA	1

A Common Call Breakdown report, with its automatic Common Call Matrix, showing all instances of Numbers Dialed that are linked to multiple Targets, along with call frequencies and identifying information, such as Name and Location.

- The **Call/Events/Seizure** listing will help the analyst uncover temporal relationships among Call records, Event records, and Seizure records.
- The **New Subpoena Numbers** report will automatically identify phone numbers for which you do not yet have Subscriber data, and which phone companies service those numbers.
- The **Subscriber Involvement** functions will automatically show which Subscribers are *linked* to any particular set of Calls, as opposed to a simple Alphabetical or Numerical listing of Subscribers (which Pen-Link can also do if you want). These functions, for example, will help show which subset of subscribers in a case or across cases is linked by call activity to a particular subset of Targets within a multi-Target intercept case. These functions can also help you easily separate subscribers that are linked to call activity from subscriber records that were entered just for general or background intelligence on other subjects involved in a case.
- **Composite Hourly** and **Day of Week** analyses help to identify temporal patterns in call activity, to characterize or predict intercept Targets' call activity across time of day and day of week.
- **Target by Cell Site** analyses help the analyst determine the frequency of any Target's cell site and sector usage. Cell site frequencies can be distributed spatially or temporally, to see which sites and sectors are used, how often, and when. In this way, a wireless Target's movements can be historically characterized or predicted, which can be very useful not only in prosecuting a criminal case, but also in tracking fugitives or terror suspects.

4.5 Graphical Analyses

Whereas many other systems rely on general, third-party, commercial graphics packages, Pen-Link software incorporates its own powerful suite of Graphical Analysis tools. You can generate a wide variety of charts and graphs directly from your Pen-Link reports, without needing to export data to any add-on or external system. Because the functions are built into Pen-Link, rather than being part of a general, commercial database charting application, the charts are specific to the needs of Law Enforcement and Intelligence Agencies. Available charting functions include:

➔ Link Analysis

- Calls and Subscribers; who is linked to whom, directly or indirectly, through the network of intercepted call activity.
- Common Call Link Analysis, revealing multiple targets linked to one another through shared numbers dialed.
- Subjects and Associates records can be used to generate Organizational Link charts based on known associations, including those not involving telecommunications
- The analyst can easily create free-form and annotated Link Charts based on the progression of the case as they understand it. Many analysts use other drawing tools (e.g., PowerPoint, Visio) that are not designed for criminal intelligence network analysis, or spend an inordinate amount of time manually entering data just to produce a chart. With Pen-Link, if the analyst chooses, he or she can quickly draw a professional Link Char, of courtroom quality, using a charting tool that is specifically designed for the needs of Law Enforcement and Intelligence agencies.
- The system includes a library of Over 600, professionally drawn icons specifically related to Law Enforcement and Intelligence (with English or Spanish icon names).

➔ Call Frequency Charts

- Dialed frequency
- In/Out frequency
- Temporal patterns in call activity, by Hour of Day, Day of Week, or Day of Month.
- Conversation Type frequency
- Monthly call activity
- Cell site use
- Etc...create any frequency chart from any field or combination of fields in the Call records

➔ GIS (Geographical Information Systems) charts

- Call Origins and Destinations, by address or cell site
- Cell and sector use maps for intercepted call activity (what "pie slice" of a cell did the target occupy)
- GPS coordinates, when Latitude/Longitude is delivered by the carrier
- Subscriber Locations
- Event Locations
- Electronic Surveillance Perimeters for live intercepts of cellular targets

➔ Timelines

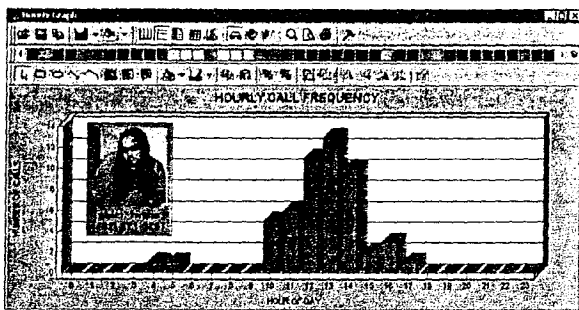
- Call Association charts, useful for identifying temporal patterns in call activity.
- Event timelines, to show the temporal relationships among other case-related events (e.g., surveillance, interviews, crime scenes, forensics, tip lines, informants, etc.)
- Generate automatically from database records or free-form drawing (excellent for courtroom summary)

