



## Case Management Software for Justice Agencies

### User Interface

Tracker® uses the latest technology to deliver a friendly, powerful, easy to use, and easy to maintain case management system for justice agencies. This document describes our user interface, and compares it with others.

There are numerous ways to create a Graphical User Interface, and all are not created equal. Some are:

- Powerful, but difficult to maintain.
- Easy to maintain, but lack power.
- Attractive but lack common features that many people just assume will be present.
- Able to communicate easily over the Internet, while others are completely unaware of it.

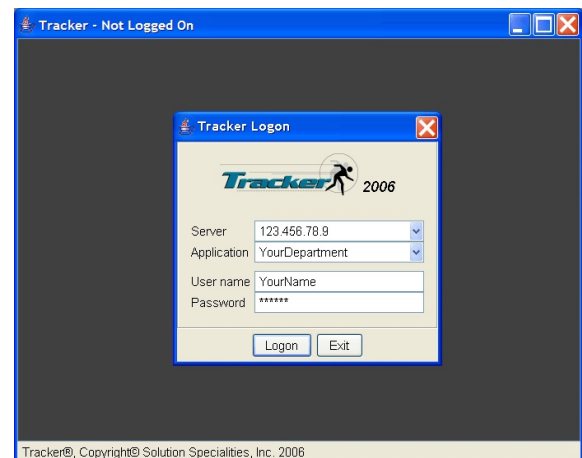
We believe in using the best tool for the job at hand. All user interface technologies fill some need, but all are not appropriate for every situation. For example, if you were running an e-commerce site and wanted anyone in the world to be able to purchase from your site, you would need a system that ran on the lowest common denominator - a browser.

On the other hand, if you are handling large amounts of complex data, in a closed and secure environment, mixing extensive amounts of text with a large amount of historical data, and need a smart, responsive user interface to help you navigate and work as quickly as possible, a browser is not the best choice. Some tasks simply require different tools.

Tracker's user interface is a hybrid system that combines the power and appearance of a Windows-style user interface, with the Centralized Management and Internet capabilities of a browser-based system. It is:

- More powerful than an Internet-based system
- More powerful than a Windows-based system
- Easier to maintain than an Internet-based system
- Requires less network bandwidth than an Internet-based system

Tracker® provides a simple, clean, user interface that is less cluttered and more Internet capable than a browser. Also Tracker® uses standard, Windows-style controls, giving it the same look and feel as your other software, and more power and responsiveness than a browser-based interface. These features minimize training requirements, and maximize ease of use. And you get the type of user interface most users expect.



Tracker® may be used locally, or over the Internet. With appropriate security in place, Internet access may be used to facilitate:

- Remote offices,
- Mobile access,
- On-call access from home, or
- Enable a Circuit-wide case management system

Tracker® starts, stops, looks, and acts like a normal Windows-Based program. The Logon screen shown above provides a simple way to log into Tracker® from any location in the world, with the proper security measures in place.

*But, Tracker® is not a standard Windows program!* It is built with Java, the world-wide defacto standard for enterprise level systems, and it is more Internet capable than any other development environment. It runs in a virtual environment on Windows, Unix, Linux, Apple, and any other operating system that has an appropriate Java Runtime Environment. It is central to the operation of companies like Oracle, IBM and Google, and it is found in consumer products ranging from Smart Phones to Blue Ray disk players. *Java is the most widely used programming platform in the world.*

We like Java because it also provides a layer of insulation between Tracker and the ever changing Windows platform. This version of Tracker runs unchanged on Windows 98/ME/NT/2000/XP/Vista and Windows 7.

- Standard Windows programs cannot do this.
- Internet-based systems cannot do this.

**Windows-based systems** are popular with users because they are more powerful, friendlier, easier to use, and more consistent in operation than browser-based systems. However, Windows-based systems have become less popular in large business environments because they are very labor-intensive to maintain -- each update needs to be installed on each workstation.

**Internet-based systems (browsers)** lack the power, consistency, and amenities of a Windows-based system, but they are easier to maintain. If you need to make a change to an Internet-based system, you make the change on the server, and do not have to install it on each workstation. This makes these systems more popular than standard Windows programs in large business environments. The trade-off is that changes are easier to deploy, but the programming is more complex, and you lose features, desktop processing power, and consistency with other Windows-based software.

