

Incident management from every angle.™

# Analysis Expert User Training Guide

Perspective by PPM 2000<sup>™</sup>

Version 3.3

Printed July 2013

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## Contents

Welcome to Perspective's Analysis Expert	2
Using This Guide	3
What to Know Before You Begin This Guide	3
Navigating the User Interface	3
Design and Process a Query	6
Plan Your Query	6
Add a New Query	6
Select Fields	3
Add Criteria	6
Work with Query Results	9
View Query Results	9
Search for Specific Data in Query Results	
Perform Calculations on Query Results	
View Details Regarding a Record	
Print Query Results	
Export Query Results to Excel	14
Chart Query Results	
Chart Wizard	
Analyze and Chart Child Data	
Contact Information	
Consulting & Training	
Technical Support	
PPM 2000	
Appendix A: Criteria Operators	
Appendix B: Boolean Logic Statements	
Appendix C: Query Examples	41
I. Monthly Incident Report by Class and Site	
II. "Open" Incidents by Owner Workgroup	
III. Incidents with Losses over \$1000 by Year	
IV. Male Suspects in Person Records	

V. Pe	ersons with "Wanted" and "Violent" Flags	51
VI. Tr	respass Information	53
VII. Ca	ases with Start Dates Over 60 Days Ago	55
VIII. Ve	ehicles with Partial License Plate Numbers	57
IX. A	Specific Organizations Type	59
X. Ite	ems Involved in an Incident	61
XI. Da	ata Entry Management	64
XII. Ac	ctivity Calls vs. Call Responses by User	66
I. Ve	ehicle Associated Losses	68
Glossary		71
Index		78

## Welcome to Perspective's Analysis Expert

Welcome to Analysis Expert (AE), an integral analytical component of Perspective by PPM 2000<sup>™</sup>. Analysis Expert is an internal search engine that scans the data in all Activity, Incident, Case (Perspective Premium only), Item, Person, Organization, and Vehicle records, and returns results that meet defined search requirements. Use Analysis Expert to create a query, and then turn your query's results into a spreadsheet, a chart, a printed grid, or a report.

Note: Only users with access to Analysis Expert can view and use this component. Search results reflect assigned user access rights and privileges.

To access Analysis Expert, log on to Perspective and click **Analysis Expert** in the Navigation pane.

## Using This Guide

Using this guide is straightforward; however, there may be some terms included that you are not familiar with. There are a few helpful tips you should know about before beginning the Perspective Analysis Expert Training Guide.

This chapter is designed to help you in the following ways:

- Get you familiar with this guide and how it is structured.
- Learn how to access Perspective's Analysis Expert.
- Know where to look for help if you are confused by anything you come across while working with this guide.
- Teach you how to navigate the different sections of Analysis Expert.

### What to Know Before You Begin This Guide

- 1. To access Analysis Expert, log on to Perspective and click Analysis Expert in the Navigation pane.
- 2. Understanding Boolean logic statements will help you significantly when working in AE. Information about Boolean logic statements can be found beginning on page 38.
- 3. You can find a variety of task-oriented examples in Appendix C, beginning on page 41.
- 4. Many of the bolded words found throughout this guide can be found in the Glossary, beginning on page 71.

## Navigating the User Interface

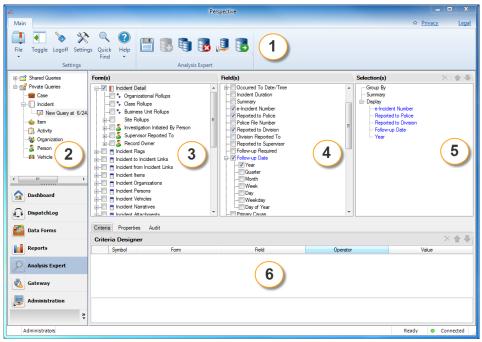
Analysis Expert's interface transforms according to the stages of query building, by which it evolves in two separate screens: the initial **query designer** window and the subsequent **query results** window.

The query designer window of Analysis Expert enables you to set specific query criteria, grouping, and search options, and is aimed at producing optimal query results. It is divided into the following six sections (Figure 1.1):

- 1. **Ribbon:** In Analysis Expert, the Ribbon contains an additional set of buttons that perform saving, adding, cloning, deletion, sharing, and the execution of queries.
- 2. **Navigation pane:** Arranges queries that you create according to their access options (i.e., Shared Queries or Private Queries) and the various record entities (i.e., Case, Incident, Item, Organization, Person, and Vehicle). By default, all new queries are Private Queries,

and they are only available to the user who created them. In order to make a saved query available to users across your organization, you must share it.

- 3. **Form(s) pane:** The forms available for querying depends on the record entity selected in the Navigation pane. Once you select a form in the Form(s) pane, the corresponding fields will be checked in the Field(s) pane and recorded in the Selection(s) pane.
- 4. **Field(s) pane:** The specific fields that can be selected for display in the query results depends on the form selected in the Form(s) pane. The selected fields will automatically populate the Selection(s) pane under Display. This enables sorting and grouping of the query results into the Selection(s) pane and Criteria Designer.
- 5. **Selection(s) pane:** Displays the selected query criteria, as well as grouping and display options for the query results.
- 6. **Criteria Designer:** Contains three tabs (Criteria, Properties, and Audit) that control the process of query building.
  - The Criteria tab displays the fields that were selected as search criteria from the Field(s) pane and enables settings of their search values.
  - The Properties tab displays the text expression of the criteria selected under the Criteria tab.



• The Audit tab tracks the history of the runs of the query.

Figure 1.1: The six sections of Perspective's Analysis Expert

Some functions of the Ribbon are accessible directly from the right-click menu of a record entry or a query. Specifically, you may **add**, **clone**, **share**, **remove**, and **execute** a query by right-clicking a record entry or a query, and selecting the relevant option in the menu.

## Design and Process a Query

## Plan Your Query

Analysis Expert has the ability to search almost any field inside Perspective's database. It is important to plan your query before you run it, as Perspective has so much information to sift through. Planning your query is essential to best determine what fields to select and analyze, which will give you the narrowest results possible.

Consider the following questions when designing a query:

- 1. What information do I want to analyze?
- 2. What is the purpose of analyzing this information? In other words, am I determining *if* some data exists, *how many* entities of the data exist, or do I want a *list* of the data?
- 3. How do I intend to process the information once it has been collected? Do I plan to chart it, compare it, or leave it raw?
- 4. Am I trying to put too much information in my query? Do I need to break it up into two (or more) queries?
- 5. Am I trying to compare information with two different dates? If so, will I need to create two different queries?

Moving forward in this guide, it is important to understand the difference between **parent records** and **child records**:

- A **parent record** refers to the basic data that are recorded on Perspective's main forms, or that correspond to only one referent. Examples of parent data include, but are not limited to, an incident's Class, Site, Business Unit, Reported Date/Time, Status, Created by User, etc.
- A child record refers to data that are recorded on Perspective's subforms, or that could potentially correspond to more than one referent. Examples of child data include information about involved Persons, involved Vehicles, and so on. The majority of queries built in AE will be based on the data contained within parent records.

### Add a New Query

Please refer to Figure 2.1 for an example of the following steps.

- 1. Click the Add button 🛂 on the Ribbon. A Create New Query dialog box will open.
- 2. From the **Type** lookup list, choose the record entity you would like AE to search (e.g., Incident, Person).
- 3. Enter a title for the query in the **Name** field.

- By default, the system will name the new query according to the template <New Query at [current date] [current time]> (e.g., <New Query at 15/12/2010 2:23:42 PM>).
- 4. In the **Description** text box, identify the type of query and/or its purpose.

🔁 Create New Query
Type Incident
Name
<my incident="" query=""></my>
Description
Use this query to view incident Status, Access Level, Class, Category and Site.
Add Cancel

Figure 2.1: Create New Query box

- 5. Click **Add**. The Form(s) pane will automatically populate with the names of the selected record entity's respective forms (e.g., Incident Details, Incident Flags, Incident Losses).
  - By default, the first form will be highlighted and its associated fields will be displayed in the Field(s) pane.

## Select Fields

- 1. Expand the nodes in the Form(s) pane, by clicking the plus sign ⊞, to see all of the contained subforms.
- 2. To view a form or subform's available fields in the Field(s) pane, click once on the form or subform in the Form(s) pane.
- 3. Check the boxes of the fields you want to have displayed in your query's results. The field names will automatically populate the **Selection(s)** pane under **Display** (Figure 2.2).
  - To select all the fields in a particular form or subform, click the form or subform's checkbox in the Form(s) pane.

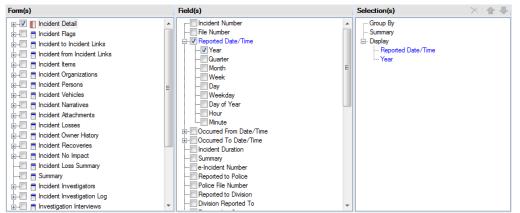


Figure 2.2: Incident Details form expanded, showing the contained subform fields

#### Example:

Build a query to look at the **Total** and **Net losses** of Incidents by **Year**, **Class**, **Category**, and **Site**.

- a. In the Form(s) pane, click on the Incident Detail form (Figure 2.3).
- b. In the Field(s) pane, check Incident Number.
- c. In the Field(s) pane, expand Reported Date/Time and check Year.

Form(s)	Field(s)	Selection(s)
Constructional Rollups     Class Rollups     Susiness Unit Rollups     Site Rollups     Supervisor Reported To     Incident Flags     Incident Inks     Incident Crganizations     Incident Organizations     Incident Vehicles     Incident Vehicles     Incident Narratives	Incident Number Patient Number Patient Number Reported Date/Time Vear Guarter Month Week Day Veekday DayofYear Hour Minute Occurred To Date/Time Incident Duration Summary	Group By Display Uncident Number Year

Figure 2.3: Query-Incident Number and Reported Date/Time

- d. In the **Form(s)** pane, expand **Incident Detail** and click on the **Class Rollups** form (Figure 2.4).
- e. In the Field(s) pane, check Class and Category.

Form(s)	Field(s)	Selection(s)
Incident Detail     Crganizational Rollups     Crganizational Rollups     Susiness Unit Rollups     Site Rollups     Site Rollups     Supervisor Reported To     S Record Owner     Incident Flags     Incident Flags     Incident Condent Links     Incident Condent Links     Incident Persons     Incident Versions     Incident Versions     Incident Narratives	Class Rollup Name Class Category Subcategory Class Code Consequence Site Loss Value Threshold	Group By Summary Display - Incident Number - Year - Class - Category

Figure 2.4: Query—Class and Category

- f. In the Form(s) pane, click on the Site Rollups form (Figure 2.5).
- g. In the Field(s) pane, check Site.

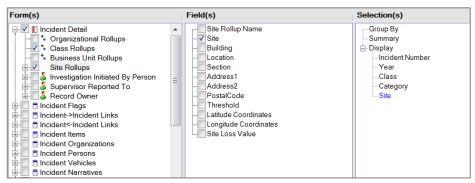


Figure 2.5: Query—Site

- h. In the Form(s) pane, click on the Incident Loss Summary form (Figure 2.6).
- i. In the Field(s) pane, check Total Loss and Net Loss.

Form(s)	Field(s)	Selection(s)
Incident Vehicles     Incident Narratives     Incident Narratives     Incident Losses     Incident Losses     Incident Recoveries     Incident No Impact     Incident Loss Summary     Incident Investigation Log     Incident Investigation Log     Incident Investigation Summaries     Incident Investigation Summaries     Incident Investigation Summaries     Incident Investigation Summaries     Incident Investigation Summaries	Total Exposure Total Averted V Total Loss Total Recoveries Net Loss	Group By Summary Display Incident Number - Year - Class - Category - Site - Total Loss Net Loss

Figure 2.6: Query—Total Loss and Net Loss

- 4. Click **Save** on the Ribbon to store the query for access at a later date, or click Execute to run the query immediately.
  - Executing the query at this point gives you a list of all corresponding records in Perspective that you have access to. The query results open in a separate window.

## Add Criteria

- If you want to search within a portion of data, set the parameters of your search by rightclicking the parameters' fields in the **Field(s)** pane, and selecting the **Search By** option (Figure 2.7).
  - The selected field will appear in the Criteria Designer pane below. (If you do not want the field to be displayed in the query's results, do not select the checkbox beside the field's name in the Field(s) pane.)
- 2. To specify a **comparison value** for the selected parameter, select the relevant **Operator** from the lookup list (Figure 2.8).
  - Depending on the type of parameter, you will have an option of either entering the comparison value in the Value field, or selecting it from the lookup list. Add as many parameters for your data sample as you need.

Note: Available operators and their functions are listed in Appendix A: Criteria Operators (pg. 38).

If you would like to search between two values (e.g., a date range), you will need to create two criteria—one using the operator *"greater than or equal to"* (>=), and the other using *"less than or equal to"* (<=) (*Figure 2.8*).

#### Example:

Adjust the search criteria so that the query results display only the incidents with a net loss **over \$100** that took place between **2011** and **2012**.

Please refer to Figure 2.7 and 2.8 for an example of the following steps.

a. Right-click Year in the Field(s) pane and select Search By.

Field(s)		
File Number		<b>^</b>
Qua 🖋	Search By Group By	E
Day Weckway	Cancel	
		-

Figure 2.7: Search within a portion of data by right-clicking and selecting Search By

- b. In the **Criteria Designer** pane, against the **Year** parameter (**A**), select the *"greater than or equal to"* (>=) **Operator** and set its **Value** to 2011.
- c. Right-click the Year field in the Field(s) pane again and select Search By.
- d. In the **Criteria Designer** pane, against the **Year** parameter (**B**), select the *"less than or equal to"* (<=) **Operator** and set its **Value** to 2012.
- e. Right-click the Net Loss field in the Field(s) pane and select Search By.
- f. In the **Criteria Designer** pane, against the **Net Loss** parameter (**C**), select the "greater than or equal to" (>=) **Operator** and set its **Value** to 100.

iteria Desig	ner			× 🛧 🖡
Symbol	Form	Field	Operator	Value
A	Incident Detail	Year	>=	2011
В	Incident Detail	Year	<=	2012
С	Incident Loss Summary	Net Loss	>=	100

Figure 2.8: Criteria Designer, where you set your Form and Field Operators and Values

- 3. As you continue to specify the parameters, the system will edit the corresponding **Boolean logic statement** at the bottom of the **Criteria Designer** pane.
  - By default, Perspective searches for data that meets both criteria A AND criteria B, and so on. If you want to only generate results that meet either criteria A OR criteria B, or some variation thereof, you must manually modify the statement (in the bottom of the Criteria Designer) to reflect this. It is best to modify the statement after you have entered all your data parameters first.

Note: Deleting a parameter symbol (e.g., A, B, C, etc.) from the statement will not remove the corresponding parameter from the list. However, if a parameter is deleted from the statement, it will not appear in the executed query results. Ultimately, the Boolean logic statement contains the defining formula for your data sample, while the list of parameters provides the parameters you may search by, and serves as a reference point for the statement.

#### Example:

In addition to the previous criteria, adjust the Boolean logic statement so that the query results display only the incidents from **Central Campus** *or* **Valley Center** locations.

- a. Right-click the Site field in the Field(s) pane and select Search By.
- b. In the **Criteria Designer** pane, against the **Site** parameter (**D**), select the "equal" (=) **Operator** and set its **Value** to Central.
- c. Right-click the Site field in the Field(s) pane again, and select Search By.
- d. In the Criteria Designer pane, against the Site parameter (E), select the "equal" (=)
   Operator and set its Value to West Valley.
- e. In the Boolean logic statement text field (bottom of the Criteria Designer), edit the displayed statement to read as "((A AND B AND C) AND (**D OR E**))".