All charts are fully customizable, giving you total control over every aspect of the chart, including chart style (horizontal or vertical bar, stacked bar, line chart, area chart, pie chart, etc.), colors, text labels, fonts, legends, etc. Various annotation tools let you insert objects, such as pictures, arrows, lines, shapes, text boxes, and callouts. You also have full control over object grouping and layering. In addition, Pen-Link charts can be saved to various graphics file formats for easy import into other applications (e.g., a word processor for written reports, PowerPoint for on-screen presentations, etc.)

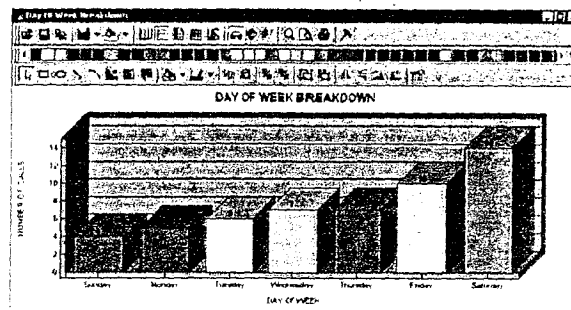
The following pages show examples of some of these charting capabilities

4.5.1 Call Frequency Charts

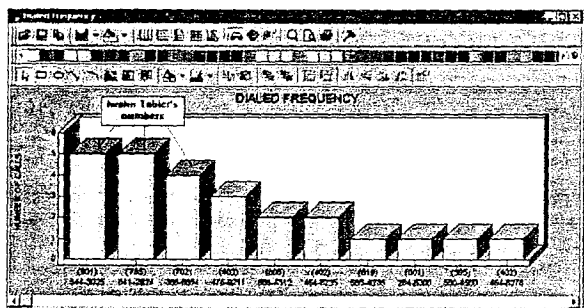
Pen-Link has several built-in call frequency charts that you can generate directly from Call and Frequency reports with the click of a single button. In addition to the built-in charts, you can create an unlimited number of custom frequency charts, based on any combination of fields in the database. The charting interface offers a wide variety of annotation tools. You can easily import any chart into other software, like Word or PowerPoint. The following examples will give you an idea of some of the Frequency Chart capabilities you will find in Pen-Link v8.0.



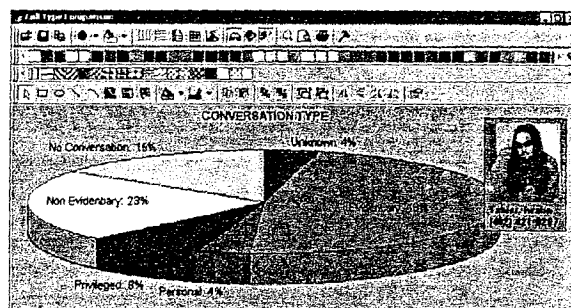
Composite Hourly Chart – call frequency as a function of hour of day.



Day of Week Chart – call frequency as a function of day of week.



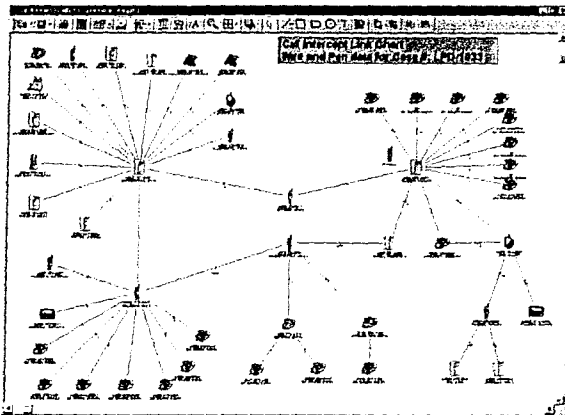
Dialed Frequency Chart – call frequency for each number dialed.