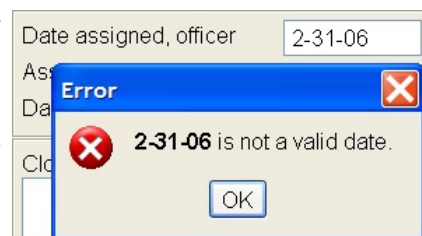
**Tracker's User Interface** provides the advantages of both systems, without the drawbacks. Like a browser-based system, Tracker® is updated at the server, not at the workstation, and it uses the Internet as needed to perform its work. However, unlike a browser, Tracker® provides a full-featured, Windows-style Graphical User Interface, that is more responsive, more powerful, more flexible, and has access to other resources on the workstation. And it does all of this without exposing you to the security problems of browsers, and the inconsistencies and security risks of scripting languages that necessarily used by Internet-Based systems.

The screen images below are actual components from Tracker. They look and act like normal Windows components; however, they are stored and managed centrally on the server, as you would expect in a browser-based system. A single change on the server changes components like these for all users, without having to install the changes on each workstation.

The screenshot shows the 'Tracker - IL' application window. The menu bar includes File, Edit, Adult, Juvenile, State, System, Window, and Help. The toolbar contains icons for file operations and navigation. The main window is titled 'Caseload' and has tabs for Description, Classification, Conditions and Plans, Chronological Log, and Case Termination. The 'Description' tab is active, showing a form with fields for Client, Date ordered, type, Date received, agency, Transfired from/to agency, Dates, Caseworkers, Units, Sent/Dis, Court Numbers, Most Serious Offenses, Dispositions, Term Dat..., Scheduled term date, Most serious crime, Case type, and Comments & conditions.

This style of user interface simply does more than browsers, providing the user with a richer experience. Browsers were designed to view static information, not to perform data entry. Therefore, they have no built-in ability to control data entry, and lack many sophisticated options that are assumed to be present in a typical Windows-style application.

For example, a standard browser cannot verify that a date is valid, or display a simple error message. Instead, the browser is dependent on the server to do this type of work. After the user submits the page for processing, the server checks the date. If it finds an error, it must send a new page to the browser advising of the problem. In contrast, a smart, Windows-style interface can immediately stop the user and display an error message. Its faster, and friendlier.



It is possible for browsers to use scripting languages to provide similar functionality, but this approach is susceptible to security problems, and well as compatibility issues from one scripting version to the next, or one browser to the next.

Tracker provides an extremely capable and secure approach that is not dependent on a browser and not exposed to the security risks of scripting languages or browsers.

A smart user interface greatly enhances the user's experience, and simplifies data entry. One such feature in Tracker® is Smart Code entry. In the example to the right, the user entered "new" in the State prompt and pressed Tab or Enter. Tracker®'s Smart Code feature determined it was not a valid State, then provided a drop down list containing only valid, matching options.

State	new	Zip	
County	New Hampshire		
Ownership	New Jersey		
	New Mexico		
Directns	New York		

The Java tool set allows us to be creative, and design systems that are easier to use. And, there are many such conveniences in Tracker®.

Many people do not realize that browsers were not designed for data entry. When the World-Wide-Web became popular many developers tried to adapt the browser to use for data entry purposes. While browser-based data entry is possible, it is an incomplete and cumbersome environment, in comparison to Windows.

For example, a common data entry mechanism in a Windows application is an Edit Table control. As simple and useful as this is, browsers have no comparable mechanism. Browser-based systems will attempt to mimic this feature, but the work-arounds are never as direct or as smart as this basic Windows-style control.