Symbol	Form	Field	Operator	Value
Α	Incident Detail	Year	>=	2011
В	Incident Detail	Year	<=	2012
С	Incident Loss Summary	Net Loss	>=	100
D	Site Rollups	Site	=	Central Campus
E	Site Rollups	Site	-	Valley Center

Figure 2.9: Criteria Designer and the Boolean logic statement (bottom left)

4. Click **Save** on the Ribbon to store the query for access at a later date, or click **Execute** to run the query immediately. The query results will open in a separate window (Figure 2.10).

Drag a column here to group	by that column.					
Incident Detail						
Incident Detail.Incident Number	Incident Detail.Year	∑ Class Rollups.Class	Class Rollups.Category	Site Rollups.Site	Incident Loss Summary.Total Loss	Incident Loss Summary.Net Loss
INCD000000137	2012	Criminal	Theft	Valley Center	350	) 35
INCD000000157	2012	Criminal	Theft	Valley Center	1895	5 18
INCD000000051	2012	Criminal	Theft	Central Campus	372	2 3
INCD000000167	2012	Criminal	Theft	Valley Center	6050	) 60
INCD000000186	2012	Criminal	Theft	Central Campus	900	) 9
INCD000000127	2011	Criminal	Theft	Central Campus	125	5 1
INCD000000105	2011	Criminal	Theft	Valley Center	1245.99	) 1245.
INCD000000187	2011	Criminal	Theft	Central Campus	3850	) 1724.
INCD000000087	2011	Procedural	Security & Safety Obser	Central Campus	450	) 4
INCD000000108	2011	Criminal	Assault	Central Campus	127	7 1
INCD000000099	2011	Criminal	Fire	Central Campus	18940	0 100
INCD000000072	2011	Procedural	Emergency Situation	Valley Center	3200	) 32
INCD000000132	2012	Criminal	Fire	Central Campus	5000	) 50
INCD000000118	2011	Criminal	Theft	Central Campus	13000	D 50
INCD000000183	2012	Criminal	Theft	Central Campus	8500	) 67
INCD000000010	2011	Criminal	Fraud	Central Campus	1134	F 1
CEN-2011-000002	2012	Criminal	Fire	Central Campus	42000	0 420
INCD000000088	2011	Criminal	Fire	Central Campus	4500	) 45

Figure 2.10: Results of an executed query

## Work with Query Results

## View Query Results

To execute a query, select the query you want to run from the query list in the Navigation pane, and click **Execute** on the Ribbon. Once the query is executed, a new window will open with the results of the query, displayed in the form of a grid. The number of returned records will be displayed at the bottom of the screen (Figure 3.1).

🛿 Export 👜 Print Grid 📧 View Det		cident Detail 🔹 📴	Chart   🚔 Print Detail	Report			
/iew Style	Records Found (18)						
Show Child Record	Drag a column here to group	by that column					
Horizontal		by that column.					
Vertical	Incident Detail	Incident Detail.Year	Σ Class Rollups.Class	Class Rollups.Category	Site Rollups.Site	The second se	∑ Incident Loss Summary.Net Loss
Outlook Group By	INCD0000000137	2012	Criminal	Theft	Valley Center		50 Summary INet Loss
Expand Al	INCD000000157	2012	Criminal	Theft	Valley Center	18	
Expand Ai	INCD000000051	2012	Criminal	Theft	Central Campus		72 3
ard View	INCD0000000167	2012	Criminal	Theft	Valley Center	3	
•	INCD000000185	2012	Criminal	Theft	Central Campus		50 60 00 5
	INCD000000127	2012	Criminal	Theft			25
ext Search					Central Campus		
	INCD000000105	2011	Criminal	Theft	Valley Center	1245.	
Backcolor of Search Results	INCD000000187	2011	Criminal	Theft	Central Campus	38	
Include Child Record	INCD000000087	2011	Procedural	Security & Safety Obser	Central Campus		50 4
Exact Match of Text	INCD000000108	2011	Criminal	Assault	Central Campus		27 1
Case Sensitive	INCD000000099	2011	Criminal	Fire	Central Campus	189	
	INCD000000072	2011	Procedural	Emergency Situation	Valley Center	32	00 32
Search Grid	INCD000000132	2012	Criminal	Fire	Central Campus	50	00 50
	INCD000000118	2011	Criminal	Theft	Central Campus	130	00 50
	INCD000000183	2012	Criminal	Theft	Central Campus	85	00 67
	INCD000000010	2011	Criminal	Fraud	Central Campus	11	34 1
	CEN-2011-000002	2012	Criminal	Fire	Central Campus	420	00 420
	INCD000000088	2011	Criminal	Fire	Central Campus	45	00 45

Figure 3.1: Executed query, with the number of returned records in the bottom left corner

From this view, you can reorder the columns by dragging and dropping the column header. You can put the list of records in ascending or descending order by clicking on the relevant column headers. Moreover, you can make columns larger or smaller by grabbing the edge of the column header and adjusting appropriately.

Use the Card View option to invert the columns and rows in your query results for an alternative display option. If your query results contain child data, you may choose to display either parent records (e.g., Incident Detail) or child records (e.g., Incident Investigators) as cards, by selecting the appropriate data label under the Card View lookup list. Select <None> to reset the view back to the list mode (Figure 3.2).

Style	Records Found (18)					
ow Child Record						
Honzontal	Drag a column here to group by th	at column.				
Vertical	Incident Detail					
Outlook Group By						
	Incident Detail.Incident Number	INCD00000013	INCD00000005	INCD00000018	INCD00000010	INCD00000008
		Σ 2012	2012	2012	2011	2011
*	Class Rollups.Class	Criminal	Criminal	Criminal	Criminal	Procedural
	Class Rollups.Category	Theft	Theft	Theft	Theft	Security & Safety
	Site Rollups.Site	Valley Center	Central Campus	Central Campus	Valley Center	Central Campus
Search	Incident Loss Summary. Total Loss		372	900	1245.99	450
	Incident Loss Summary.Net Loss	Σ 350	372	900	1245.99	450
Backcolor of Search Results						
	Incident Detail.Incident Number	INCD00000015	INCD00000016	INCD00000012	INCD00000018	INCD00000010
	Incident Detail.Year	Σ 2012	2012	2011	2011	2011
	Class Rollups.Class	Criminal	Criminal	Criminal	Criminal	Criminal
	Class Rollups.Category	Theft	Theft	Theft	Theft	Assault
Search Grid	Site Rollups.Site	Valley Center	Valley Center	Central Campus	Central Campus	Central Campus
	Incident Loss Summary. Total Loss	Σ 1895	6050	125	3850	127
	Incident Loss Summary.Net Loss	Σ 1895	6050	100	1724.99	127

Figure 3.2: Query shown in Card View

## Search for Specific Data in Query Results

To search for specific data in your query results, use the **Text Search** function. Type a keyword in the Text Search field, and click **Search Grid** (Figure 3.3).

- The color of the highlighted search text can be modified using the **Backcolor of Search Results** lookup list.
- Check Include Child Record to search all records in the query results.
- Check **Exact Match of Text** to search only for text that corresponds exactly to the text entered in the Text Search field.
- Check Case Sensitive to search only for text containing the correct uppercase or lowercase characters specified in the search text.

	Records Found (18)					
Show Child Record						
Horizontal	Drag a column here to group	by that column.				
Vertical	Incident Detail					
Outlook Group By	Incident Detail.Incident Number	Incident Detail.Year	∑ Class Rollups.Class		Site Rollups.Site	Incident Loss Summary.1
	INCD000000137	2012	Criminal	Theft	Valley Center	
Expand All	INCD000000157	2012	Criminal	Theft	Valley Center	
	INCD000000051	2012	Criminal	Theft	Central Campus	
Card View	INCD000000167	2012	Criminal	Theft	Valley Center	
None +	INCD000000186	2012	Criminal	Theft	Central Campus	
Text Search	INCD000000127	2011	Criminal	Theft	Central Campus	
re	INCD000000105	2011	Criminal	Theft	Valley Center	
	INCD000000187	2011	Criminal	Theft	Central Campus	
Backcolor of Search Results	INCD000000087	2011	Procedural	Security & Safety Obser	Central Campus	
Include Child Record	INCD000000108	2011	Criminal	Assault	Central Campus	
Exact Match of Text	INCD000000099	2011	Criminal	Fire	Central Campus	
Case Sensitive	INCD000000072	2011	Procedural	Emergency Situation	Valley Center	
Search Grid	INCD000000132	2012	Criminal	Fire	Central Campus	
	INCD000000118	2011	Criminal	Theft	Central Campus	
	INCD000000183	2012	Criminal	Theft	Central Campus	
	INCD000000010	2011	Criminal	Fraud	Central Campus	
	CEN-2011-000002	2012	Criminal	Fire		
	INCD00000088	2011	Criminal	Fire		
	CEN-2011-000002 INCD000000088	2012 2011	Criminal Criminal	Fire Fire	Central Campus Central Campus	

Figure 3.3: Using Text Search to highlight specific data

## Group Query Results by a Field

To **group the results by a field**, drag the column heading to the gray box above the grid and drop it.

 All query results will automatically collapse; grouped by the column heading you just selected (Figure 3.4).

Records Found (18)	cords Found (18)		
Drag a column here Incident I	Drag a column here Incident Detail.Yearlur∑		
lincident Detail			
Incident Detail.Incident Number	Incident Detail.Year	Class Rollups.Class	
INCD000000137	2012	Criminal	
INCD000000157	2012	Criminal	
INCD000000051	2012	Criminal	
INCD000000167	2012	Criminal	
INCD000000186	2012	Criminal	
INCD000000127	2011	Criminal	

Figure 3.4: Grouping query results by year

To **add another tier** to the grouping, first expand one of the nodes to view its data in grid format. Then, click and drag a different column heading to the gray box. The query results will once again collapse, grouped first by your initial selection, and then by your second selection. You may continue to add tiers to your grouping using the same method.

To **reorder the tiers** in your grouping, click and drag the column headings in the gray bar (Figure 3.5).

To **remove a field** from your grouping, drag the column heading in the top gray bar and place it anywhere in the query results screen.

Records Found (18)						
Incident Detail.Year / Class Rollups.Category /						
🖃 Incident Detail.Year : 2011 (6 items)						
Elass Rollups.Category : Emergency Situation (1 item)						
Class Rollups.Category : Fire (2 items)						
Figure 3.5: Reorder tiers						

## Perform Calculations on Query Results

- To perform calculations on data in query results that were created using the Group By option, select the **Outlook Group By** radio box in the View Style section. The **Sigma** symbol (Σ) will appear on all column headings. (If the Group By function was used to build the query, Sigma will automatically appear on column headings.)
- 2. To perform data calculation on a column of data, click the  $\Sigma$  button at the top of the respective column. The Select Summaries dialog box will open (Figure 3.6).
- 3. Select the type of calculation that is required for the column (Average, Count, Maximum, Minimum, and/or Sum). You can select more than one calculation option (Figure 3.6).

∑ Select Summaries
Average
🔲 📰 Count
Maximum
🦳 🛌 Minimum
🔽 = Sum
OK Cancel

Figure 3.6: Calculation options available via the Sigma ( $\Sigma$ ) button

- 4. Click OK.
  - The calculation results will be displayed below the appropriate columns at the bottom of the query results. If your results were grouped by a field within the query results window, then the calculations will apply and be displayed for each group (Figure 3.7).

/ Style	Records Found (18)						
how Child Record	Hecords Found (18)						
C Horizontal	Drag a column here to group	by that column.					
<ul> <li>Vertical</li> </ul>	Incident Detail						
Outlook Group By	Incident Detail.Incident Number	Incident Detail.Year	∑ Class Rollups.Class	Class Rollups.Category	Site Rollups.Site	Incident Loss Summary.Total Loss 2	Incident Loss Summary.Net Loss
	INCD000000137	2012	Criminal	Theft	Valley Center	350	350
Expand All	INCD000000157	2012	Criminal	Theft	Valley Center	1895	189
	INCD000000051	2012	Criminal	Theft	Central Campus	372	37.
View	INCD000000167	2012	Criminal	Theft	Valley Center	6050	605
•	INCD000000186	2012	Criminal	Theft	Central Campus	900	90
<b>.</b>	INCD000000127	2011	Criminal	Theft	Central Campus	125	10
Search	INCD000000105	2011	Criminal	Theft	Valley Center	1245.99	1245.9
	INCD000000187	2011	Criminal	Theft	Central Campus	3850	1724.9
Backcolor of Search Results	INCD000000087	2011	Procedural	Security & Safety Obser	Central Campus	450	45
nclude Child Record	INCD000000108	2011	Criminal	Assault	Central Campus	127	12
Exact Match of Text	INCD000000099	2011	Criminal	Fire	Central Campus	18940	1000
Case Sensitive	INCD000000072	2011	Procedural	Emergency Situation	Valley Center	3200	320
Search Grid	INCD000000132	2012	Criminal	Fire	Central Campus	5000	500
	INCD000000118	2011	Criminal	Theft	Central Campus	13000	500
	INCD000000183	2012	Criminal	Theft	Central Campus	8500	675
	INCD000000010	2011	Criminal	Fraud	Central Campus	1134	13
	CEN-2011-000002	2012	Criminal	Fire	Central Campus	42000	4200
	INCD00000088	2011	Criminal	Fire	Central Campus	4500	450
	Grand Summaries						
		Sum = 36206					
		Average = 2011.444	4				
		Minimum = 2011					
		Maximum = 2012					

Figure 3.7: Calculation results in bottom right corner

## View Details Regarding a Record

You can look at more details regarding a record in the following two ways:

- 1. Click View Details to open a read only view of the selected record.
- 2. Click View in Visual Analysis to open the record details in Visual Analysis.

## **Print Query Results**

- 1. To print the query results, first estimate the layout of your grid in relation to the **portrait layout**.
  - If necessary, scale the query results window to fit one portrait page.
- 2. Click **Print Grid** an the top toolbar. A Print Preview window will open (Figure 3.8).
- 3. Review the layout of the grid using the toolbar at the top of the screen.
- 4. Click the **Print** icon 🖾 to print the grid.

🖳 Prin	t preview							x
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	NCCOMPT 1				erie Censo			
	NCCOMMON 1		teres the		antal Campus	10	-	
	NCONSERVED.	2011 0	teres inte		and Valley Card	126		
	IV VETBORD		teres inte		ant Valley Card	22		
	NCCORRECT		and and		and Carpo	30		
	NCCOMMON 1		and the		and Carpo			
	NOCESSIE &				ant Valley Cart articl Cargan			
	N V4130300				and Carps			
	W VETBORD				and Carpo			
	CENTRES		and the		and Carpo	a		
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	L						1	
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		_						-

Figure 3.8: Print preview

### Export Query Results to Excel

- 1. To export query results, click **Export** on the top toolbar. A Windows Explorer window will open.
- 2. Choose the location for the new file, and name the file. Indicate the file type, choosing from Excel-Flat Format (\*.xls), Excel-Data (\*.xls), and Extensible Markup Language (\*.xml).
- 3. Click **Save**. You will receive a confirmation message stating that the export was successful.
- 4. Click **OK**.

## Chart Query Results

Note: If your query results contain child data, you may choose to chart either parent records or child records, by selecting the appropriate data label under the attached lookup. To learn how to analyze and chart child records, see the Analyze and Chart Child Data chapter (pg. 30).

1. To begin charting your query results, click **Chart** <sup>L</sup> (Figure 3.9).



- 2. A charting window will open with a blank Viewing pane, with a list of variables available for charting listed in the **Data pane** on the left, and a grid with raw chart data listed in the bottom **Data** tab.
- 3. In the left Data pane, select an **X-Field** and a **Y-Field** (or multiple Y-Fields) for your chart from the available options (Figure 3.10).
  - The X-Field data will appear on the horizontal x-axis of your chart. The Y-Field data will appear on the vertical y-axis of your chart. If you select more than one Y-Field, ensure that they have the same unit of value (e.g., dollars, items).