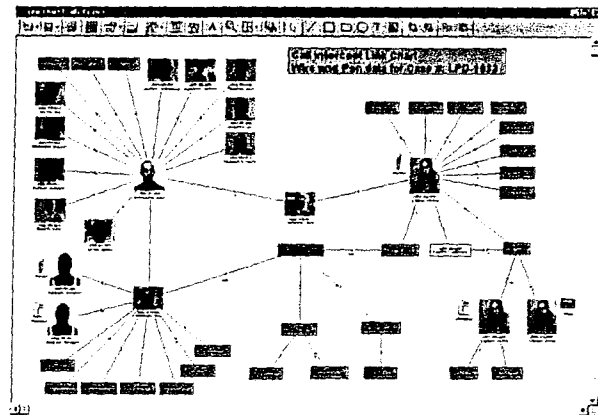
Conversation Type Chart – relative frequency for each intercepted conversation type, for one subject.

4.5.2 Link Charts

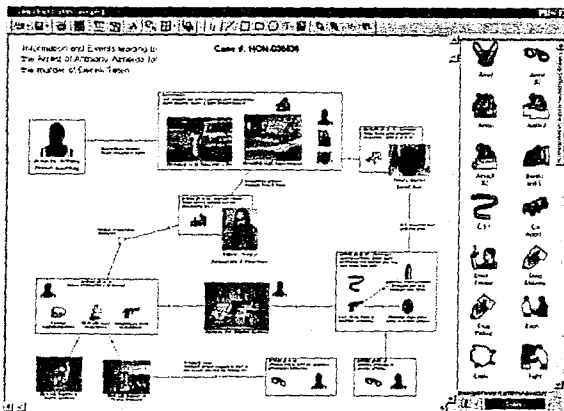
The new Link Charting and Analysis functions in Pen-Link v8.0 surpass those found in dedicated link analysis applications; so much so that many professional intelligence analysts have told us that they no longer need a separate link charting tool. You can generate Link Charts automatically from various database Call reports, Subscriber reports, and Special reports. In addition to the linking performed by the software, you can add links and information manually. A powerful suite of annotation tools makes it easy to augment your charts in a wide variety of ways. The following examples will give you an idea of some of the Link Chart capabilities you will find in Pen-Link v8.0.



Link Chart showing the network of call activity for intercepted call data. Nodes show Phone Number and Subscriber Name. Icons indicate the type of communications device used. Links show call directions and frequencies.



Link Chart derived from the same data as the one shown at left. This one shows Subscriber photos instead of phone icons. Node colors automatically show common calls.



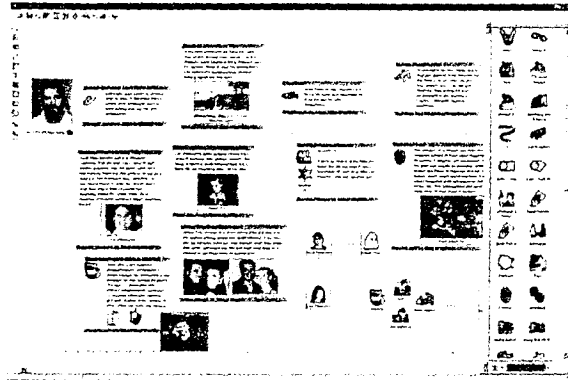
Link chart depicting various events in a homicide investigation. Note the icon bar at the right of the chart area; Pen-Link comes with over 600 professionally drawn icons in 14 categories. You can also create your own icons from any image, add them to existing categories or create your own categories.

