

User's Manual



Table of Contents

Chapter 1 : Getting Started with Integrity	3
Chapter 2 : Interface Layout	4
Chapter 3 : Navigation	5
Chapter 4 : Printing	6
Chapter 5 : Quick Search and Results Menu	7
Buffering Search Results	8
Exporting to Excel or .CSV	8
Creating Mailing Labels	9
Creating Thematic Maps	9
Related Data Tables	10
Sanitary Sewer Overflow Reports	11
Property Record Card	12
Integrated Media	13
Chapter 6 : Advanced Toolbar	14
Map Layers	15
Bookmarks	16
Identifying Features	17
Advanced Queries	18
Drawing Markup	22
The Dock	23
Create Reports	24
Editing	25
Account Management	28
Chapter 7 : Legal Information and Other Resources	29

About Integrity™

Integrity is a web-based GIS (geographic information system) software for managing and maintaining spatial data of all kinds for municipalities, utility companies, governmental bodies, and private and public sector entities. **This user's manual will help you learn how to utilize Integrity's various tools and features.**

Getting Started

Windows System Requirements

[Microsoft Silverlight 4.0 or greater \(free download\)](#)

Operating System – Windows 7, Windows Vista, Windows XP Service Pack 2

Processor – 2 GHz processor or better

Memory – 512MB of RAM

Browser - Mozilla Firefox, Internet Explorer 7.0 or greater, Google Chrome, Safari, Opera

Macintosh System Requirements

[Microsoft Silverlight 4.0 or greater \(free download\)](#)

Operating System - Apple Mac OSX 10.4.8 or greater

Processor - 2 GHz processor or better

Memory - 512MB of RAM

Browser - Safari, Opera, Mozilla Firefox, Google Chrome

Network Connection Recommendations

Integrity will work with any internet connection. However, load times and function processing speeds may vary based on the speed of your internet connection.

Broadband internet connection (min. of 512 Kb/s download rate) recommended.



Interface Layout



1 Navigation Bar

The Navigation Toolbar provides basic map navigation functions, printing access, and houses the Quick Search.

2 Advanced Toolbar

The Advanced Toolbar provides advanced tools for identifying features and gathering information from the map.

3 Quick Search

Quick Search automatically searches several predefined fields for the text entered.

4 Results Window

The Results Window displays selected or returned features when using Quick Search, Identify, and Advanced Querying.

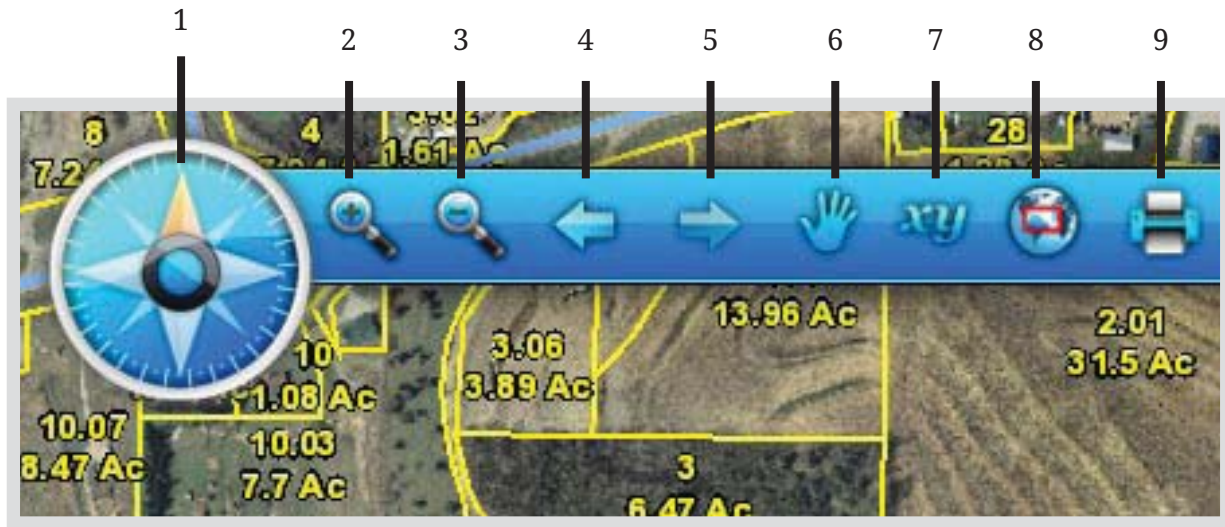
5 The Dock

Minimize windows to The Dock to conserve space and pin saved queries, markup, and bookmarks for quick recall.

6 Site Information

Reference information about the site owner and Integrity.

Navigation Tools



1 Compass

The [Navigator Compass](#) allows you to pan north, south, east, and west using the arrows, zoom to full extent with the center button, and rotate the map by mousing over the edge of the compass.

2 Zoom In

Select the [Zoom In](#) tool and click anywhere on map to zoom to a selected area. You can also click and drag the cursor to zoom to a specific area.