Note: Y-Fields are always charted as numerical values. Generally, text fields are counted (e.g., quantity of Incident Numbers or Last Names), while numerical fields are summed (e.g., amounts of Incident Losses).

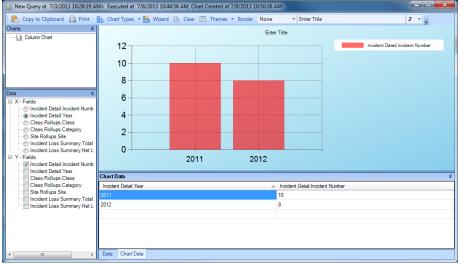


Figure 3.10: Charting your data

#### Example:

Build an Incident query with the following criteria: Incident Number, Year, Category, Site, and Total Loss. Run the query and chart the query results to show incidents' **Total Loss** by **Site**.

a. In the Analysis Expert query building screen, select the Incident Number, Year, Category, Site, and Total Loss fields. In our example, using the Search By function and the Criteria Designer pane, we will limit the query results to only reflect incidents that occurred at Central and West Valley locations, and their involved losses (Figure 3.11)

▲		Pers	pective		
Main					© Privacy Legal
File Toggle Logoff Settin Settings		Analysis Expert	9		
	Form(s)		Field(s)	Selection(s)	× (合 単)
Physic Queries     Case     Case	-V     Incident     -     -     Incident     -     -     Incident     -     -     Incident     -     -     Incident	Rags o Incident Links on Incident Links terms on Incident Links terms of the province of the p	Total Exposure	Group By Summary Display	nt Number ory
Data Forms	Criteria Propert				× <b>4</b> 4
Reports	Symbol	Form	Field	Operator A	Value
	A	Site Rollups	Ste	-	Central Campus
Analysis Expert	В	Site Rollups	Ste	-	Valley Center
dateway	• C	Incident Loss Summary	Total Loss	0	0
Administration	((A OR B) AND C)				Ready   Connected

Figure 3.11: Query and Criteria Designer (and the corresponding Boolean logic statement)

Click **Execute** on the Ribbon to run the query (Figure 3.12).

Show Child Record					
	Drag a column here to group				
Horizontal		by that column.			
Vertical	Incident Detail	Incident Detail.Year	<b>T</b> (1) (1) (1)	Site Rollups.Site	
Outlook Group By	INCD000000137	2012	Class Rollups.Category Theft	Valley Center	Incident Loss Summary. Total Loss 2 350
Expand All	INCD000000157	2012	Theft	Valley Center Valley Center	1895
Expand Ai	INCD000000051	2012	Theft	Central Campus	372
View	INCD000000167	2012	Theft	Valley Center	6050
•	INCD000000186	2012	Theft	Central Campus	900
	INCD000000127	2012	Theft	Central Campus	125
Search	INCD000000105	2011	Theft	Valley Center	1245.99
	INCD000000187	2011	Theft	Central Campus	3850
Backcolor of Search Results	INCD00000087	2011	Security & Safety Obser	Central Campus	450
clude Child Record	INCD000000108	2011	Assault	Central Campus	430
xact Match of Text	INCD000000099	2011	Fire	Central Campus	18940
ase Sensitive	INCD000000072	2011	Emergency Situation	Valley Center	3200
Search Grid	INCD0000000132	2012	Fire	Central Campus	5000
	INCD0000000132	2012	Theft	Central Campus	13000
	INCD000000183	2012	Theft	Central Campus	8500
	INCD000000010	2012	Fraud	Central Campus	1134
	CEN-2011-000002	2012	Fire	Central Campus	42000
	INCD000000098	2011	Theft	Central Campus	345
	INCD000000088	2011	Fire	Central Campus	4500
	INCD000000115	2011	General Corporate Polic		340

Figure 3.12: Executed query

- b. Click the **Chart** icon is on the query results screen. The charting window will open.
- c. In the Data pane, Set the X-Field to **Site Rollups.Site**, and the Y-Field to **Incident Loss Summary.Total Loss** (Figure 3.13). Your chart will appear in the Viewing pane.
  - By default, your initial chart will be formatted as a Column chart. The bottom pane will display your selected Chart Data.

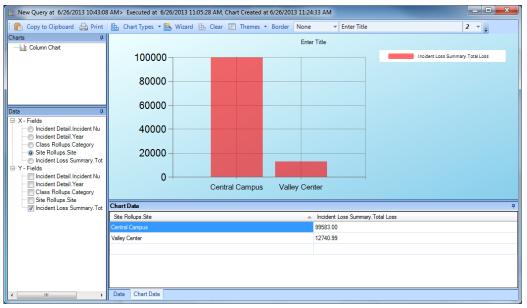


Figure 3.13: Charting your data

- 4. You may copy data from the Chart Data pane into Excel by highlighting the relevant cells and then using the <Ctrl>+<C> and <Ctrl>+<V> keyboard commands.
- 5. If you want to select an additional variable for your chart to see the distribution of one of your variables by another, click on the name of the variable, right-click it, and select **Add Series**.
  - The chart type will switch to a pivot chart.
  - The new variable will be added to the chart and will be explained in the legend.

Note: Once a Series variable is incorporated into your chart, only one Y-Field will be charted. Additional Y-Fields will be automatically dropped from your chart.

#### Example:

Modify the previous chart to be able to see the distribution of **total loss** by **incident categories** in each **site**.

a. In the Data pane, click on the name of the **Class Rollups.Category**, right-click it, and select **Add Series** (Figure 3.14).

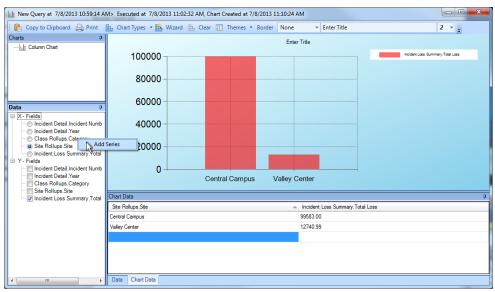


Figure 3.14: Adding a series to your chart

b. The Chart Data pane, the chart itself, and the legend will change to include the new criterion (Figure 3.15).

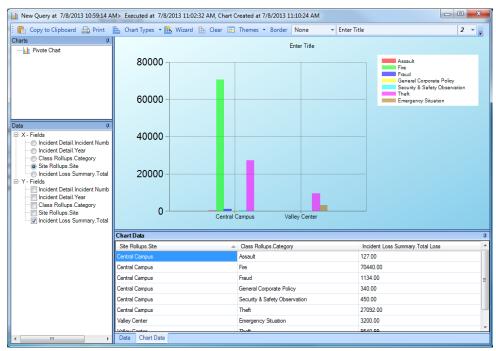


Figure 3.15: Charted data with additional criterion and a legend

6. Once you have the necessary information in your chart, you can modify its appearance with the toolbar at the top of the window (Figure 3.16). To rotate the chart, adjusting its perspective, click and drag the chart on the Viewing pane. For more elaborate designs, you can also refer to the **Wizard** feature.

Note: To learn about the functions of the Wizard feature, consult the Chart Wizard section (pg. 22).

≞	Chart Types	To change the default Column chart to a different chart type, choose an option from the <b>Chart Types</b> lookup list (e.g., Pie, Bar, Area). The Charts pane will automatically populate with the name of the selected chart.
		Note: If your chart includes series, changing the chart type will remove the series. The <b>Wizard</b> must be used in order to change the chart type for a chart with a series.
	Themes	In the <b>Themes</b> lookup list, select a color theme for your chart.
	Border	From the <b>Border</b> lookup list, select a border or frame style for the chart.
	[Title]	Enter a title for the chart in the wide blank text box.
	[Format]	To change the chart's default format from 2D (two- dimensional) to 3D (three-dimensional), choose 3D in the right drop-down menu.

**Modify Your Charts** 

Table 3.1: Various ways to modify your chart

7. To copy your chart to **clipboard** or to **print** it , click the appropriate icon on the toolbar. If you want to **erase** the chart and construct a new chart of the query results, click **Clear** on the toolbar or right-click in the chart area and select **Clear**.

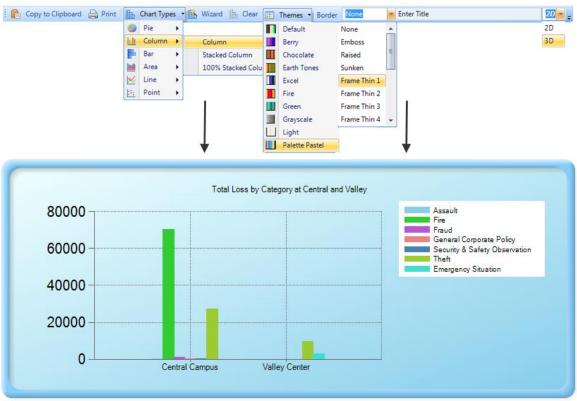


Figure 3.16: Changing the appearance of your chart

### **Chart Wizard**

1. To adjust the chart's appearance, click the **Wizard** icon **b** on the toolbar. The Chart Wizard contains a number of options that allow you to fully customize your chart (Figure 3.17).

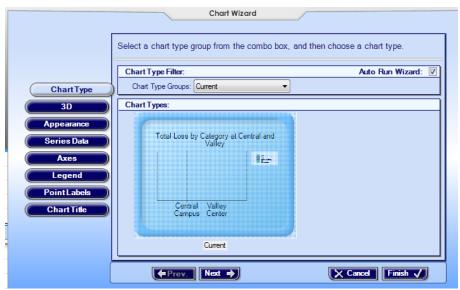


Figure 3.17: Adjusting your chart's appearance with the Chart Wizard

 Specify your chart options by selecting the appropriate modes from the toolbar on the left. Click **Previous** and **Next** to navigate between the modes.

#### Example:

Modify the appearance of the previously designed column chart by adding the Total Loss **unit**, **point values**, and names of the **axes**. Experiment with the chart's design, trying to achieve an optimal three dimensional (3D) appearance.

#### **Chart Type**

- a. Choose the general **Chart Type Group**, and then select the specific chart type. For the purposes of optimal visualization, we will select the Column type.
- b. Click the **Show 3D Types** box to see the chart type images in 3D.

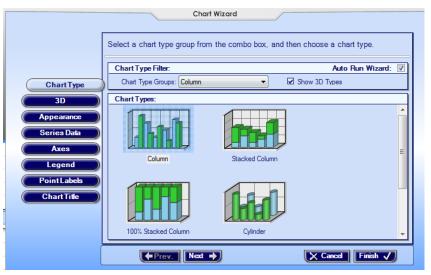


Figure 3.18: Enabling the 3D Column

#### Three-Dimensional (3D)

Please refer to Figure 3.19 for an example of the following steps.

- a. To start editing three-dimensional properties of your chart, ensure the **3D Enabled** box is checked.
- b. Check the **Right Angle Axes (Oblique)** box to make your X and Y axes perpendicular to each other. Uncheck the box to set them at an angle other than 90 degrees.
- c. Drag the chart or alter the numbers in the X and Y **Rotation** fields to change the viewpoint of the chart.

- d. Adjust the degree of **Perspective** that corresponds to the distance and spatial relationship of the image in relation to you.
- e. Adjust the degree of the Light or shading applied to the chart.
- f. Adjust the width between marked values on the X and Y axes under Area Wall Width.
- g. If your chart includes a series variable, check the **Clustered Series** box if you want to cluster the variables separately.

Note: Some 3D settings may be disabled depending on the chart type. For example, the Clustered Series option is only available for charts that contain a series variable.

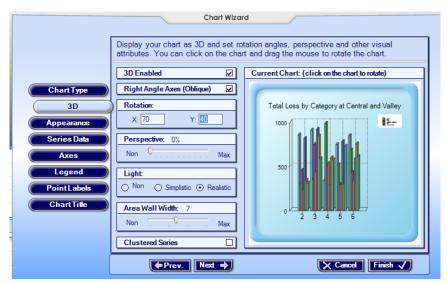


Figure 3.19: Modifying your chart with 3D properties

#### Appearance

In the Appearance module, there are three tabs that are located at the top of the Chart Wizard window—Style List, Border, and Advance.

a. Under the **Style List** tab, indicate what color scheme you would like to apply to your chart. Unlike the Themes function from the basic charting screen, the Style List also changes the background appearance (Figure 3.20).

	Chart Wiz Style List Border Select chart appearance from the li	Advanced st.
Chart Type 3D Appearance Series Data Axes Legend Point Labels Chart Title	Appearance Syles: Current From Designer EarthTones LightSteelBlue GrayScale SemiTransparent ExcelLike LightBeige Berry Chocolate Fire GreenBlue	Current Chart
	Frev. Next 🔿	Cancel Finish V

Figure 3.20: Changing the color scheme of your chart

b. Under the **Border** tab, choose a **Border Style** and, if applicable, **Border Color** and **Fill** (Figure 3.21).

	Chart Wiza	rd
	Style List Border	Advanced
	Select a chart border.	
	Border Style:	Current Chart:
Chart Type	TitleRounded	Total Loss by Category at Central and Valley
3D Appearance	Border Color:	
Axes Legend	Border Fill: Solid  Gradien Hatc	500
Point Labels Chart Title	DiagonalLeft	
	Prev. Next 🔿	Cancel Finish 🗸

Figure 3.21: Changing the border style of your chart

c. Under the Advanced tab, select an element of the chart you would like to edit by clicking on the chart image. In the Line/Border Attributes section, select the Color, Width, and Style of the line border of the element. In the Back Fill section, adjust the chart elements' background colors and color schemes (Solid, Gradient, or Hatch Background). In the Shadow Size section, set the depth of the shadow for the element (Figure 3.21).

		ard Advanced t elements like axes, grid lines, tick marks, series
Chart Type 3D Appearance Series Data Axes Legend Point Labels Chart Title	Selected Element:         Chart         Line/Border Attributes:         Color:         Width:       2 \$ Style:         Solid       Gradien         Hatc         Back Fill:       Hatc         Solid       Gradien         Hatc       Gradient         Gradient Style       View	Current Chart Total Loss by Category at Central and Valley 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000
	Frev. Next 🔿	

Figure 3.22: Advanced settings that can be applied to your chart

#### **Series Data**

In the Series Data module, there are two tabs that are located at the top of the Chart Wizard window—Data Source and Series Data.

- a. As the **Data Source** for our chart has already been created, this tab never needs to be activated, and is locked.
- b. Under the **Series Data** tab, you can add, remove, move, rename, and select Chart Types for the series variables included in your chart and legend.

#### Axes

Please refer to Figure 3.23 for an example of the following steps.

- a. Under the Axis X and Axis Y tabs, assign formatted axes Titles.
- b. Choose the placement of Tick Marks for axes values.
- c. Make Grid Lines visible or invisible.
- d. Apply Interlacing Strips of gray shading to every other grid column or row.
- e. Make the chart axes reversed.
- f. Maintain or eliminate any white space between the charted elements and the edges of the chart area with the **Side Margin** or **Start at Zero** option.
- g. Set the axes Values Type to Numeric or Date/Time format.
- h. Select the correct **Axis Labels Formats** and the number of **Decimals** for these values. In our example, we will set the Y-axis to Currency with two decimal places.

Chart Wizard			
	Set Y axis attributes.		
	Title:	Current Chart:	
ChartType 3D	Total Loss         Font           ○ Near         ⓒ Center         ○ Far	Total Loss by Category at Central and Valley	
Appearance	Tick Marks:           O Non O Out O In O Cross		
Series Data	Grid Lines:	g 1111	
Axes	Interlaced Strips:		
Legend	Reversed:		
PointLabels	Start From Zero		
ChartTitle	Values Type:           ③ Numeric         ○ DateTime	2 3 4 5 6	
	Axis Labels Format	Category by Site	
	Decimals:		
	Prev. Next 🔶	Cancel Finish 🗸	

Figure 3.23: Controlling your axes

#### Legend

Please refer to Figure 3.24 for an example of the following steps.