Link Chart Features:

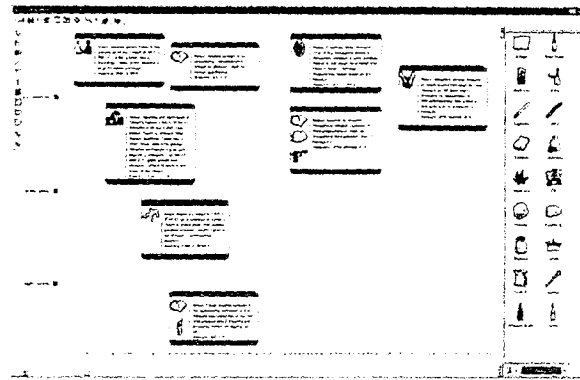
- Call data automatically linked to Subscriber data, including photos, addresses, aliases, etc. (all subscriber fields are available for display).
- Call information displayed includes frequency, direction, origin, destination, dialed numbers
- Numbers common to multiple targets are automatically highlighted.
- Automatic iconic depiction of phone types.
- A variety of annotation tools, including text boxes, lines, arrows, rectangles, rounded corner rectangles, circles, ellipses, photograph insertion, ... and more.
- Easy zooming, panning, and scrolling controls.
- Adjustable snap-to grid.
- Object layering.
- Library of over 600 professionally drawn icons in 14 categories. Create your own icons; add them to existing categories or create your own categories.
- Many more features...

4.5.3 Time Lines

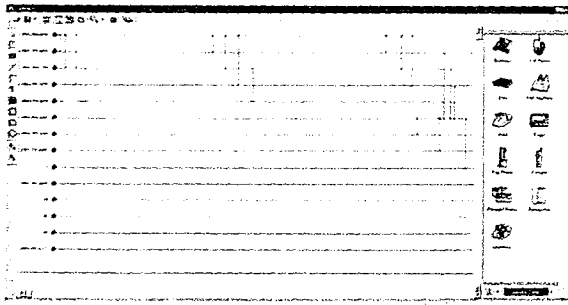
Pen-Link software incorporates two types of Time Line functions; the Standard Timeline and the Linkable Timeline. Standard Timelines can be generated from the Case Events database; they represent a quick, one-click way to show a chronological charts of any set of events in an Event report. Linkable Timelines can be generated from Event reports, Call reports, or by freeform drawing.



Freeform Timeline showing chronological development of events in the Scott Peterson murder case; a case that gained national news media attention in the United States in 2003 and 2004. Peterson was ultimately convicted, in part because of the evidence provided by the wiretaps conducted on his cell phones using Pen-Link systems.



Event Timeline depicting events in a homicide investigation. This chart was generated automatically by data queried from the Events database. Automatically generate court-quality timeline charts, arranged by Case, Event Type, Subject, Investigator, etc.



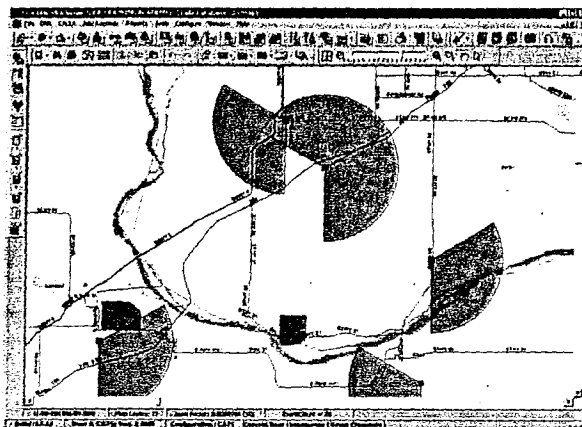
Call Association Timeline showing calls links between numbers in chronological order. This chart reveals a possible repeating temporal pattern among four phones. Horizontal lines represent unique phone numbers in the report, vertical lines represent calls, anchors and arrows show call direction.