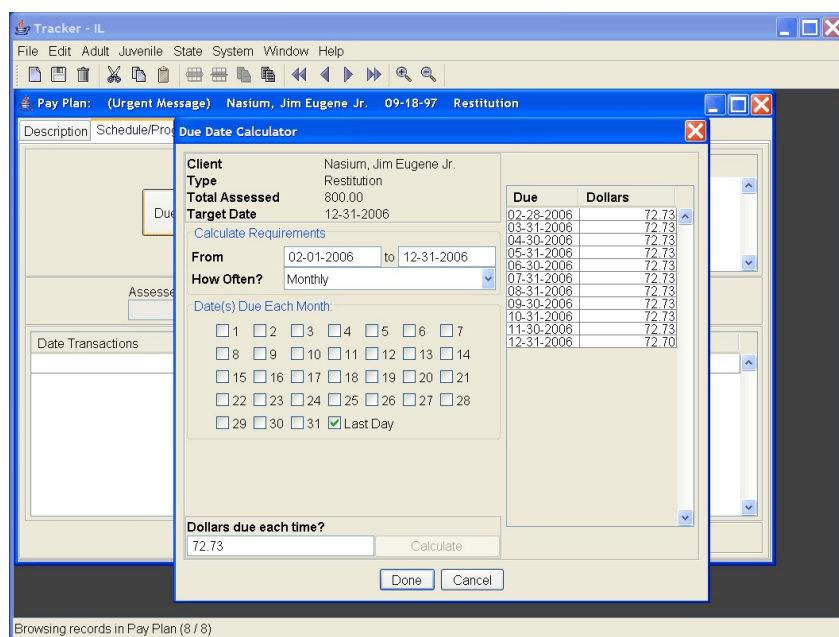
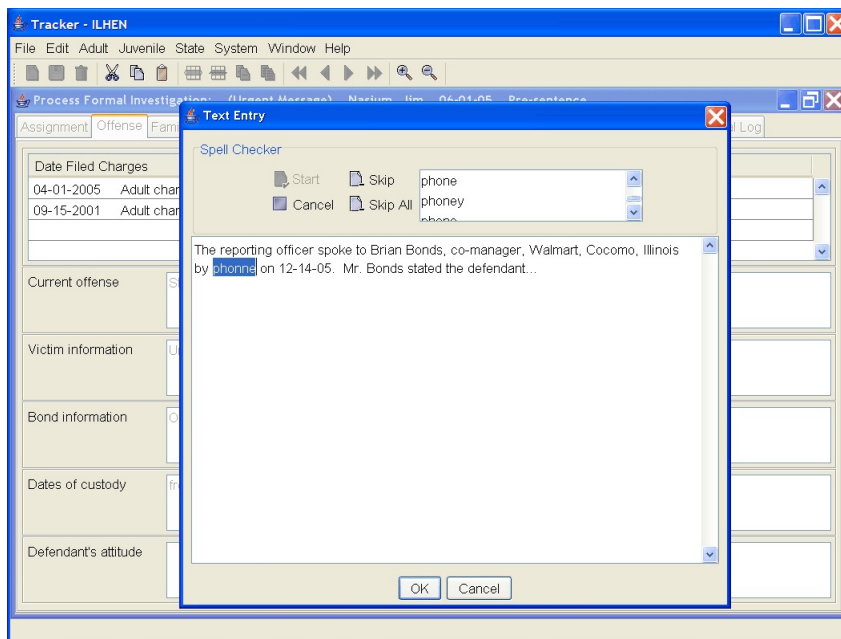
Phones	Notes
(847) 456-7890	Home phone
(999) 999-9999	Cell phone
(123) 654-9870	Mom's home

In contrast, Tracker® provides you with a fully functional edit table that validates dates, allows you to enter "smart" codes from a drop down list, enter notes with integrated spell checking, resize and reorder columns, all while keeping things sorted chronologically, automatically. Our user interface is smarter, more capable, and easier to use than a browser-based user interface.

Start Dates	Stop Dates	Gangs	Statuses	Gang Notes
01-01-1979	06-01-1997	Sharks	Fringe member	
01-01-1984	06-01-1999	Jets	Not involved	
01-01-2000		Sharks	Insufficient documentation	
			Gang at-risk (wannabe)	
			Fringe member	
			Regular member	
			Hard core member	
			Leader	

The image to the right illustrates another convenience feature found in Tracker®, our expanded text editor.

You may, of course, enter text directly into any text field in the system. However, for those situations where you need to type a lot, and the screen prompt is relatively small, a single keystroke or mouse click will display a large, resize-able editing window, with an integrated spell checker:



Another example of a convenience feature is our powerful Due Date Calculator.

This mechanism may be used to calculate, schedule, reschedule, and monitor any obligation or expectation.

For example, it can be used to schedule and monitor treatment, assist with financial collections, manage community service, and so on. It can help you manage any obligation that can be scheduled in advance.

And, Tracker's floating Tool Bar allows you to perform many common functions with a single click. For example, you can increase or decrease the size of the system fonts, navigate through a browse list, add or remove rows from an Edit Table, or even fill the entire window with the contents of the previous record...