- a. If your chart has a legend, ensure the **Legend Visibility** box is checked to display the legend.
- b. Choose the legend's presentation Style.
- c. Select the legend's position relative to the chart in **Docking** and **Alignment**. Check **Legend Inside Plot Area** to display the legend inside the chart area.

Chart Wizard				
ChartType 3D Appearance Series Data Axes Legend PointLabels ChartTitle	Set the legend's visibility, style and p Legend Visibility: Style: Ocolumn ORW OTable Docking: Column ORW OTable Near Center Far Legend Inside Plot Area	Desition.		
	Prev. Next 🔿			

Figure 3.24: Controlling your legend

#### **Point Labels**

- a. Check **Display Point Labels** if you want to label charted values for columns, bars, and so forth. Under **Selected Chart**, choose to format series of labels for each variable separately, or apply the same formatting to all charted point labels.
- b. Select the Color and Font of labels.
- c. Set the Angle and Position of the label text relative to the point charted.

Chart Wizard				
	Data point labels are used to display the Y value of data points. You can change			
		Use SmartLabels to prevent text overlapping.		
	Display Point Labels:	Selected Chart All		
ChartType	Color:			
Chart Type		Current Chart		
3D		Total Loss by Category at Central and West Valley		
Appearance	Font:	Total 2000 by Category at Contrar and West Valley		
Appealance	Microsoft Sans Serif, 8	A83		
Series Data		\$1,000.00		
Axes	Angle: 0	1/2 man = 186		
Aues	-90 90	S 5462 Mas 1		
Legend	-50 1 1 1 1 1 1 30	550,00		
PointLabels	Position:	≓ <b>fra</b> ta		
		\$0.00		
ChartTitle		2 3 4 5 6		
		Category by Site		
	K + A	Category by Site		
	Prev. Next 🔿	X Cancel Finish V		
	Triev. Near			

Figure 3.25: Controlling your labels

#### **Chart Title**

Please refer to Figure 3.26 for an example of the following steps.

- a. Enter or edit the chart title's Text.
- b. Choose its Color, Font, and Style.
- c. Select the title's position relative to the chart with the **Docking** and **Alignment** options.

Chart Wizard				
Chart Type 3D	Set the chart's title, as well as its text by separating the lines using '\n Text Total Loss by Category at Central and Appearance:	Current Chart: Total Loss by Category at Central and Valley		
Appearance Series Data Axes	Color: Co			
Chart Title	Docking:         Alignment                •             •			
		Category by Site		
	Prev. Next 🔶	Cancel Finish		

Figure 3.26: Changing your chart's title

- 3. Once the design of your chart is complete, click **Finish** to exit the Wizard and see your chart results (Figure 3.27).
- 4. Click **Cancel** to restore the chart to its original view.

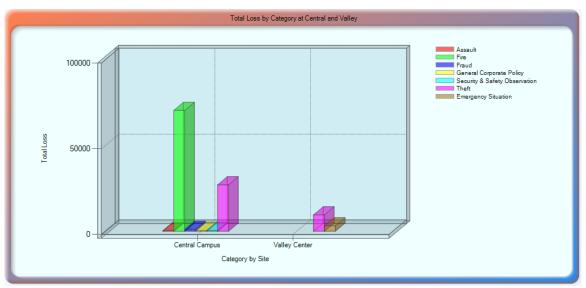


Figure 3.27: Finalized chart

## Analyze and Chart Child Data

**Child data** refers to data that are recorded on Perspective's subforms, or that could potentially correspond to more than one referent. Examples of child data include information about Involved Persons, Involved Vehicles, Item Losses, and so on. Although the main principles of analyzing the parent data also apply to the child data, some navigation and analysis options only apply to the child data type.

#### Example:

Build a query that looks at all incidents that involve blue-eyed persons. Select to analyze the incidents' **class** and **category** (parent data), and the person's **first name**, **last name**, and **eye color** (child data).

Please refer to Figures 3.28-3.35 for examples of the following steps.

- 1. Add a new Incident query containing child fields.
  - a. In the Form(s) pane, click the Incident Detail form.
  - b. In the Field(s) pane, check Incident Number.
  - c. In the Form(s) pane, expand Incident Detail and click the Class Rollups form.
  - d. In the Field(s) pane, check Class and Category.
  - e. In the Form(s) pane, click the Incident Persons form.
  - f. In the Field(s) pane, select First Name, Last Name, and Eye Color.

Form(s)	Field(s)	Selection(s) × 🛧 🗸
Incident Detail     ** Organizational Rollups     ** Organizational Rollups     ** Organizational Rollups     ** Organizational Rollups     *********************************	V Last Name     V Last Name     V Last Name     V Last Name     Intral     Introl     Introl     Gender     Employee?     Introviewed?     Introviewed?     Introviewed?     Injured     Person Hospitalized?     Hair Color     Martal Status     Velight     Velight     Velight	Group By → Summary → Display → Incident Number → Class → Category → Last Name → First Name → Eye Color

Figure 3.28: Building a query to look at blue-eyed persons.

- g. In order to see the incidents that only involve blue-eyed persons, right click **Eye Color** in the **Field(s)** pane, and select **Search By**.
- h. In the Criteria Designer, set the Eye Color criterion to equal (=) Blue (Figure 3.29).

Criteria Properties Audit Criteria Designer ×					
Symbol         Form         Field         Operator					
•	A	Incident Persons	Eye Color	-	Blue
)					

Figure 3.29: Searching incidents that only involve blue-eyed persons.

Note: The child data contained in the query results will show at least one child record that corresponds to the Search By criterion set previously, but will not be limited to the child records that only correspond to this criterion. Instead, the query results will list the parent records that strictly correspond to the Search By criterion (e.g., incidents with at least one involved person with blue eyes), and at the same time displaying all the parent data-relevant child records, including both the child records that have the Search By criterion (i.e., involved persons with blue eyes) and those that do not have it (i.e., involved persons with any other eye color).

- 2. Execute the query ensuring optimal visualization of the child data.
  - a. Click **Execute** so on the Ribbon. In the query results window, you will see all incidents that have at least one involved person with blue eyes.
  - b. In order to see all child records, you can navigate to the View Style section on the left, select **Show Child Record**.
  - c. Click **Expand All** (Figure 3.30).

New Query at 7/8/2013 2:42:54 PM>	Executed at 7/8/2013 2:49:17 PM	
🗄 📧 Export 🚔 Print Grid 📧 View Deta	I 🖄 View in Visual Analysis 🛛 Incident Detail 🛛 👻 🖺 Chart 🛛 🚔 Print Detail Report	
View Style	Records Found (14)	
Show Child Record	Drag a column here to group by that column.	
O Vertical	Incident Detail Incident Detail.Incident Number Class Rollups.Class Class Rollups.Category	<u>^</u>
<ul> <li>Outlook Group By</li> </ul>	DNS-2012-000004 Criminal Fire	
Expand All	B INCD000000114 Criminal Assault	-
Number of Records Returned 14		:

Figure 3.30: Showing all child records in results

 Alternatively, you may selectively expand the records by clicking on the **plus** icon beside corresponding record nodes. Each of the expanded Incident records will unfold a list of all involved persons, not just those with blue eyes (Figure 3.31)

🛚 Export 👜 Print Grid 🛛 View Detail 🏾	View in Visual Analysis Incide	nt Detail 🛛 👻 🌇 Chi	art 🗎 🗎	Print Detail Report	
View Style	cords Found (14)				
Show Child Record					
Horizontal	Drag a column here to group by	that column.			
Vertical	Incident Detail				
Outlook Group By	Incident Detail.Incident Number	Class Rollups.Class	Class F	Rollups.Category	
	DNS-2012-000004	Criminal	Fire		
Collapse All	Incident Persons				
	Incident Persons.Last Name	Incident Persons.First	Name	Incident Persons.Eye Color	
Card View	Robertson	Will		Blue	1
•	Incident Detail				
1	Incident Detail.Incident Number	Class Rollups.Class	Class F	Rollups.Category	
Text Search	INCD000000114	Criminal	Assaul	lt	
	N INCD000000177	Criminal	Fire		-
Backcolor of Search Results	NCD000000161	Criminal			
Include Child Record	Incident Persons				
Exact Match of Text	Incident Persons Last Name	Incident Persons.First	Name	Incident Persons.Eye Color	
Case Sensitive	Muller	Vincent		Blue	
Search Grid	Woodward	Kenneth		Hazel	
	Incident Detail				
	Incident Detail.Incident Number	Class Rollups.Class	Class F	Catagony	
G		Criminal	Theft	tonups.category	
		on mind	- Hone		
	Incident Persons Incident Persons.Last Name	Incident Persons.First	Mana	Incident Persons.Eve Color	
	Calquehoun	Donalee	IName	Blue	
		Donalee		Diue	
	Incident Detail				
	Incident Detail.Incident Number	Class Rollups.Class		Rollups.Category	
E	INCD000000157	Criminal	Theft		
	Incident Persons				

Figure 3.31: Looking at all involved persons (not just those with blue eyes)

d. By default, the child records are displayed below their respective parent records. To view the child records to the right of the parent records, check the **Show Child Record** box and select the **Horizontal** radio button. To restore the default view, select the **Vertical** radio button (Figure 3.32).

Export 👜 Print Grid 📧 View De	tail 🖄	View in Visual Analysis Incide	nt Detail 🛛 🔻 🚻 Ch	art 🛛 🚔 Print Detail Report			
view Style	Rec	cords Found (14)					
Show Child Record		Incident Detail			Incident Persons		
e Horizontal		Incident Detail.Incident Number	Class Rollups.Class	Class Rollups.Category	Incident Persons.Last Name	Incident Persons.First Name	Incident Persons.Eye Color
Vertical		DNS-2012-000004	Criminal	Fire	Robertson	Will	Blue
Outlook Group By		INCD000000114	Criminal	Assault			
Collapse All		INCD000000177	Criminal	Fire			
Compaci Air		INCD000000161	Criminal		Muller	Vincent	Blue
Card View					Woodward	Kenneth	Hazel
•		INCD000000098	Criminal	Theft	Calquehoun	Donalee	Blue
Text Search		INCD000000157	Criminal	Theft	Brooks	Jenni	Green
					Townsend	Dillon	Hazel
Backcolor of Search Results					Cardinal	Clifford	Black
Include Child Record					Ropes	Bradley	Brown
Exact Match of Text					Muller	Vincent	Blue
Case Sensitive		INCD000000185	Criminal	Theft	White	Pamela	
Search Grid					Wayne	Cochrane	
					Brown	Jeff	Blue
		INCD000000148	Criminal	Theft	Moon	Herman	Blue
							~

Figure 3.32: Viewing child records beside the parent records

e. In order to perform a search including the child data, type the key word in the Text Search field (e.g., "blue"), check **Include Child Record** and click **Search Grid** (Figure 3.33).

Image: Style       Print Grid       View Detail       View in Visual Analysis       Incident Detail       Print Detail Report         View Style       Records Found (14)       Incident Detail       Incident Detail         Incident Detail       Incident Detail       Incident Detail       Incident Detail         Incident Detail       Incident Persons       Incident Persons       Incident Persons	
Image: Show Child Record     Incident Detail       Horizontal     Incident Detail Incident Number       Class Rollups.Class     Class Rollups.Category       DNS-2012-000004     Criminal	ŕ
Show Child Record     Horizontal     November Class Rollups.Class Rollups.Category     DNS-2012-000004     Criminal     Fire	
○ Horizontal       Incident Detail.Incident Number       Class Rollups.Class       Class Rollups.Category         ◎ Vertical       DNS-2012-000004       Criminal       Fire	Î
Vertical     DNS-2012-000004     Criminal     Fire	
Incident Persons.Last Name Incident Persons.First Name Incident Persons.Eye Color	=
Collapse All Robertson Will Blue	_
Card View Incident Detail	
Incident Detail.Incident Number Class Rollups.Class Class Rollups.Category	
INCD000000114 Criminal Assault	
Text Search Incident Persons	
blue Incident Persons.Last Name Incident Persons.First Name Incident Persons.Eye Color	
Backcolor of Search Results Baril Guy Blue	
Include Child Record Incident Detail	
Exact Match of Text Incident Detail.Incident Number Class Rollups.Class Class Rollups.Category	
Case Sensitive	
Search Grid	
Incident Persons.Last Name Incident Persons.First Name Incident Persons.Eye Color	
Abrams Terry Blue	
Incident Detail	
Incident Detail.Incident Number Class Rollups.Class Rollups.Category	
INCD000000161 Criminal	
INCD000000098 Criminal Theft	~
Number of Records Returned 14	.;

Figure 3.33: Include child data in your Text Search

3. Chart your child record information.

Note: The resulting chart will be limited, because Analysis Expert cannot chart parent and child data at the same time.

Example:

Chart the query's child data, displaying the count of involved persons by eye color.

a. In order to select the child data for charting, select **Incident Persons** in the drop-down menu next to the Chart button, and then click **Chart** (Figure 3.34).

1 View in Visual Analysis	Incident Detail	🗸 🏦 Chart 🛛 👜 Print Detail Report
	Incident Detail	
Records Found (14)	Incident Persons	N
		45

Figure 3.34: Using child data for charting

b. In the charting window, select Eye Color as the X-Field, and Last Name as the Y-Field. Having selected Last Name for the Y-Field you will count the number of the involved persons with distinct last names. This way, your chart will show a count of all involved persons (assuming that they all have distinct last names) by each eye color (Figure 3.35).

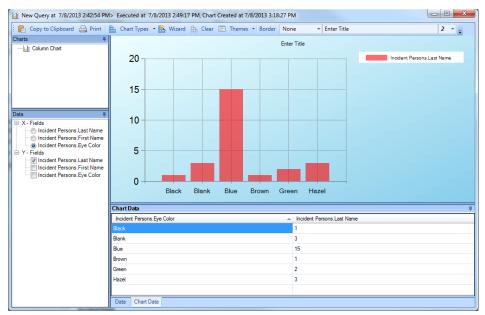


Figure 3.35: Charting Last Name by Eye Color

Note: Since Analysis Expert is designed to chart parent and child data separately, you may need to take your analysis a step further by exporting your results to Excel. See the "Export Query Results to Excel" chapter (pg. 14) for details.

# **Contact Information**

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# Appendix A: Criteria Operators

### **Criteria Designer Operators**

Symbol	Read as	Explanation of Result
=	"equals"	Will display records where the field's value is equal to the value specified. Note that only exact matches will be displayed.
>=	"is greater than or equal to"	Will display records where the field's value is greater than or equal to the value specified. This operator is only available for criteria with numerical values, such as dates, quantities, amounts of money, etc.
<=	"is less than or equal to"	Will display records where the field's value is less than or equal to the value specified. This operator is only available for criteria with numerical values.
>	> "is greater than"	Will display records where the field's value is greater than the value specified. This operator is only available for criteria with numerical values.
<	"is less than"	Will display records where the field's value is less than the value specified. This operator is only available for criteria with numerical values.
<>	"is not equal to"	Will display records where the field's value is not equal to the value specified.
Like	"like"	Will display records where the value specified is contained somewhere in the selected field.
Starts with	"starts with"	Will display records where the field's value starts with the value specified.
Ends with	"ends with"	Will display records where the field's value ends with the value specified.

Table A1: Descriptions of what the Operators in the Criteria Designer mean

Note: You may use any of Perspective's operators in combination to search for records matching multiple criteria.