Timeline Features:

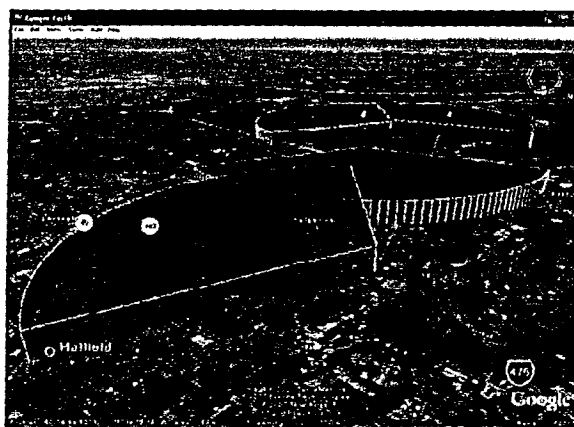
- Generate Timelines from Event reports, Call reports, or by drawing freehand
- Automatically incorporate Notes or Summary text from Event records in the database
- Automatic assignment of Event Type icons
- User-defined colors, node shapes, line styles, etc.
- User can select which fields to include from the database in node bodies, headers, and footers
- Superimpose a Link Chart on your Timeline
- Powerful suite of annotation drawing tools; text boxes, lines, arrows, callouts, arc, shapes, add photographs, etc.
- Easy zooming, panning, and scrolling controls; automatic zoom, manual zoom, zoom to fit.
- Library of over 600 professionally drawn icons in 14 categories. Create your own icons; add them to existing categories or create your own categories.
- Many more features...

4.5.4 GIS Mapping

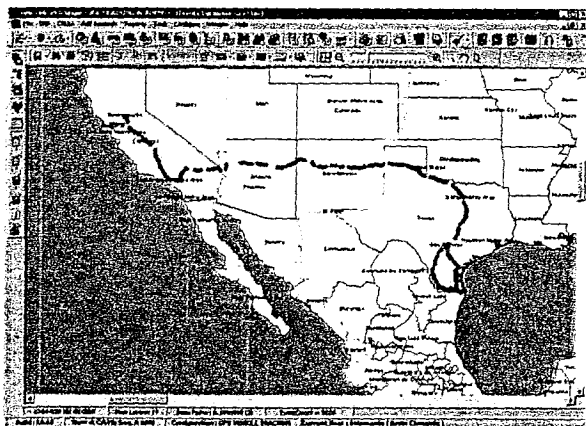
Where available, Geographical Information Systems (GIS) is an optional *add-on* to Pen-Link Software. Pen-Link provides GIS capabilities and will load the data. The mapping layers will need to be acquired locally. With the GIS functions, you can map any record or set of records that contain location information, including Call records, Cell Sites, Subscriber records, and Event records. Pen-Link will map locations based on street addresses or latitude and longitude (so it will work with most GPS Tracking units). Where available, the GIS functions can include center-line street data allowing you to zoom down to surface street level. Pen-Link's GIS capabilities are also compatible with ESRI shape file formats, so you can also load your own departmental data and image layers.



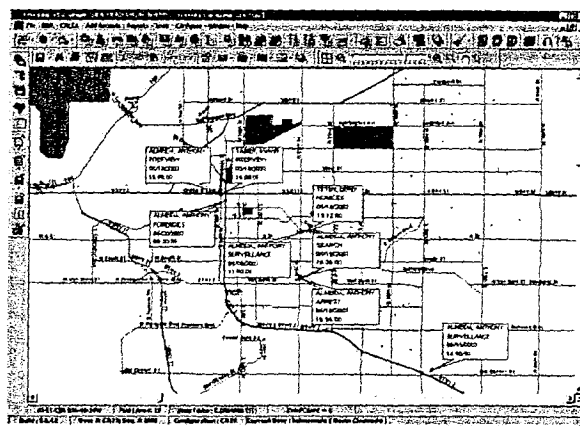
GIS Map showing cell sites and sectors that an intercepted Target occupied while making and receiving several calls, while traveling by automobile.



Pen-Link's Google Earth interface shows the cell sites and sectors that a wireless Target occupied during calls, superimposed on satellite imagery of the city



GIS Map of GPS Tracking data in a Pen-Link Events Database. Data was obtained by loading the output files of a Bloodhound GPS Tracking System. Geospatial plotting reveals the path the subject took, driving his vehicle from Sacramento, CA to various points in Texas and along the Mexican border over a 30-day period.