User interfaces built with browser-based technology simply cannot provide the same level of power and sophistication as Tracker's user interface.

From a very general point of view, data entry screens look like you would expect them to look in a Windows-based system...

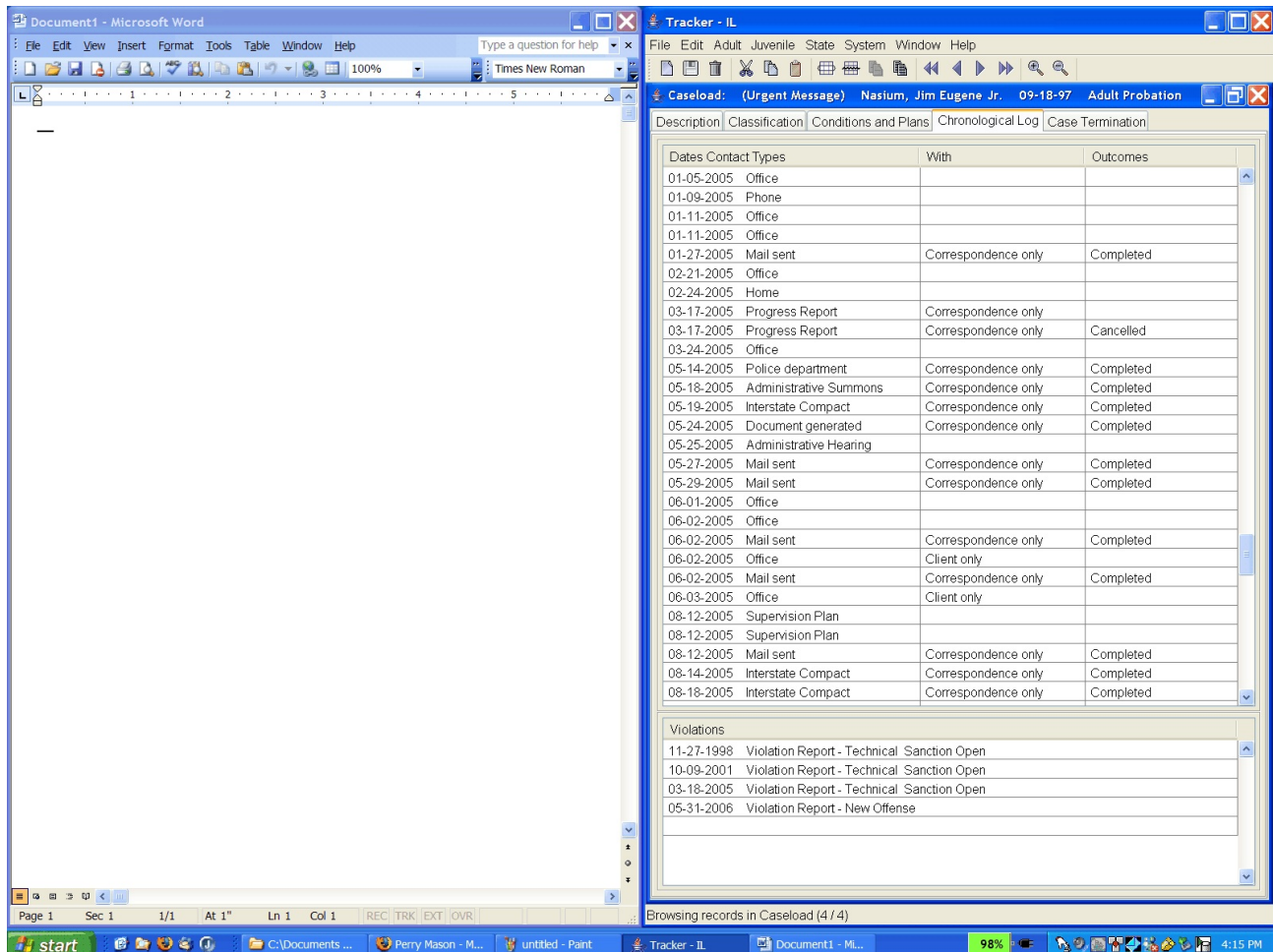
The screenshot displays the Tracker - ILHEN application window. The title bar reads 'Tracker - ILHEN'. The menu bar includes 'File', 'Edit', 'Adult', 'Juvenile', 'State', 'System', 'Window', and 'Help'. The toolbar contains various icons for file operations and navigation. The main window title is 'Process Formal Investigation: (Urgent Message) Nasium, Jim 06-01-05 Pre-sentence'. Below this, there are tabs for 'Assignment', 'Offense', 'Family/Residence', 'Employment/Education', 'Offender Description', 'Medical', 'Summary', and 'Chronological Log'. The 'Assignment' tab is active, showing a form with the following fields:

Client	Nasium, Jim		
Date opened, type	06-01-2005	Pre-sentence	
Case type	Felony		
Judge	Bean, Judge Roy		
Prosecutor	Berger, Hamilton		
Defense	Mason, Perry		
Dt assgnd, offcr, unit	06-01-2005	Reese, Daniel	Adult Probation
Assigned department	Henry County Court Services		
For court date, time	06-21-2005	11:00AM	
Target filing date	06-17-2005		
Officer target date	06-15-2005		
Date filed	06-19-2005		

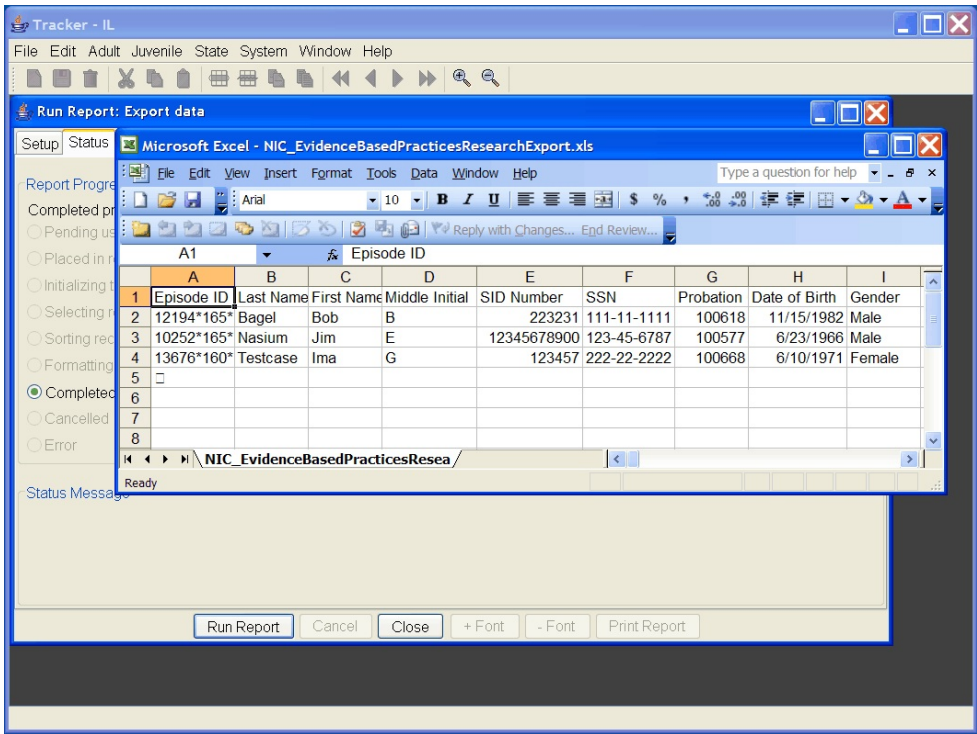
Below the form is a 'Processing comments' section with a large text area. At the bottom of the window, a status bar indicates 'Browsing records in Process Formal Investigation (1 / 2)'.