# Appendix B: Boolean Logic Statements

Boolean logic is a complete system for symbolic logical operations. In simple terms, Boolean logic is a form of algebra in which all values are interpreted as either *true* or *false*. Having a common understanding of Boolean logic statements is a necessity when working with Analysis Expert, because AE uses *truth tables* as a basis for search.

A **truth table** is a mathematical table used in logic—specifically, in connection with Boolean functions—to compute functional values of logical expressions and possible combinations. In particular, a truth table determines if an expression or statement is true for all legitimate (or valid) inputs. The expressions themselves are built using *operators* (e.g., "AND", "OR") and *parentheses*. For example, if we search for all incidents that were "thefts" **OR** "frauds" **AND** "occurred between 2004" **AND** "2006" **AND** "occurred at Site A" **OR** "Site B", the list of our results will show all incidents where the statements or expressions are valid according to the "AND" and "OR" functions used.

The column headings on a truth table show each possible valuation of "true" or "false" statements. The tables below represent truth tables that can be applied to Analysis Expert.

### Example 1

A typical search of the incident database involves searching for a specific incident category (e.g., *Thefts*) that occurred at a specific location (e.g., *Building A*). In a truth table, this search statement is interpreted as a combination of A (*Theft*) and B (*Building A*). This is a strict Boolean search, *meaning that both components of the statement must be "true" for a valid result*. As shown below, only the bottom combination produces a result where the conditions "*Theft*" and "*Building A*" are both observed making the statement valid (Table B1).

А	В	Results
Theft TRUE	Building B <sub>FALSE</sub>	FALSE
Fraud <sub>FALSE</sub>	Building A TRUE	FALSE
Fraud <sub>FALSE</sub>	Building B <sub>FALSE</sub>	FALSE
Theft TRUE	Building A TRUE	TRUE

### Truth Table Using "And"

Table B1: Using a truth table to illustrate a search where a specific incident (Theft) occurred at a specific location (Building A)

### Example 2

Another typical search involves looking for records that satisfy one or the other criterion. In our case, this means looking for incidents that are categorized as *Thefts* <u>or</u> that happened in *Building A*. Either statement can be true, which is reflected in the truth table as A (*Theft*) <u>or</u> B (*Building A*). In this scenario, there is likelihood for multiple results, and lines 1, 2 and 4 all produce a "true" outcome, satisfying the A <u>or</u> B requirement (Table B2).

А	В	Results
Theft <sub>TRUE</sub>	Building B <sub>FALSE</sub>	TRUE
Fraud FALSE	Building A TRUE	TRUE
Fraud FALSE	Building B <sub>FALSE</sub>	FALSE
Theft TRUE	Building A TRUE	TRUE

### Truth Table Using "Or"

Table B2: Using a truth table to illustrate a search for incidents that are Thefts, or incidents that happened in Building A

### Example 3

A more in-depth search can involve a combination of both statements <u>and</u> and <u>or</u>. For example, you can search for *Thefts* where the incident occurred in either *Building A* <u>or</u> *Building C*. The truth table captures this query as A (*Theft*) <u>and</u> (B (*Building A*) or C (*Building C*)). In this scenario, one of many statements must be true in order to produce a valid result. The valid combinations are both A and B or A and C (Table B3).

А	В	С	Results
Theft TRUE	Building B <sub>FALSE</sub>	Building D <sub>FALSE</sub>	FALSE
Fraud <sub>FALSE</sub>	Building A TRUE	Building C TRUE	FALSE
Fraud <sub>FALSE</sub>	Building B <sub>FALSE</sub>	Building D <sub>FALSE</sub>	FALSE
Theft TRUE	Building A TRUE	Building D <sub>FALSE</sub>	TRUE
Theft TRUE	Building B FALSE	Building C TRUE	TRUE

### Truth Table Using "And" and "Or"

Table B3: Using a truth table to illustrate a search where a Theft occurred in Building A, or in Building C

The purpose of Boolean logic statements in Perspective is to complete a search that returns exactly what you ask for in your search statement. In order to get accurate results from your database, you must make sure your enquiry to the database (i.e., your Boolean logic statement) is correct.

# Appendix C: Query Examples

## I. Monthly Incident Report by Class and Site

### Example:

Look at the number of incidents that occurred during a specific month and view what class and site they belong to.

Please refer to Figures C1-C5 for examples of the following steps.

- 1. Add an Incident query by selecting **Incident** in the Navigation Pane and clicking the **Add** button.
- 2. In the Form(s) pane, select the words Incident Detail.
- 3. In the Field(s) pane, check Incident Number and Occurred From Date/Time.
- 4. Expand the Occurred From Date/Time node and select Year and Month.

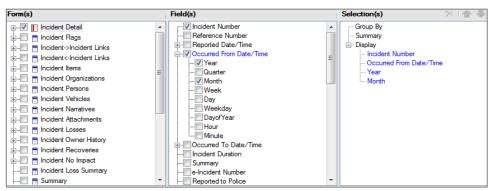


Figure C1: Query-Incident Number and Occurred From Date/Time > Year, and > Month

- 5. We will add criteria to the month and year in order to narrow down our results to what we specifically need:
  - a. In the Field(s) pane, right-click on the Month field and select Search By. It is important to note that each month is represented by a number, i.e., January=1, February=2, and so on.
  - b. Choose the *"equal"* (=) **Operator** and put the appropriate month number. In our example, we will enter "2".
  - c. In the Field(s) pane, right-click on the Year field and select Search By.

d. In **Criteria Designer**, set the **Operator** to "equal" (=) and enter the four-digit year **Value** you want to search on. In our example, we will enter "2011".

Criteria Designer						
	Symbol	Form	Field	Operator		Value
	A	Incident Detail	Month	EQUAL		2
•	В	Incident Detail	Year	EQUAL		2011

Figure C2: Criteria Designer and the Boolean logic statement (bottom left)

- 6. In the Form(s) pane, expand the Incident Detail node and click on Class Rollups.
- 7. In the Field(s) pane, check Class.
- 8. In the Form(s) pane, select the words Site Rollups.
- 9. In the Field(s) pane, check Site.

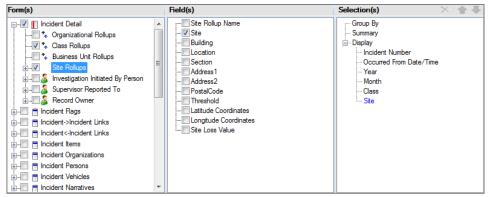


Figure C3: Query—Site

10. Execute your query.

View Style Records Found (10)							
Show Child Record     Drag a column header here to group by that column.							
							Vertical
Outlook Group By	Incident Number	Occurred From Date/Time	Year	Σ Month	∑ Class Rollups.Class	Site Rollups.Site	
0	INCD00000013	2011-02-15 00:00	2011	2	Criminal	West Valley Cent	
Expand All	INCD00000013	2011-02-21 00:00	2011	2	Procedural	West Valley Cent	
	INCD00000013	2011-02-23 00:00	2011	2	Criminal	MSC RDMD 1	
rd View	INCD00000013	2011-02-02 00:00	2011	2	Procedural	Doons - South C	
•	INCD00000004	2011-02-28 16:18	2011	2	Procedural	West Valley Cent	
at Search	INCD00000006	2011-02-23 16:18	2011	2	Criminal	Central Campus	
	INCD00000006	2011-02-13 16:18	2011	2	Criminal	Central Campus	
	INCD00000014	2011-02-28 00:00	2011	2	Procedural	West Valley Cent	
Backcolor of Search Results	INCD00000000	2011-02-03 16:18	2011	2	Procedural	West Valley Cent	
Exact Match of Text	INCD00000013	2011-02-04 00:00	2011	2	Criminal	Doons - South C	
Case Sensitive							
Case Sensitive							

Figure C4: Executed query

11. Once in the results screen, you can group your data for counting, or you can export the data to Excel by clicking the **Export** button on the top toolbar. From Excel, you can further filter your data or create a pivot table.

New Query at 6/22/2012 1:14:58	PM> executed at 6/	22/2012 1:22:36 PM							
Export 🖨 Print Grid 🛛 View De	🛛 🔤 Export 🚔 Print Grid 🕮 View Detail 💯 View in Visual Analysis 🛛 Incident Detail 🤍 👻 👫 Chart 🛛 🚔 Print Detail Report								
View Style	Records Found (10)	]							
St Export Record	Drag a column h	eader here to group by that	teelune						
Horizontal		leader here to group by tha	Column						
Vertical	Incident Detail			-	_				
Outlook Group By	Incident Number	Occurred From Date/Time	Year	Σ Month	Class Rollups.Class	Site Rollups.Site			
	INCD00000013	2011-02-15 00:00	2011	2	Criminal	West Valley Cent			
Expand All	INCD00000013	2011-02-21 00:00	2011	2	Procedural	West Valley Cent			
	INCD00000013	2011-02-23 00:00	2011	2	Criminal	MSC RDMD 1			

Figure C5: Exporting your query results to Excel for analysis

## II. "Open" Incidents by Owner Workgroup

### Example:

Look at all incidents with an "Open" status for which a workgroup has owner rights.

Please refer to Figures C6-C10 for examples of the following steps.

- 1. Add an Incident query by selecting **Incident** in the Navigation Pane and clicking the **Add** button.
- 2. In the Form(s) pane, select the words Incident Detail.
- 3. In the Field(s) pane select Incident Number and Reported Date/Time.

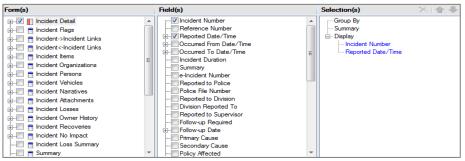


Figure C6: Query-Incident Number and Reported Date/Time

- 4. In the Form(s) pane, select the words Incident Visibility.
- 5. In the Field(s) pane, check Owner Workgroup, Read, and Update.
  - The latter two fields will show up as checkboxes in the results, so that you can see the access rights that correspond to each available workgroup.

Form(s)	Field(s)	Selection(s)	× 1 🏠 🗣
	Owner Workgroup     Owner Workgroup     Owner Workgroups     Owner Barborn State/Time     Created By Date/Time     Last Modified By Date/Time	Group By Summary Displey Incident Number Reported Date/Time Owner Workgroup Read Update	

Figure C7: Query—Owner Workgroup, Read, and Update

- 6. In the Form(s) pane, expand Incident Visibility and select the word Workgroups.
- 7. In the Field(s) pane, check Workgroup Name.

Form(s)	Field(s)	Selection(s) X 🎓 🛡
Incident Owner History     Incident Recoveries     Incident Recoveries     Incident Loss Summary     Incident Loss Summary     Incident Investigators	Held(s)	Group By Summary ⊡ Display □ Incident Number □ Reported Date/Time □ Owner Workgroup □ Read
incident Investigation Log     investigation Interviews     incident Investigation Summaries     incident Investigation Summaries     incident Assignments     incident Reviews     incident Reviews     incident Vasibility     Modemana		Update Workgroup Name
Workgroups     Workgroups     Incident-Case Links		

Figure C8: Query—Workgroup Name

- 8. From here, you can add criteria to see the incidents between certain dates. We will limit our search results to incidents that occurred in 2009. In the **Selection(s)** pane, select **Reported Date/Time**.
  - This will show the Field(s) pane that contains the Reported Date/Time field.
- 9. In the Field(s) pane, expand the Reported Date/Time field, right-click on Year, and select Search By.
- 10. In **Criteria Designer**, set the **Operator** to "*equal*" (=), and then type in your four-digit year in the **Value** field.

Note: You do not need to select a field to add criteria to it. In our case, we added a criterion to show only the incidents from 2009, but the Year field will not appear in the results.

- 11. We will also add a criterion to the **Status** field (without displaying Status in our results). In the **Field(s)** pane, right-click on **Status** and select **Search By**.
- 12. In Criteria Designer, set the Operator to "equal" (=), and select "Open" in the Value field.

Criteria Designer X						× 🛧 🗸
	Symbol	Form	Field	Operator		Value
	A	Incident Detail	Year	EQUAL		2012
ø	В	Incident Detail	Status	EQUAL		Open -

Figure C9: Criteria Designer and the Boolean logic statement (bottom left)

13. Execute your query. In the results screen, expand all child records that contain the workgroup information for each returned incident.

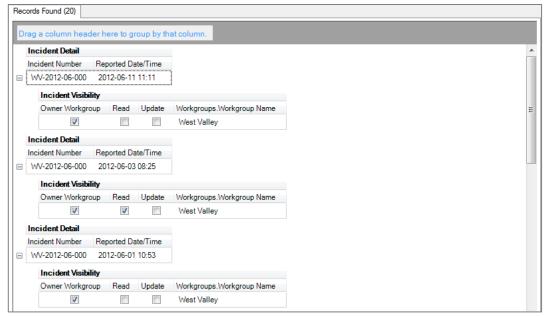


Figure C10: Query results with expanded child records

### III. Incidents with Losses over \$1000 by Year

#### Example:

Show only the incidents with losses over a certain dollar amount in a particular year. In this example, we will keep the details simple, but you can add any type of extra information you need to analyze, such as class or site.

Please refer to Figures C11-C15 for examples of the following steps.

- 1. Add an Incident query by selecting **Incident** in the Navigation Pane and clicking the **Add** button.
- 2. In the Form(s) pane, select the words Incident Detail.
- 3. In the Field(s) pane, check Incident Number and Occurred From Date/Time.
- 4. Expand the Occurred From Date/Time node and select Year and Month.

Form(s)	Field(s)	Selection(s)
Incident Detail     Incident Pags     Incident Pags     Incident Pags     Incident Pags     Incident Pags     Incident Cogarizations     Incident Organizations     Incident Parsons     Incident Naratives     Incident Recoveries     Incident Recoveries     Incident Sources     Incincenter     Incident Sources     Incincenter     Incident Sources	Incident Number     Reference Number     Reforence Number     Reforence Number     Reforence Number     Qocured From Date/Time     Qocured From Date/Time     Quarter     Quarter	Group By ├ Summary C Display └ Incident Number └ Occurred From Date/Time └ Year Month

Figure C11: Query—Incident Number and Occurred From Date/Time > Year, and > Month

- 5. In the Field(s) pane, right click on Year and select Search By.
- 6. In Criteria Designer, set the **Operator** *"equal"* (=), and set the **Value** to the year you would like to analyze (e.g., "2011").

	Criteria Properties Audit Criteria Designer						
	Symbol	Form	Field	Operator		Value	
•	A	Incident Detail	Year	EQUAL	2	2011	
(A)							

Figure C12: Criteria Designer and the Boolean logic statement (bottom left)

- 7. In the Form(s) pane, select the words Incident Loss Summary.
- 8. In the **Field(s)** pane, check Total Loss, Total Recoveries, and Net Loss.

Form(s)		Field(s)	Selection(s) X 🔺 🗣
	*	····· Total Exposure	Group By
🕀 🖳 💾 Incident Items		Total Averted	Summary
🖶 🔲 💾 Incident Organizations	_		Display
🕀 🖳 💾 Incident Persons			Incident Number
🗑 🖷 Incident Vehicles		Vet Loss	Occurred From Date/Time
🗑 🖷 💾 Incident Narratives			Month
	=		- Total Loss
🗑 🗂 💾 Incident Losses			- Total Recoveries
👜 🔚 💾 Incident Owner History			···· Net Loss
🗄 🖅 🛅 Incident Recoveries			
👜 🔚 💾 Incident No Impact			
Incident Loss Summary			
🛅 💾 Summary			
🗄 🖳 💾 Incident Investigators			
🖽 🗐 💾 Incident Investigation Log			
🖶 🔲 💾 Investigation Interviews	-		

Figure C13: Query-Total Loss, Total Recovers, and Net Loss

- 9. In the Field(s) pane, right-click on Net Loss and select Search By.
- 10. In **Criteria Designer**, change the **Operator** to *"greater than or equal to"* (>=), and set the **Value** to "1000".