GIS Map showing the locations of various case-related events stored in the Events Database. In addition to the locations in various parts of the city, each node shows the Name of the subject, the Date and Time of the event, and the Event Type.

5. Exporting Data and Work Product

Pen-Link offers flexible support for outputting data, audio, and work product to other formats, for distributing to other sites, sharing with cooperating agencies, backup, packaging for discovery, exporting to other databases, etc. Data and evidence can be exported to any computer-writable format, including CD, DVD, BD (Blu-ray), MO, UDO, etc. Export formats include:

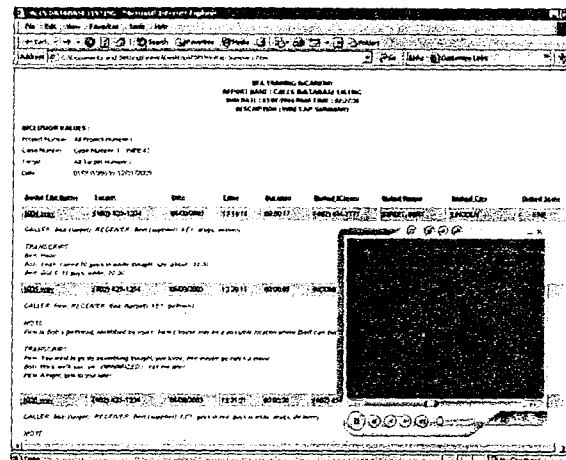
- **ASCII Text files** are an easy means of exchanging data between your Pen-Link Databases and other database systems.
 - Industry-standard .CSV files
 - Columnar ASCII files

- **.RTF (Rich Text Format).** All reports, standard and custom, can be output to industry-standard .RTF files, for use in any Word Processing application. This is a simple way to output data records for agencies that do not have Pen-Link software (e.g., your prosecutors; defense attorneys). The recipient of such an .RTF file can simply open the report in Word, WordPerfect, WordPad, etc.

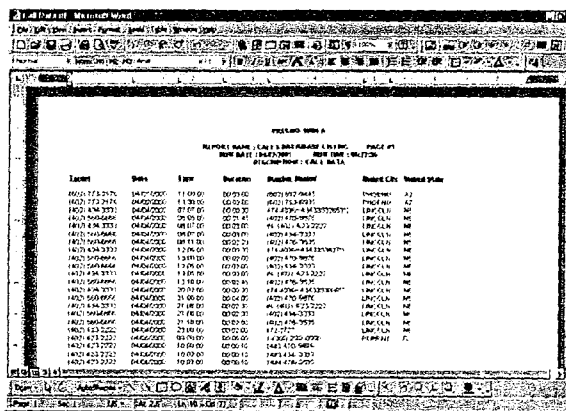
- **.HTML Files.** You can export your reports to .HTML files that can be opened in any web browser. If your report includes the "Audio File Name" column for wiretap records, then the exported field in the .HTML file becomes a standard .HTML hyperlink to the audio file. The result is that, when you open the file in a browser, clicking on an Audio File Name will play the .WAV file recording for that record, using whatever software is registered on that system for .Wav playback (e.g., Windows Media Player). This type of file is ideal for setting up a simple system for courtroom playback if you don't want to have a full installation of Pen-Link software available in court.

- **.XML Files.** XML is an alternative to .HTML, with similar features. The advantage of .XML files is that they can be imported into other analytical database systems, like ACISS.

- **.WAV Export.** You can export .WAV file recordings directly from any Pen-Link Call report. You can export all of the recordings for all records contained in a report, export selected recordings for some of the records in a report, or export tagged segments of a recording from any particular record displayed in a report. This last option would be ideal in situations where portions of a recording must be made available for playback; e.g., to make recordings of news media personnel available for review by the