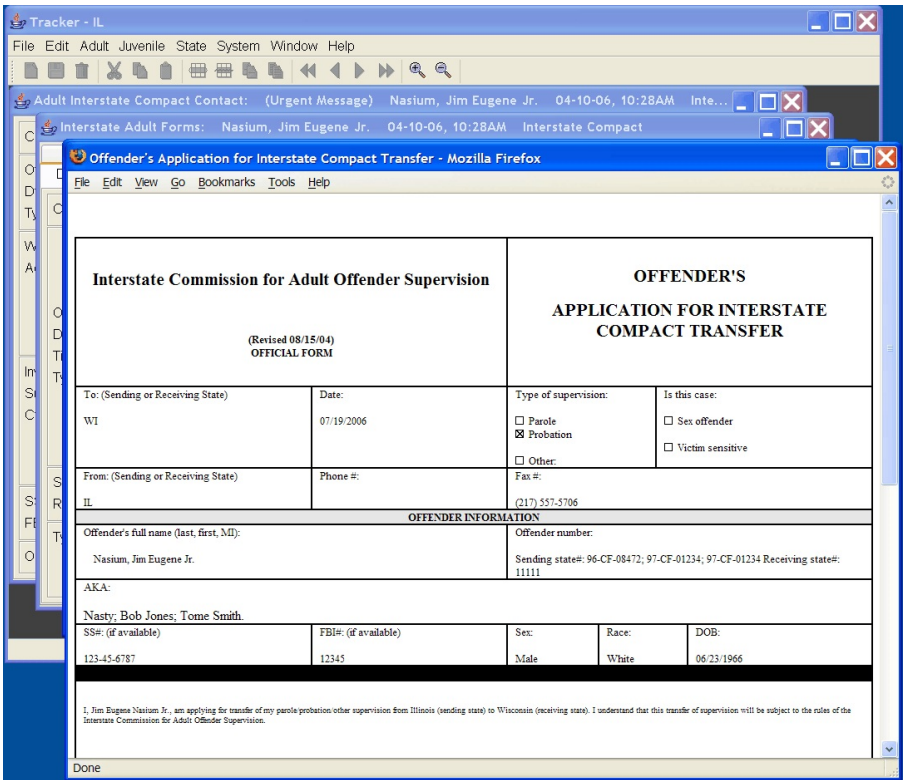
However, Tracker's screens are uncommonly flexible and adaptable. Tracker uses dynamic screen layouts that resize and reshape the window contents as needed. This behavior is more like a browser than a typical Windows-based data entry screen. In the example below, Word Processing appears on the left, and Tracker on the right. Tracker automatically adjusts the size and shape of its controls as the window is resized.



And, unlike browsers, however, Tracker® will have access to other resources on the workstation. For example, it is easy to create reports that interact with other desktop applications. This example shows a Tracker report placed automatically in an Excel spreadsheet:



Tracker's Rich Client can interact with most applications on your desktop, even your browser...





Many systems require you to use an external word processor for creating correspondence and other documents. While most users are familiar with word processing, *this approach introduces a gaping hole in data quality for database systems that rely on word processing for document generation*. It is too easy to display a document, allow users to make changes to the finished document, without those changes migrating back to the database. This approach is easy for developers to implement, but it guarantees that your database will not be complete and accurate. It is a flawed approach for any organization that expects its database to be accurate and up to date.

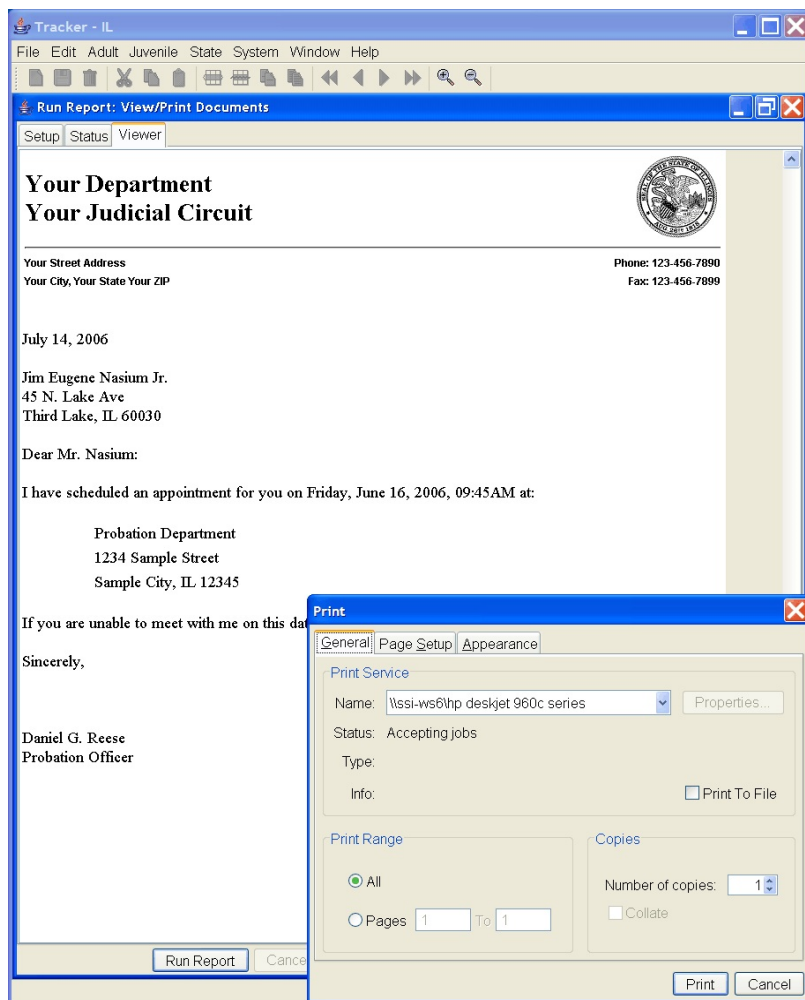
In contrast, Tracker® has an integrated merge processor that handles routine correspondence and document generation for you. It is part of the Tracker® environment, and interacts with the database as needed to construct simple or complex documents. This provides an automatic, consistent, industry standard way to manage document generation, and allows us to provide a higher level of automation and control than can be obtained otherwise.