Criteria Properties Audit							
Criteria Designer							
	Symbol	Form	Field	Operator		1	Value
	A	Incident Detail	Year	EQUAL		2011	
•	В	Incident Loss Summary	Net Loss	>=		1000	

Figure C14: Criteria Designer and the Boolean logic statement (bottom left)

11. Execute your query. From the results screen, you can chart your results for further analysis.

Drag a column I	neader here to group by tha	t column				
Incident Detail						
Incident Number	Occurred From Date/Time	Year	Σ Month	∑ Incident Loss Summary.Total Loss	Incident Loss Summary. Total Recoveries	∑ Incident Loss Summary.Net Loss
INCD00000015	2011-05-29 00:00	2011	5	1895	5	1895
INCD00000016	2011-07-15 00:00	2011	7	6050	)	605
INCD00000013	2011-02-23 00:00	2011	2	1300	30 30	00 1000
INCD00000018	2011-09-18 16:18	2011	9	3850	2125	01 1724.9
INCD00000018	2011-09-13 12:00	2011	9	2999	)	299
INCD00000013	2011-01-24 00:00	2011	1	5000	)	500
INCD00000018	2011-09-10 11:00	2011	9	3650	) 7	50 290
CEN-2011-00000	2011-10-21 07:24	2011	10	4200	)	4200
INCD00000014	2011-04-01 00:00	2011	4	8500	)	850

Figure C15: Executed query

### IV. Male Suspects in Person Records

#### Example:

Search through the general Person records to find all male suspects and the incidents they are linked to.

Please refer to Figures C16-C21 for examples of the following steps.

- 1. Add a new Person query by selecting **Person** in the Navigation Pane and clicking the **Add** button.
- 2. In the Form(s) pane, select the words Person Detail.
- 3. In the Field(s) pane, select First Name, Last Name, and Gender.

Form(s)	Field(s)	Selection(s) × 🛧 🗣
Form(s)  Form(s)  Ferson Detail  Ferson->Person Links  Ferson-Organization Links  Ferson-Organization Links  Fulletrification  Fulletrific	Field(s)           Image: Access Level           Image: Table           Image: Tabl	Selection(s) X I I I I I I I I I I I I I I I I I I
Person Addresses  Person Final Addresses  Person Final Addresses  Person Trespasses  Person Attachments  Person Visibility  Person Visibility  Time Person Incidents Involving  Time Person Incidents Involving	Marital Status Hair Color Eye Color Height Graphyse Graph	

Figure C16: Query-First Name, Last Name, and Gender

- 4. Add a criterion to the Gender field by right-clicking on **Gender** in the **Field(s)** pane and selecting **Search By**.
- 5. In the Criteria Designer, select the Operator to "equal" (=), and set Value to "Male".

Crite	ria Desigr	ier			× 🛧 🖡
	Symbol	Form	Field	Operator 🖌	Value
.0	Α	Incident Persons	Gender	EQUAL	Male

Figure C17: Criteria Designer, set to search for males

- 6. In the Form(s) pane, select the words Person Incidents Involving.
- 7. In the **Field(s)** pane, check **Involvement Type**.

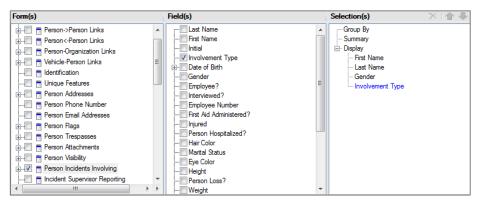


Figure C18: Query—Involvement Type

- 8. Set a criterion on the Involvement Type field by right-clicking on **Involvement Type** in the **Field(s)** pane and selecting **Search By**.
- 9. In Criteria Designer, select the Operator "equal" (=), and set Value to "Suspect".

UIII	eria Desig					
	Symbol	Form	Field	Operator	 Value	
	A	Person Detail	Gender	EQUAL	Male	
•	В	Person Incidents Involving	Involvement Type	EQUAL	Suspect	

Figure C19: Criteria Designer, set to search for male suspects and incidents they are linked to

- 10. In the Form(s) pane, expand Person Incidents Involving and click on the word Incident.
- 11. In the **Field(s)** pane, check **Incident Number**. This will enable filtering of the incidents with male suspect involvement.

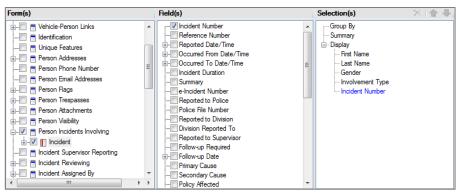


Figure C20: Query—Incident Number

12. Execute your query. In the results screen, expand the child nodes that contain the records of all involvement types for each returned person, with at least one Suspect involvement type included.

Last Name	Gender	
Smith	Male	
ents Involving		
ype Incident.Inc	cident Number	
INCD0000	0000187	
Last Name	Gender	
Baril	Male	
ents Involving		
ype Incident.Inc	cident Number	
erest INCD0000	0000015	
INC-2006-	-000188	
erest INCD0000	0000128	
	ype Incident.In INCD0000 Last Name Baril ents Involving ype Incident.In erest INCD0000 INC-2006	ype Incident.Incident Number INCD000000187 Last Name Gender Baril Male ents Involving ype Incident.Incident Number erest INCD000000015 INC-2006-000188

Figure C21: Query results with expanded child records

13. Once in the results screen, you can export your data to Excel by clicking the **Export** button on the top toolbar. From Excel, you can filter your data even further, or create a pivot table.

### V. Persons with "Wanted" and "Violent" Flags

#### Example:

Find all Person records that have been marked with the "Wanted" and the "Violent" flags. This query can be run for any flag.

Please refer to Figures C22-C26 for examples of the following steps.

- 1. Add a new Person query by selecting **Person** in the Navigation Pane and clicking the **Add** button.
- 2. In the Form(s) pane, select the words Person Detail.
- 3. In the Field(s) pane, check First Name and Last Name.

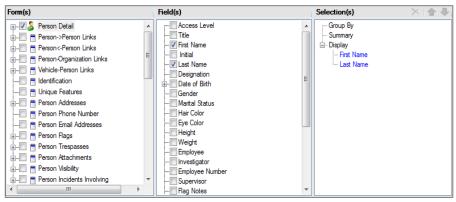


Figure C22: Query—First Name and Last Name

- 4. In the **Form(s)** pane, select the words **Person Flags**.
- 5. In the **Field(s)** pane, check **Severity**.

Form(s)	Field(s)	Selection(s)
🖅 🖉 🕹 Person Detail 🔹	True/False?	Group By
👜 🖷 Person->Person Links	Severity	Summary
👜 🖳 🖱 Person <- Person Links		Display
🖶 🖳 💾 Person-Organization Links		First Name
🖶 🔲 💾 Vehicle-Person Links		Last Name
- dentification		Sevency
🛄 💾 Unique Features		
🛓 🖳 💾 Person Addresses		
Person Phone Number		
🖶 🐨 💾 Person Flags		
😥 👘 Person Trespasses		
🐵 🖳 💾 Person Attachments		
👜 🖳 💾 Person Visibility		
🖶 🖷 💾 Person Incidents Involving 🔹 🔻		
( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( )		

Figure C23: Query—Severity

- 6. In the Form(s) pane, expand Person Flags and select the words Person Flag List.
- 7. In the Field(s) pane, check Flag Description.

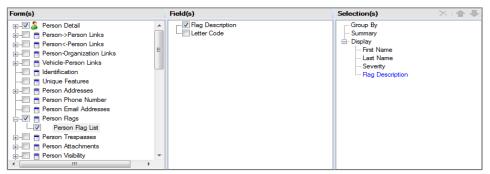


Figure C24: Query—Flag Description

- 8. Set the two required criteria on the Flag Description field by right-clicking on **Flag Description** in the **Field(s)** pane and selecting **Search By**.
- 9. In **Criteria Designer**, set the first criterion to "Flag Description "*equal*" (=) Wanted", and the second criterion to "Flag Description "*equal*" (=) Violent".
- 10. Change the Boolean logic statement to "(A **OR** B)", as we want to search for the persons that have been flagged "Wanted" or "Violent".

	Symbol	Form	Field	Operator	Value
	A	Person Flag List	Flag Description	EQUAL	Wanted
•	В	Person Flag List	Flag Description	EQUAL	Violent

Figure C25: Criteria Designer and the Boolean logic statement (bottom left)

11. Execute the query. In the results screen, expand the child nodes that contain the records of all flags attached to each returned person record, with at least one Violent or Wanted flag included.

📝 <new 2012="" 22="" 2:58:2<="" 6="" at="" query="" th=""><th>4 PM&gt;</th><th>executed at 6/2</th><th>2/2012 3:05:52 PM</th><th></th><th></th></new>	4 PM>	executed at 6/2	2/2012 3:05:52 PM		
🗄 📧 Export 🚔 Print Grid 📧 View	Detail 🖄	View in Visual	Analysis Person Detail	🝷 🔠 Char	t 🛛 🚔 Print Detail Report
View Style	Rec	cords Found (3)			
Show Child Record		Person Detail		Person Flags	
<ul> <li>Horizontal</li> </ul>		First Name	Last Name	Severity	Person Flag List.Flag Description
Vertical		AI	Troutman		Wanted
Outlook Group By		Terry	Abrams	Critical	Violent
Expand All		Jeffrey	Barbeau		Wanted

Figure C26: Query results with expanded child records

### VI. Trespass Information

#### Example:

Show all persons that have a trespass notice and who have been involved in incidents.

Please refer to Figures C27-C31 for examples of the following steps.

- 1. Add a new Person query by selecting **Person** in the Navigation Pane and clicking the **Add** button.
- 2. In the Form(s) pane, select the words Person Detail.
- 3. In the Field(s) pane, check First Name, Last Name, Date of Birth, Gender, Height, and Weight.

Figure C27: Query—First Name, Last Name, Date of Birth, Gender, Height, and Weight

- 4. In the **Form(s)** pane, select the words **Person Trespasses**.
- 5. In the Field(s) pane, check Expiry Date and Comments.

Form(s)	Field(s)	Selection(s) × 🛧 🕸
Person Detail     Person-Person Links     Person-Organization Links     Person-Organization Links     Vehicle-Person Links     Vehicle-Person Links     Vehicle-Person Links     Person Addresses     Person Addresses     Person Flags     Verson Flags     Verson Flags     Person Flags     Verson Flags     Ver	Expiry Date     Solution     Comments	Group By → Summary → Display → First Name → Last Name → Date of Birth → Gender → Height → Weight → Equity Date → Comments

Figure C28: Query—Expiry Date and Comments

- 6. In the Form(s) pane, expand Person Trespasses and select the words Site Rollups.
- 7. In the **Field(s)** pane, check **Site**, **Building**, **Location**, and **Section**. These fields will show you the places from which the person was banned.

Form(s)	Field(s)	Selection(s)
Serson Detail     Person-Person Links     Person-Cerson Links     Person-Capanization Links     Vehicle-Person Links     Vehicle-Person Links     Vehicle-Person Links     Vehicle-Person Links     Person Addresses     Person Addresses     Person Phone Number     Person Ntachments     Person Ntachments     Person Ntachments     Person Ntachments	Ste Rollup Name Ste Ste Ste Ste Ste Ste Ste Ste Ste St	Group By Summary Display First Name Last Name Date of Birth Gender Height Expiry Date Comments Ste Building Location Section

Figure C29: Query-Site, Building, Location, and Section

- 8. In order to eliminate persons without a trespass notice, add a relevant criterion to the **Site** field. In the **Field(s)** pane, right-click on **Site** and select **Search By**.
- 9. In Criteria Designer, set the Operator to "not equal" (<>), and the Value to "Null".

Operator  Value Volue NOT EQUAL Null
NOT FOUND IN MIL
NOT EGOAL NOT
NOTEGOAL

Figure C30: Criteria Designer and the Boolean logic statement (bottom left)

10. Execute the query. In the results window, expand the child nodes to see the trespass information for each returned person record.

	rag a column he	ader here to group	by that column.					
	Person Detail							
	First Name	Last Name	Date of Birth	Gender	Height	Σ Weigl	ht 2	Σ
-	Terry	Abrams	1975-03-01 00:00	Male		185.42	90.72	2]
	Person Tre	spasses						
	Expiry Date	Comments	Site Rollups.Site	e Site Rollup	s.Building	Site Rollups.Lo	ocation	Site Rollups.Section
	2008-08-11	00:00	Doons - South	Ce Wing A				
	2007-09-30	00:00	MSC RDMD 1	Building 1		R & D		
	Person Detail							
	First Name	Last Name	Date of Birth	Gender	Height	Σ Weigl	ht 2	Ε
	Farrah	Christy		Female				
	Person Tre	spasses						
	Expiry Date	Comments	Site Rollups.Sit	e Site Rollup	os.Building	Site Rollups.Lo	ocation	Site Rollups.Section
	2007-02-01	00:00	Central Campu	s Building 2	2 - J.K. Ron			

Figure C31: Query results with expanded child records

### VII. Cases with Start Dates Over 60 Days Ago

#### Example:

Track the age of cases by start date.

Please refer to Figures C32-C34 for examples of the following steps.

- 1. Add a new Case query by selecting **Case** in the Navigation Pane and clicking the **Add** button.
- 2. In the Form(s) pane, select the words Case Detail.
- 3. In the Field(s) pane, select Case Number, Case Name, Case Start Date, and Status.

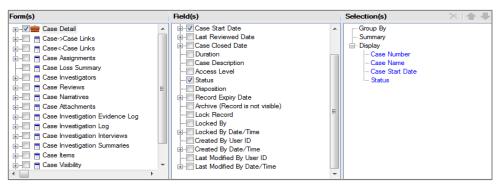


Figure C32: Query—Case Start Date and Status

- 4. In the Field(s) pane, right-click on Case Start Date and select Search By.
- 5. In **Criteria Designer**, set the **Operator** to *"less than or equal to"* (<=), and the **Value** to the date of 60 days previous to the current day (e.g., *"11/4/2011"*).
- 6. In the Field(s) pane, right-click on Status and select Search By.
- 7. In Criteria Designer, set the Operator to "equal" (=), and the Value to "Open".

Crite	eria Desig	iner				× 🛧 🗸
	Symbol	Form	Field	Operator	-	Value
	A	Case Detail	Case Start Date	<=		6/22/2012
•	В	Case Detail	Status	EQUAL		Open

Figure C33: Criteria Designer and the Boolean logic statement (bottom left)

8. Execute your query.

eader here to group	by that column.	
Case Name	Case Start Date	Status
Jeff Brown Restra	2011-04-01 00:00	Open
Jeff Brown	2012-06-04 00:00	Open
Electronic Theft C	2011-04-01 00:00	Open
	Case Name Jeff Brown Restra Jeff Brown	Jeff Brown Restra 2011-04-01 00:00

Figure C34: Executed query

## VIII. Vehicles with Partial License Plate Numbers

### Example:

Search through general Vehicle records to find the vehicles that use only a partial plate number.

Please refer to Figures C35-C38 for examples of the following steps.

- 1. Add a new Vehicle query by selecting **Vehicle** in the Navigation pane and clicking the **Add** button.
- 2. In the Form(s) pane, select the words Vehicle Detail.
- 3. In the Field(s) pane, check License Plate, Year, Style, and Color.

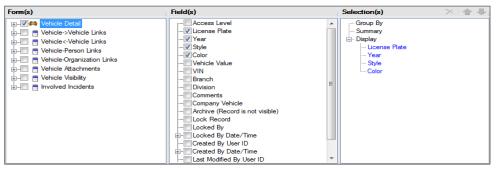


Figure C35: Query-License Plate, Year, Style, and Color

- 4. In the Form(s) pane, expand Vehicle Detail and select the words Vehicle Make Model Rollups.
- 5. In the **Field(s)** pane, check **Make** and **Model**.