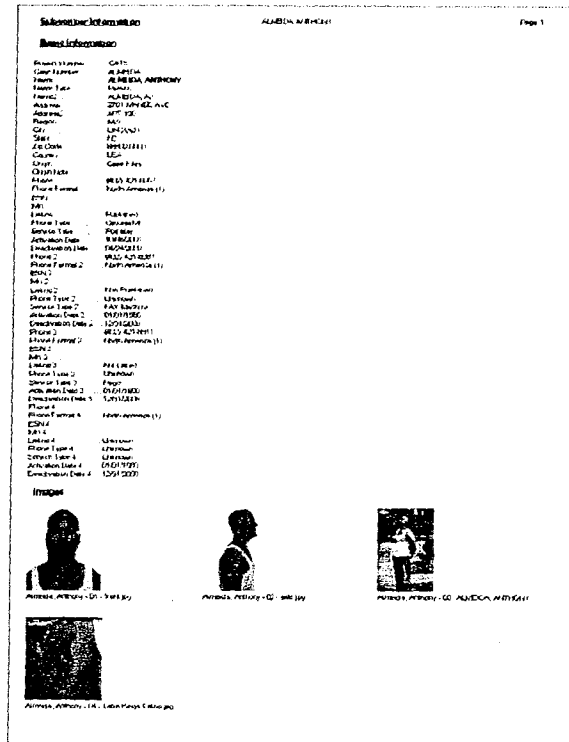
An HTML file output from a Pen-Link call report. The file shows Call Details, Subscriber, Location, and Synopsis for each call record. The Audio File Name is a hyperlink to the .WAV recording; click the link to play the recording (e.g., in Windows Media Player, as shown here).



A Pen-Link Calls Report viewed as an .RTF file in Microsoft

intercepted party when those conversations are part of larger recordings, like checking voicemail.

- ➔ **Export to other Analytical Systems.** Many agencies use multiple applications for intelligence analysis. The exchange of data among multiple systems can sometimes be tedious and time consuming. Pen-Link, Ltd. cooperates with manufacturers of other popular analytical systems to simplify the exchange of data between Pen-Link and other systems, saving the analyst valuable time and effort. We currently offer Call Data export functions for i2's Analyst's Notebook and ACISS.
- ➔ **Pen-Link Archives.** Each database in Pen-Link Software offers an Archive function that will output the data in the database to an external archive file. The archive file is a compressed version of all of the data and content the user wants to export, including links through multiple databases, text (e.g., synopses, transcripts, etc.), photos, videos, audio recordings. The user can archive all records in a database, or only a selected subset of records in the database. The archive represents a convenient, single-file source for all of your Pen-Link data, and is therefore an easy means of backing up your databases, or sharing your databases with other cooperating agencies who also have Pen-Link.
- ➔ **Media.** The Pen-Link system can output to any computer-writable medium, including CD, DVD, BD, MO, UDO, etc. Multiple copies may be burned simultaneously or in series.



Printed Subscriber record, showing personal data and images.

6. Use and Training History

With its long history and widespread use among law enforcement and intelligence agencies, Pen-Link software has thousands of users throughout the United States and a growing user base abroad. In the event that your agency should bring new personnel in from other agencies, the chances are fairly good that at least some of these people will already be familiar with Pen-Link. Some may even be well experienced or expert users of Pen-Link. Such knowledge will only benefit your agency if you number Pen-Link software among the analytical tools that are available to your personnel.

7. Pen-Link, an Industry Standard

Pen-Link has established a large user base over more than 20 years. Pen-Link is accepted as an industry standard by Law Enforcement agencies at all levels; local, city, state, and Federal. Many U. S. Federal Law Enforcement and Intelligence agencies have acquired agency-wide site license contracts for the use of Pen-Link in their operations throughout the United States. These include the DEA, ICE, ATF, U.S. Marshals, FBI, and Secret Service. Pen-Link systems are also becoming more frequently used by U.S. intelligence efforts operating in several other countries. In addition, Pen-Link is used nationwide by hundreds of law enforcement agencies at the county, city, and state levels. No other system of this specific nature has such wide-spread use. With today's intelligence efforts shifting from proprietary intelligence to shared intelligence through interagency cooperative efforts (e.g. Fusion Centers, HIFCAs, ICACs), such wide-spread use of Pen-Link systems can only help to facilitate the sharing of intelligence.