When you need to generate a document, simply select the form from a list, and the system will construct the document using data from the database. There is no need to cut and paste. If and when you print the document, the system detects this operation and can automatically enter a case note for you documenting the correspondence. If you need to make a correction to the document, simply click on the data entry window, correct the data, and click the button to regenerate the document. Your database and your documents are always in sync!

You may generate individual documents with Tracker®, as shown to the right, or use a batch process to prepare a large mailing, generating and documenting thousands of letters in a single operation.

For example, you might use this mechanism to send overdue notices to clients with financial obligations.

Many standard forms are included with Tracker. You may add new ones to the system, or modify those provided by us.



Tracker's ability to generate different types of documents is extensive and powerful. For example, Tracker may be used to create complex Pre-Sentence Investigation reports. In doing so, it draws relevant information directly from the database, and assembles the document using a pre-defined format. Of course you may modify these report formats, use different ones for different situations, and add new ones of your own at any time.

You have complete control over the appearance of documents, and there are many advanced features. For example, you can specify conditional page breaks, to make sure key sections of a document are not split up. The page breaks would appear (or not) automatically based on the volume of content in your document and the placement of that content on a given page. You can also establish or modify a common look and feel for all of your documents with industry standard Style Sheets.

The screenshot displays the Tracker - ILHEN application window. The title bar reads "Tracker - ILHEN". The menu bar includes "File", "Edit", "Adult", "Juvenile", "State", "System", "Window", and "Help". The toolbar contains various icons for file operations and navigation. A sub-window titled "Run Report: Print the Investigation Report" is active, showing a report for the "Probation & Court Services Department". The report is titled "PRE-SENTENCE INVESTIGATION" and dated "June 19, 2005".

**Probation & Court Services Department**  
**PRE-SENTENCE INVESTIGATION**  
**June 19, 2005**

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**Name:** Jim Nasium  
**A.K.A.:** Nasty.  
**Address:** 3857 Anystreet  
Anywhere, IL 12345  
**Home Phone:** (123) 456-7890

**Social Security:** 111-11-1111  
**Client:** 117506  
**FBI:** 2222222  
**SID:** 3876571  
**Driver's License:** IL, N200 1234 5678

**Date of Birth:** 08-22-65 (39 years of age)  
**Place of Birth:** Anywhere, IL  
**U.S. Citizen:** Yes

**PHYSICAL DESCRIPTION**

<b>Sex:</b> Male	<b>Height:</b> 5 11	<b>Hair:</b> Brown
<b>Race:</b> White	<b>Weight:</b> 180	<b>Eyes:</b> Hazel
<b>Build:</b> Medium		
<b>Marks:</b> Tattoo on right arm of Tattoo from Love Boat		