Form(s)	Field(s)	Selection(s)	$\times$ ( $\clubsuit$ $\clubsuit$
Vehicle Detail     Organizational Rollups     Geo Rollups     Vehicle Make Model Rollups     Vehicle Vehicle Links     Vehicle-Vehicle Links     Vehicle-Vehicle Links     Vehicle-Person Links     Vehicle-Organization Links     Vehicle Attachments     Vehicle Visibility     Vehicle Visibility	Rollup Name	Group By Summary Display License Plate Year Style Color Make Model	

Figure C36: Query—Make and Model

- 6. In the Form(s) pane, select the words Vehicle Detail.
- 7. In the Field(s) pane, right-click on License Plate and select Search By.
- 8. In **Criteria Designer**, set the **Operator** to **Starts With** and the **Value** to the known starting characters of the license plate (e.g., "XYZ").

Criteri	a Properti	ies Audit			
Crite	ria Desigr	ner			× 🛧 🗸
	Symbol	Form	Field	Operator	Value
•	A	Vehicle Detail	License Plate	STARTS WITH	XYZ
(A)					

Figure C37: Criteria Designer and the Boolean logic statement (bottom left)

9. Execute your query.

Drag a column	header here to c	roup by that colur	nn.		
Vehicle Detail					
License Plate	Year	Style	Color	Vehicle Make Model Rollups.Make	Vehicle Make Model Rollups.Model
XYZ093	1999	2 Door	White	GMC	C40/70 Series
XYZ003	2000	Pick Up Truck	White	Ford	Focus

Figure C38: Executed query

# IX. A Specific Organizations Type

### Example:

Search the contact information for all Organizations with a specific Organization Type

Please refer to Figures C39-C44 for examples of the following steps.

- 1. Add new Organization query by selecting **Organization** in the Navigation Pane and clicking the **Add** button.
- 2. In the Form(s) pane, select the words Organization Detail.
- 3. In the Field(s) pane, check the Organization Name and Organization Type.

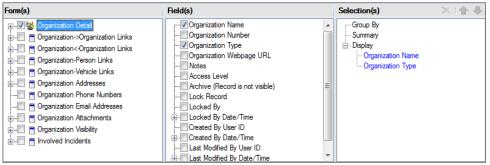


Figure C39: Query—Organization Name and Organization Type

- 4. In the Field(s) pane, right-click on Organization Type and select Search By.
- 5. In **Criteria Designer**, set the **Operator** to *"equal"* (=), and the **Value** to your desired Organization Type (e.g., "Corporation").

Crite	ria Desig	ner			× 🛧 🛛
	Symbol	Form	Field	Operator	Value
•	A	Organization Detail	Organization Type	EQUAL	Corporation
			2		
A)					

Figure C40: Criteria Designer and the Boolean logic statement (bottom left)

- 6. In the **Form(s)** pane, select the **Organization Addresses**.
- 7. In the Field(s) pane, select the Primary Address, Type, and Address 1.

Form(s)	Field(s)	Selection(s) 🛛 🕹 🛔
Vigenization Detail     Organization ->Organization Links     Organization ->Organization Links     Organization ->Organization Links     Organization -Person Links     Organization -Vehicle Links     Organization -Vehicle Links     Organization Addresses     Organization Fhone Numbers     Organization Email Addresses     Organization Attachments     Organization Ntachments     Organization Visibility     Involved Incidents	V Primary Address? V Type V Address 1 Address 2 V ZIP / Postal Code	Group By → Summary → Display → Organization Name → Organization Type → Primary Address? → Type → Address 1

Figure C41: Query—Primary Address, Type, Address 1

- 8. In the Form(s) pane, expand the Organization Addresses node and select the words Geo Rollups.
- 9. In the Field(s) pane, check State\Province and City.

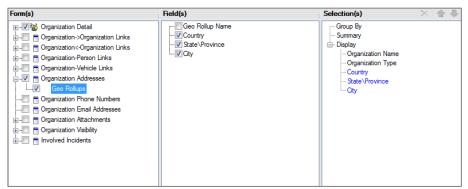


Figure C42: Query—Country, State/Province, City

- 10. In the Form(s) pane, select the Organization Phone Numbers.
- 11. In the Field(s) pane, select the Primary Number, Type, and Phone Number.

Form(s)	Field(s)	Selection(s)	$\times$
Organization Detail     Organization Corganization Links     Organization-Organization Links     Organization-Person Links     Organization-Person Links     Organization Addresses     Organization Phone Numbers     Organization Phone Numbers     Organization Final Addresses     Organization Visibility     Organization Visibility     Involved Incidents	Primary Number?	Group By Summary Display Organization Name Organization Type Country State VProvince City Primary Number? Type Phone Number	

Figure C43: Query—Primary Number, Type, and Phone Number

12. Execute the query. In the results screen, expand the child nodes that contain the records of all addresses and phone numbers for each returned Organization.

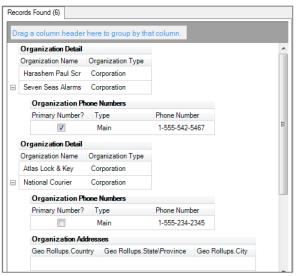


Figure C44: Query results with expanded child records

### X. Items Involved in an Incident

#### Example:

Search for a list of items that have been involved in an incident.

Please refer to Figures C45-C49 for examples of the following steps.

- 1. Add new Item query by selecting Item in the Navigation Pane and clicking the Add button.
- 2. In the Form(s) pane, select the words Item Incidents Involving.
- 3. In the Field(s) pane, check Item Name.

Form(s)	Field(s)	Selection(s) X 🔺 🗣
tem Detail     tem Attachments     tem Visbility     tem Visbility     tem Visbility	Them Name     Disposition     Disposition	Group By ├─ Summary ⊖─ Displey └─ Item Name

Figure C45: Query—Item Name

- 4. In the **Form(s)** pane, expand the **Item Incidents Involving** node and select the word **Incident**.
- 5. In the Field(s) pane, check Incident Number and Occurred From Date/Time.
- 6. Expand the **Occurred From Date/Time** node and check **Year**.

Form(s)	Field(s)	Selection(s)
tem Detail     The Attachments     The Visibility     The Notice Incidents Involving     The Incident Involving	Incident Number     Reference Number     Reference Number     Reference Number     Reperted Date/Time     Occurred From Date/Time     Occurred From Date/Time     Occurred From Date/Time     Day     Weekday     DayofYear     Hour     Minute     Cocurred To Date/Time     Incident Duration     Summay     -e-Incident Number	Group By Summary Display Incident Number Occurred From Date/Time Year kern Name
	Reported to Police	

Figure C46: Query—Incident Number and Occurred From Date/Time > Year

- 7. In the Field(s) pane, right-click on Year and select Search By.
- 8. In **Criteria Designer**, set the **Operator** to *"equal"* (=), and the **Value** to the four-digit year value you would like to search (e.g., "2011").

Symbol	Form	Field	Operator		Value
A	Incident	Year	EQUAL	2011	

Figure C47: Criteria Designer and the Boolean logic statement (bottom left)

9. In the Form(s) pane, expand the Incident node and select the words Class Rollups.

10. In the Field(s) pane, check Class and Category.

Form(s)	Field(s)	Selection(s)
tem Detai     tem Attachments     tem Matachments     tem Vability     tem Incidents Involving     forganizational Rollups     forganizational Rollups     forganizational Rollups     Site Rollups	Class Rollup Name Class Rollup Name Classony Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category Category	Group By Summary ⊖ Display ⊢ Incident Number − Occured From Date/Time − Year − Class − Category ⊢ Item Name

Figure C48: Query—Class and Category

11. Execute the query.

Drag a column header here to group by that column.								
Item Incidents Involving								
Item Name	Incident.Incident Number	Incident.Occurred From Date/Time	Incident.Year	∑ Class Rollups.Class	Class Rollups.Category			
CD	INCD000000170	2011-07-25 02:00	2011	Criminal	Fire			
Copper	INCD000000187	2011-09-18 16:18	2011	Criminal	Theft			
Plate glass windo	INCD000000053	2011-04-19 16:18	2011	Procedural	Security & Safety Obser			
Wire Spools	INCD000000167	2011-07-15 00:00	2011	Criminal	Theft			
Flatbed Trailer	INCD000000139	2011-02-23 00:00	2011	Criminal	Theft			
Wire Spools	INCD000000167	2011-07-15 00:00	2011	Criminal	Theft			
Palm Life Drive	INCD000000078	2011-09-09 16:18	2011	Criminal	Theft			
Car Stereo	INCD000000170	2011-07-25 02:00	2011	Criminal	Fire			
Copper	INCD000000167	2011-07-15 00:00	2011	Criminal	Theft			

Figure C49: Query—Executed query

# XI. Data Entry Management

### Example:

Track creation of incidents to ensure users are entering appropriate information. You can track any field that is important to your organization. In this particular example, we will make sure that users are linking the Person records to the corresponding Involved Person records.

Please refer to Figures C50-C53 for examples of the following steps.

- 1. Add an Incident query by selecting **Incident** in the Navigation Pane and clicking the **Add** button.
- 2. In the Form(s) pane, select the words Incident Detail.
- 3. In the Field(s) pane, check Incident Number, Created By User ID, and Created By Date/Time.

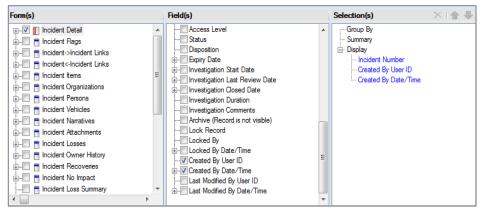


Figure C50: Query-Created By User ID and Created By Date/Time

- 4. In the **Form(s)** pane, select the words **Incident Persons**.
- 5. In the **Field(s)** pane, check **First Name** and **Last Name**.

Figure C51: Query-Last Name and First Name

- 6. In the Form(s) pane, expand the Incident Persons node and select the words Involved Person.
- 7. In the Field(s) pane, check First Name and Last Name.

Note: The "Incident Persons" data is stored in a particular Incident record under the Involvements > Persons sub-tab, whereas the "Involved Person" data is stored in a general Person record that you are linking to (i.e., static information).

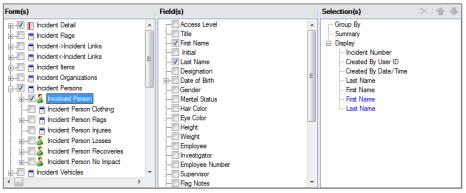


Figure C52: Query—First Name and Last Name

- 8. You may choose to add criteria to the **Created By Date/Time** field, in order to see only a subset of records that belong to a certain time frame (e.g., the last month). In our example, we will not set any criteria.
- 9. Execute your query. In the results window, expand the child nodes containing the Incident Person records.
  - In our results, we can see that Incident record INC-2008-000017 has two Incident Person records (i.e., two involved persons—Holly Becker and Jamie Campbell) with the *Involved Person.First Name* and *Involved Person.Last Name* fields populated with their respective names. This means that the involved persons have been linked to their respective general Person records. In contrast, the involved persons Vulkin Tui and Green Pea have

not been linked to any general Person records, which is reflected in the empty *Involved Person.First Name* and *Involved Person.Last Name* fields.

Recon	ds Found (215)				
Drag	g a column head	der here to group by t	hat column.		
Ir	ncident Detail				
In	cident Number	Created By User ID	Created By Date/Time		
• []	NCD00000016	PPM2000	2011-07-19 11:00		
	Incident Pers	ons		-	
	Last Name	First Name	Involved Person.First N	lame	Involved Person.Last Name
	Bastion	Sheri	Sheri		Bastion
	Best	Constable	Constable		Best
Ir	ncident Detail				
In	icident Number	Created By User ID	Created By Date/Time		
1	NCD00000007	PPM2000	2011-07-31 16:18		
	NCD00000006	PPM2000	2011-07-23 16:18		
	Incident Pers	ons			
	Last Name	First Name	Involved Person.First N	lame	Involved Person.Last Name
	Calquehoun	Donalee	Donalee		Calquehoun
	Busetto	Ricardo	Ricardo		Busetto

Figure C53: Query results with expanded child records

## XII. Activity Calls vs. Call Responses by User

#### Example:

Count the total number of recorded activity calls and the number of times the calls were actually taken up, arranging the results by users that created the activities.

Please refer to Figures C54-C57 for examples of the following steps.

- 1. Add an Activity query by selecting **Activity** in the Navigation Pane and clicking the **Add** button.
- 2. In the Form(s) pane, select the words Activity Details.
- 3. In the Field(s) pane, check Activity Number and Created By User ID.
- 4. In the Field(s) pane, right-click the Created By User ID field and select Group By.
  - The field will be duplicated under the Group By node in the Selection(s) pane, and the Activity Number's Operator will be set to COUNT.

Form(s)	Field(s)	Selection(s) X 🔺 🖣
Activity Detail     Activity Attachments     Activity Attachments     Activity Attachments     Activity Attachments     Activity Attachments     Activity Officer Responses     Activity Officer Responses     Activity Organization Requests     Activity Organization Responses     Activity Organization Responses     Activity Version     Activity Source     Activity Version     Activity Source     Activity Version     Activity Version     Activity Source     Activity Version     Activity Source     Activity Version     Activity Source     Activity Source     Activity Version     Activity Source     Activity Version     Activity Source     Activity Version     Activity Source     Activity Source	Activity Number     Priority     Asigned Date/Time     Reported Date/Time     Gosed Date/Time     Address     Address     Address     Address     Contact Number     Postal Code     SOP?     Closed?     Gosed?     Goff Site     Group By     Cocked By User ID     Created By User ID     Cast Modified By User ID	Group By Summary Display Activity Number Created By User ID

Figure C54: Query—"Group By" Created By User ID

- 5. In the Form(s) pane, expand the Activity Detail node and select the words Call Taken By.
- 6. In the Field(s) pane, check Last Name.
  - The field will be added under the Summary node in the Selection(s) pane with the purpose of doing a DISTINCT COUNT of officers that took calls. In this case, the count would reflect the number of physical persons that participated in call responses, rather than the number of times the responses were actually made. *How can we fix this?*



Figure C55: Query—Last Name

7. To make the system count the total number of officers' responses to the calls, right-click the **Last Name** field in the **Selection(s)** pane and change the Operator to **COUNT**.

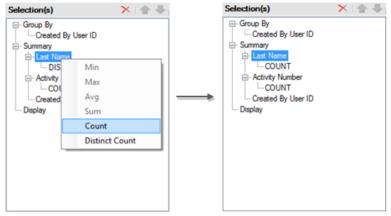


Figure C56: Query—"Count" Last Name

8. Execute your query. In the results window, you will see the number of activities created by each user that participated in activity creation, as well as the number of officers' responses to their calls.

Records Found (6)			
Drag a column header l	here to group by that col	umn.	
Activity Detail			
COUNT_Activity Number	∑ Created By User ID	COUNT_Call Taken By.Last Name	∑ GROUPED_BY
9	Dale	3	Dale
16	dowens	4	dowens
3	JFernandez	3	JFernandez
12	jpollock	0	jpollock
1	jsieben	1	jsieben
13	KJones	0	KJones

Figure C57: Query results

### I. Vehicle Associated Losses

#### Example:

Search all Category specific Vehicle Losses.

Please refer to Figures C58-C62 for examples of the following steps.

1. Add an Incident query by selecting **Incident** in the Navigation Pane and clicking the **Add** button.

- 2. In the Form(s) pane, select the words Incident Details.
- 3. In the Field(s) pane, check Incident Number and Reported Date/Time
- 4. In the Forms(s) pane, expand the Incident Detail node and select the words Class Rollups.
- 5. In the Field(s) pane check the Class, Category, Subcategory, and Type.

Form(s)	Field(s)	Selection(s)
	Class Rollup Name Class Rollup Name Class Code Class Code Consequence Consequence Threshold	Group By Summary Display Incident Number Reported Date/Time Class Category Subcategory Type

Figure C58: Query-Class, Category, Subcategory, and Type

- 6. In the Field(s) pane, right click on Category and select Search By.
- 7. In the **Criteria Designer**, set the **Operator** to "*equal*" (=), and the **Value** to your desired Category (e.g., "Theft").

Criteria Designer X 🛧 🖡							
	Symbol	Form	Field	Operator	Value		
+	A	Class Rollups	Category	EQUAL	Theft		
(A)							

Figure C59: Query—Criteria Designer and the Boolean logic statement (bottom left)

- 8. In the **Form(s)** pane, expand the **Incident Vehicle** node and expand the **Incident Vehicle Losses** node. Select the word **Losses**.
- 9. In the Field(s) pane, check the Loss Cause, Method, and Total.

Form(s)	1	Field(s)	Selection(s)
Incident Vorice     Incident Vehicle     Incident Vehicle     Vehicle Damages     Vehicle Damages     Vehicle Losses     Vehicle No Impact     Incident Vehicle No Impact     Incident Attachments     Incident Losses	*		Group By     Summary     Summary     Display     Incident Number     Reported Date/Time     Class     Category     Subcategory     Type     Loss Cause     Method     Total

Figure C60: Query—Loss Cause, Method, and Total

- 10. In the Field(s) pane, right-click and select Total, and select Search By.
- 11. In the **Criteria Designer**, set the **Operator** to *"not equal"* (<>), and the **Value** to "0".

Criteria Designer X 🛧 🖡						
	Symbol	Form	Field	Operator	Value	
	A	Class Rollups	Category	EQUAL	Theft	
•	В	Losses	Total	NOT EQUAL	0	
( A AN	ID B)					

Figure C61: Criteria Designer and the Boolean logic statement (bottom left)

12. Execute the query. In the results screen, expand the child nodes to view the Vehicle associated Loss information.

-	-	olumn head ent Detail	ior nore a						
		it Number	Reported	d Date/Time	Class Rollups.Cla	ass (	Class Rollups.Category	Class Rollups.Subcategory	Class Rollups.Type
	INCD	00000005	2010-12	2-26 16:18	Criminal		Theft	Personal Property	Under \$1000
	-	Incident V Losses.Los Deliberate	s Cause		thod Losses.To				
		Deliberate				750 1350			
		ent Detail				1330			
		ant Detail	Deserte	d Date/Time	Charles Dallana Ch		Class Balling Caleson	Charles Calendary	Charles Trans
					Class Rollups.Cla		Class Rollups.Category	Class Rollups.Subcategory	Class Rollups.Type
	WV-2	012-000003	2012-05	5-24 08:22	Criminal		Theft		
		Incident	ehicle I or	10.00					
		Incident V			thod Losses.To	tal Σ			

Figure C62: Query results with expanded child records

# Glossary

Activity	An activity is an event or series of events with which security personnel may become involved. When an activity has been closed, the corresponding Activity record is transferred to the Activities component within Data Forms, where it can be further described, investigated, and analyzed.
Administrator	An Administrator sets up Perspective, changes settings, and assigns security protocols to users. Administrators have the highest level of access to all records, forms, and fields; they have no visibility or access restrictions within the program.
Analysis Expert	Analysis Expert is an internal search engine that scans the data in all Activity, Incident, Case, Item, Person, Organization, and Vehicle records, and returns results that meet defined search requirements. With Analysis Expert, you can create a query, and then turn your query's results into a spreadsheet, a chart, a printed grid, or a report.
Assignment	An assignment is a task that is given to a user by his or her supervisor. Only authorized users can create assignments.
Boolean Logic	Boolean logic expresses the reasoning Perspective uses when applying search criteria. It uses letter symbols to represent each set of search criteria and applies AND/OR operators and parentheses to define the relationship of search criteria to each other. For example, the simple Boolean logic statement (A) AND (B) shows that Perspective will only search for results that meet both criteria A and B; in order to include results that meet criterion A or criterion B, the logic formula would need to be modified.
Case	A case is a grouping of incidents related by person, item, location, class or other commonality, generally requiring further investigation. (Case management is only available in the Premium Edition of Perspective.)
Child Data	Child data refers to the data that are recorded on Perspective's subforms, or that could potentially correspond to more than one referent. Examples of child data include information about involved Persons, involved Vehicles, and so on.
Child Node	A child node is a node that can only be accessed when its associated parent node has been expanded.

Class Rollup	A Class Rollup describes an incident according to its Class, Category, Subcategory, and/or Type. Class Rollups are hierarchical, meaning that the option selected in the first level of the hierarchy (Class) determines what options are available in the second level of the hierarchy, Category, and so forth.
Component	A component is a program subdivision represented by a specific type of form. For example, the Data Forms <i>component</i> of Perspective contains such forms, or <i>components</i> , as Incidents, Cases, Activities, Items, etc. The components within Data Forms are graphically represented by <i>banners</i> accessible from the Navigation pane.
Criteria Designer	The Criteria Designer is where the items you want to build your query by are displayed. Here, you set your Form and Field Operators and Values.
Dashboard	The Dashboard is like the Home page or main screen of Perspective. It displays charts summarizing incident information, as well as messages and assignments from supervisors.
Database	A database is a collection of data stored in a structured format. A database might be compared to an electronic filing cabinet. Databases are often organized into tables that store related information in the form of records (e.g., Incident records, Person records, Item records).
Dialog Box	A dialog box is a window that appears on screen when a particular selection is made. It generally provides further options for the selected program feature.
Docking	When changing the legend in the Chart Wizard, you can decide where you want the legend to appear (top, bottom, left, right) by changing the Docking location.
Drop-down	A drop-down list or menu offers a range of selections that have been condensed to save screen space. Click on the down arrow on the right side of a drop-down field, and the field will expand to display a list of options. Select an option by clicking it.
Entity	An entity is an object, person, event, or other concept that provides information about a larger category recorded in Perspective. For example, in order to create a detailed Incident record, you may need to enter such entities, as involved persons and items, attachments, assignments, losses, pieces of evidence, etc., that help to create a full picture of the larger category—the incident.

Export	To export a file is to convert a file created in one software program or application into a format that is usable in another application. For example, exporting a set of query results to Microsoft <sup>®</sup> Excel <sup>®</sup> involves converting the results into a format suitable for use in Excel.
Field	A field is an element within a form that allows you to enter or access a specific nugget of information related to the record type. One field in an address record might be "Street".
Filter	When filters are applied in directory searches, they tell the program to return only records in which the content of a specific field matches the criteria set by the user.
Form	A form is a part of the user interface that allows you to interact with the information contained in the database via a screen populated with related fields and designed to perform specific program functions, like reporting an incident, conducting searches, preparing reports, and so forth.
Group By	Selecting Group By in the Field(s) pane categorizes the data fields you are grouping by in order (i.e., grouping by date of birth will create query results with the DOBs appearing in chronological order).
Hierarchy	A hierarchy is organized into successive levels or layers with each level subject to the preceding levels in the hierarchy. For example, the Class Rollup is divided into four fields ordered hierarchically (Class, Category, Subcategory, and Type); a selection made in the Class field determines what options are available in the Category field and so forth.
Import	To import a file is to bring a file into the currently active application. For example, importing an electronic report into the Gateway involves converting the file into a format that is usable within Perspective, and then uploading the properly formatted file into the Gateway.
Incident	An incident is an unusual action or situation affecting persons or property, either accidental or purposeful, which requires notice or follow-up by a security or human resources department.
Interface	Interface in Perspective refers to the visual on-screen means (e.g., windows, dialog boxes, buttons, banners, panes, or icons) by which Perspective modules and components communicate with the user to allow for a seamless entry, display, analysis, and transfer of data.

Lookup List	See "Drop-down".
Navigation Pane	The Navigation pane is the area of Perspective where users navigate to major program components (e.g., the Dashboard, Data Forms, Analysis Expert), and, to some extent, within the program components. The Navigation pane is located on the left side of the screen.
Node	A node is a point of intersection in a tree that allows users to navigate through the tree to access increasingly specific levels of data or program function. A node can be identified by the small square box to the left of its position in the tree. Clicking the box when it has a plus (+) symbol inside will expand the entity and display all its sub-entities underneath. Clicking the box when it has a minus (-) sign inside will collapse all the sub-entities and hide them under the main entity. When a sub-entity also has a small square box to its left, it is known as a child node.
Operator	An operator is used to create a more refined search. Like the calculation symbols used in mathematical formulae, where operators define the relationship between the formula's parts (e.g., A is equal to B), operators in Perspective express the relationship of the field to the value when setting search criteria. For example, if the Class field is selected and Criminal is the chosen value, an operator of "equal to" (=) would stipulate that any records appearing in your search results would have a Class equal to Criminal. Examples of other operators include not equal to, less than, like, starts with, and ends with.
Organization	In the context of Perspective, an organization is any agency, company, or group.
Pane	A pane is an area within an on-screen window that contains specific type of information in form of interconnected files, fields, messages, banners, buttons, formulae, or other information. For example, Data Forms interface is expressed through the functionalities contained in the Navigation, Listing, and Viewing panes.
Parent Data	Parent data refers to the basic data that are recorded on Perspective's main forms, or that correspond to only one referent. Examples of parent data include, but are not limited to, an incident's Class, Site, Business Unit, Reported Date/Time, Status, Created by User, etc.

Premium Edition	The Premium Edition of Perspective is the "full" version of Perspective, including all features and functionality available in the Standard Edition, plus more. Features and functionality available only in the Premium Edition include investigation management, case management, the Quick Find tool, and the option of integrating with any of Perspective's add-on modules (including Perspective Visual Analysis). For a list of features and functionality common to both the Premium and Standard Editions of Perspective, see "Standard Edition".
Query	A query is a request for information. In Analysis Expert, when the Execute button is clicked, the program sends a message to the database where all information is stored, requesting results matching the query's specified criteria.
Radio Button	A radio button allows users to select one option out of a set of options. Before a radio button has been selected, it will look like an open circle, and after it is selected, a dot will appear inside the circle. Once a user has selected one radio button, selecting any other radio button in the same set will deselect the first option.
Record	A record is a subsection of database holding information about one entity or a member of a category within the database that is stored as one unit (e.g., an Incident, Activity, Item, or Person record).
Record View	A record view is a particular list of records that a user is permitted to access. In Perspective, users are able to create and save their own customized record views in the Data Forms component, allowing them to better organize and manage the records they need to view on an ongoing basis.
Ribbon	Formerly the Action Toolbar, the Ribbon in Perspective locates the most frequently used general administration, navigation, help and search tools and a search field for you to refer to sections of the integrated Help files. In the Data Forms component, the Visual Analysis icon is added that assists in visual representation of relationships between the records stored in the Perspective's database. In the Analysis Expert component, the Ribbon is populated with an additional set of icons that perform saving, adding, cloning, deletion, sharing, and execution of queries.

Rollup	A rollup is also known as a multi-tier or hierarchical lookup list. Rollups are used to streamline the options and functions available to users, making selections from related lookup lists. Each rollup has up to four tiers. The first tier is known as the Root; the option selected in this first tier determines what options are available in the second tier, and so forth. A higher tier in the hierarchy is known as a Parent field and a lower tier is known as a Child field. Any Child fields that are on the same tier of the hierarchy are called Sibling fields.
Search By	Selecting Search By in the Field(s) pane determines the specific data your query will search for.
Sigma (Σ)	Sigma is the Greek symbol for "sum". In Analysis Expert, the sigma symbol appears on the heading of a column when Group By is clicked, indicating that the data in the column can be added together.
Standard Edition	The Standard Edition of Perspective is the "lite" version of Perspective, offering the same quality, design, and potential as the Premium Edition, but with less functionality and an easier implementation. Features and functionality common to both the Standard and Premium Editions include incident management, searching and analysis, reporting, Dashboard assignments and charts, data segregation and application security, and the option of integrating with a number of Perspective's add-on modules (including Perspective e-Reporting). For a list of features and functionality available only in the Premium Edition of Perspective, see "Premium Edition".
Subform	A subform is a sub-tabbed screen that contains child data, allowing you to enter a large amount of detailed information about an entity, in an organized and coherent manner. A subform can only be accessed through its associated parent form. Like its parent form, the subform is designed to perform specific program functions (e.g., recording an involved person or registering a piece of evidence).
Tab	A tab in Perspective is used to mark a particular section within a data form. It looks like and operates like a tab in a file folder. To access the contents of a tab, users must simply click on the tab.
Text Search	In your query results window, Text Search pinpoints specific data you want to find. Begin the search by clicking the Search Grid button.

Tier	When grouping results by a field, you can drag and drop column headings. By doing this, you can add tiers (or column headings), remove tiers, or reorder tiers.
Toolbar	A row of icons that activate functions or options when clicked. (e.g., The Ribbon).
Tree	A tree, in Perspective, is a hierarchical structure representing the links and relationships between program components. For example, expanding a single node reveals child nodes, which in turn yield further entities, until the user arrives at individual fields containing precise pieces of data. The hierarchical relationship between all these pieces, essentially a navigation map of one particular area of the program, can be described as a tree.
Value	A value is the specific information, or data, entered into a field.
Viewing Pane	The Viewing pane is the area of Perspective where users view record contents. (Depending on their user privileges, users may also be authorized to edit, delete, or add records in the Viewing pane.) The record displayed in the Viewing pane depends on selections made in the Navigation pane and the Listing pane. The Viewing pane is located on the right side of the screen.
Visual Analysis	Perspective Visual Analysis is an optional module for the Premium Edition of Perspective, allowing data relationships between Incident, Case, Item, Person, Organization, or Vehicle records to be rendered into powerful visual link charts. These visual elements can easily be analyzed and interpreted, bringing clarity to complex investigations and scenarios.
Window	A window is an enclosed rectangular on-screen viewing area that displays programs, files, fields, messages, or Web sites independently of other on-screen areas.
Wizard	The Wizard contains a number of options that allows you to customize your charts, such as the appearance, legend, themes, etc.
Workgroup	A workgroup, in Perspective, segregates users by department, division, corporate level, region, or any other criteria an organization wants to use, and allows an organization to limit users' access to data. Users can only access records assigned to their respective workgroups.

## Index

### Α

Add Criteria	6
Analysis Expert	2
access	2
Analyze and Chart Child Data	15, 30
Appendix C	3, 41
query examples	41-70

#### В

Boolean logic	.38
criteria operators	.36
truth table	. 38

### С

Chart Query Results	15
data pane	15
x-field	15
y-field	15
Chart Wizard	21, 22, 24, 26
3D	22
appearance	22
axes	
chart title	
chart type	22
legend	22
series data	22
add series	15
Child Records	6, 31, 34
Criteria Designer	4
criteria tab	4
properties tab	4
audit tab	4
Criteria Operators	
Boolean logic	7, 38, 40, 52

#### Ε

Export Query Results to Excel ......14, 34

# Group by add tier .....11

by field	11
remove a field	11
reorder the tiers	11

#### Η

Help	3
Μ	

Modify Your Charts2
---------------------

#### Ρ

Parent Records	6
Print Query	13
portrait layout	13
print grid	13

### Q

Query	6
add	6
execute	6
plan	6
results	6, 15
view	9
examples	41-70

#### S

Search	6, 10
backcolor of search results	10
case sensitive	10
exact match of text	10
include child record	10

#### T

Truth Table	3
-------------	---

#### U

User Interface	3
criteria designer	3
field(s) pane	3
form(s) pane	3
navigation pane	3
ribbon	3

selection(s) pane3
V
View Details Regarding a Record13
W
WizardSee "Chart Wizard"

79



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