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**INVESTIGATION**

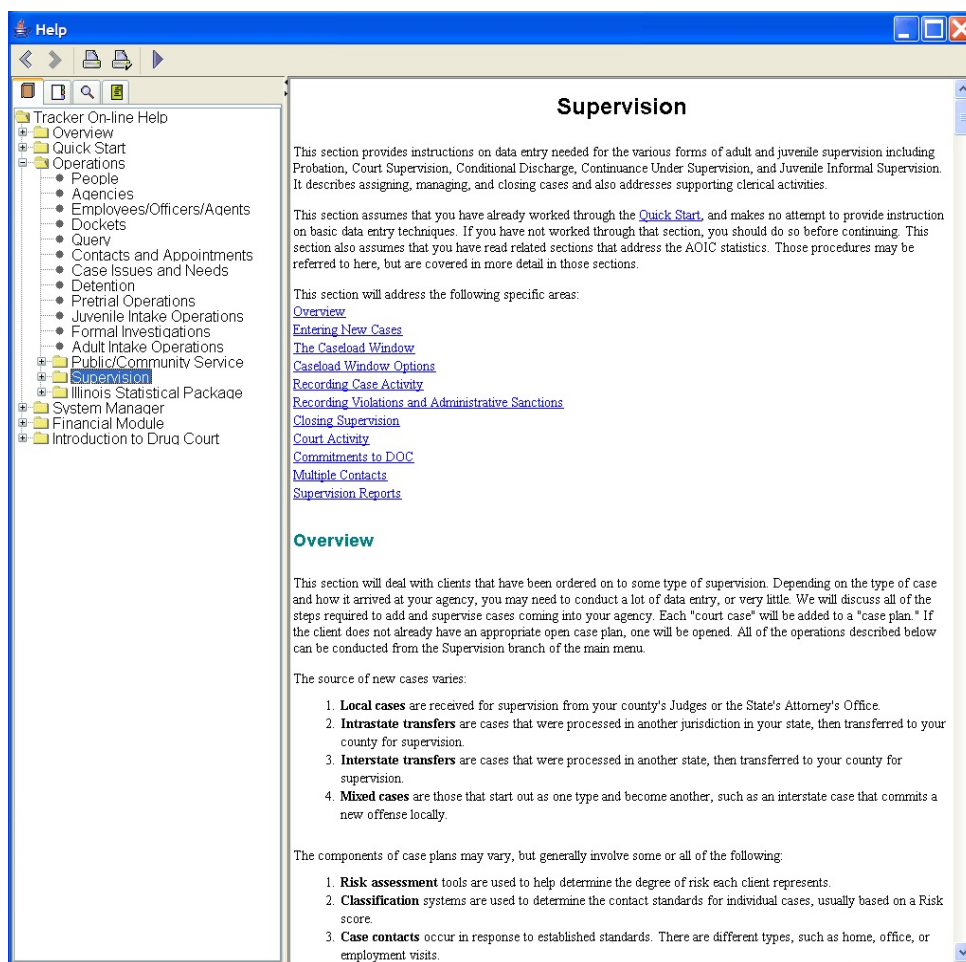
<b>Date Ordered:</b> 06-01-05	<b>Judge:</b> Judge Roy Bean
<b>Sentencing Date:</b> 06-21-05	<b>Prosecutor:</b> Hamilton Berger
<b>PSI Interview Date:</b>	<b>Defense:</b> Perry Mason
<b>Custody Dates:</b> from 3-31-05 to 4-25-05	
<b>Bond Information:</b> Out on \$25,000 case bond	

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<b>Case Numbers</b>	<b>Offenses</b>
05-CF-02853	Theft Control Intent \$300 < 10k (Attempted)
01-CM-23456	Disorderly Conduct

At the bottom of the window are buttons: "Run Report", "Cancel", "Close", "+ Font", "- Font", and "Print Report".

The user manuals are available on-line, directly from the menu system. The Help information, of course, is stored and maintained on the server, where a single change or addition can update the manual for all users:



Tracker has many, many more features and benefits than those described here. This document is intended to introduce you to the user interface, and illustrate key differences between systems based on Windows, Browsers, and the Java technology used by Tracker®.

**Internet-based systems** are necessary when you do not have control over the user's computing environment. As stated earlier, a browser-based system may be the only option for creating an e-commerce site. But this does not mean it is the best tool for every job.

**Tracker®**, on the other hand, uses Java to create a smart, dynamic and flexible user interface that is better suited for working with the complex information found in the justice environment. The user interface was designed and optimized to meet the complex requirements of this setting. It is more capable than Internet-based systems, more secure, easier to maintain, and less likely to be impacted by changes to Microsoft Windows. It is the right tool for this job.