3 Zoom Out

Select the [Zoom Out](#) tool and click anywhere on map to zoom out from a selected area.

4 Previous Map Extent

The [Previous Extent](#) tool will return you to the previously viewed map extent. This can be used much like your web browser's (IE, Firefox, etc.) "Back" button.

5 Next Map Extent

The [Next Extent](#) tool will return you to more recent map extents. This can be used much like your web browser's (IE, Firefox, etc.) "Forward" button.

6 Pan Map

[Pan](#) lets you click your cursor anywhere on the map and drag to a desired view.

7 Display Coordinates

Select [Display Coordinates](#) to view a window that displays your cursor's coordinates in DMS (Degrees, minutes, seconds), Decimal Degrees, and State Plane.

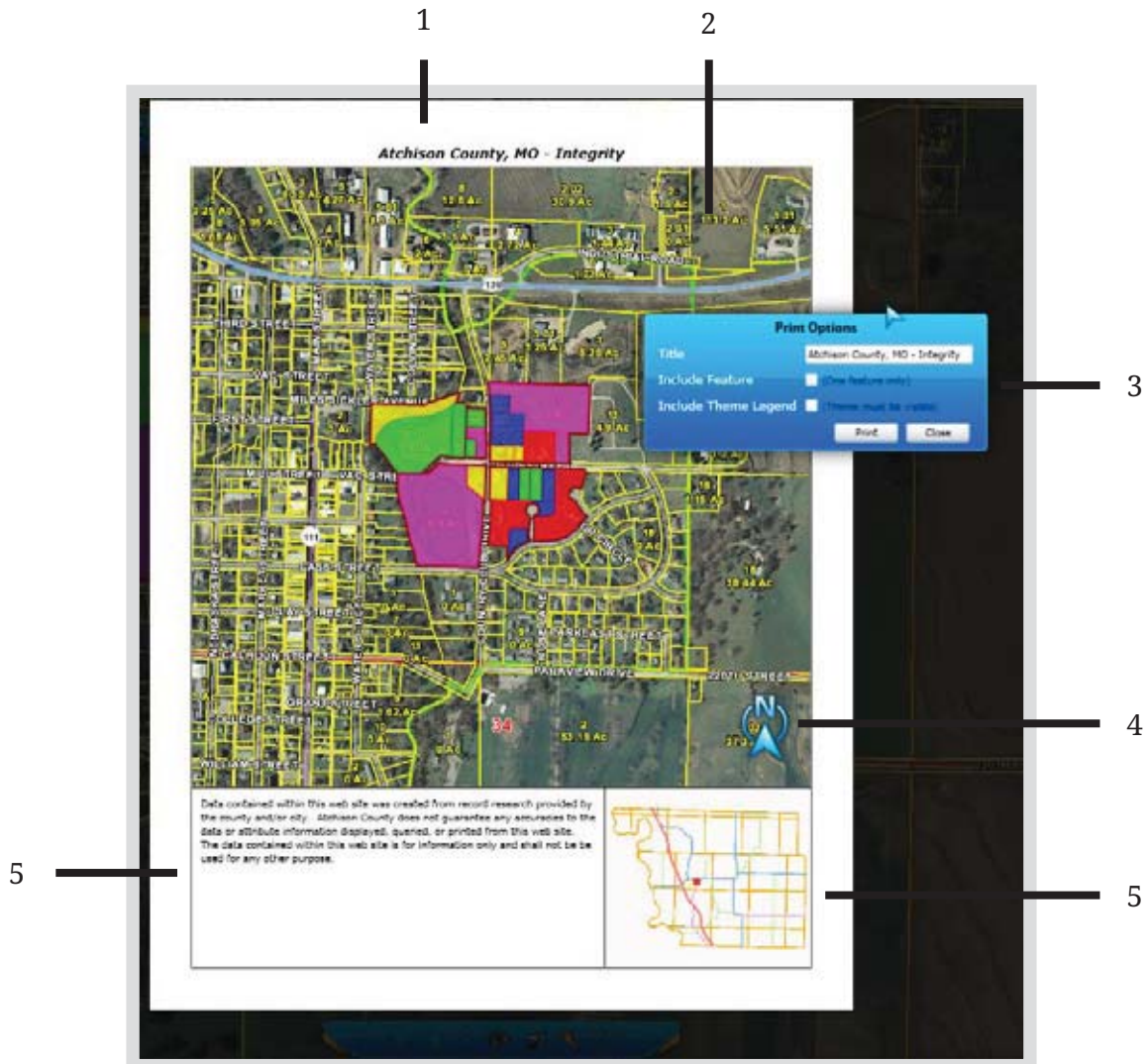
8 Overview Map

Select [Map Overview](#) to view the full extent of the map in a small display window. A red square shows the current area of the map being viewed.

9 Print

See [Printing](#) on Page 6.

Printing



1 Map Title

Set the document's name in Printing Options and the title will be reflected here.

2 Map Document

This is the actual map that will be printed - which is your current map extent

3 Printing Options

Set the Map Title, include Map Legends, or a single selected feature.

4 North Arrow

5 Map Overview

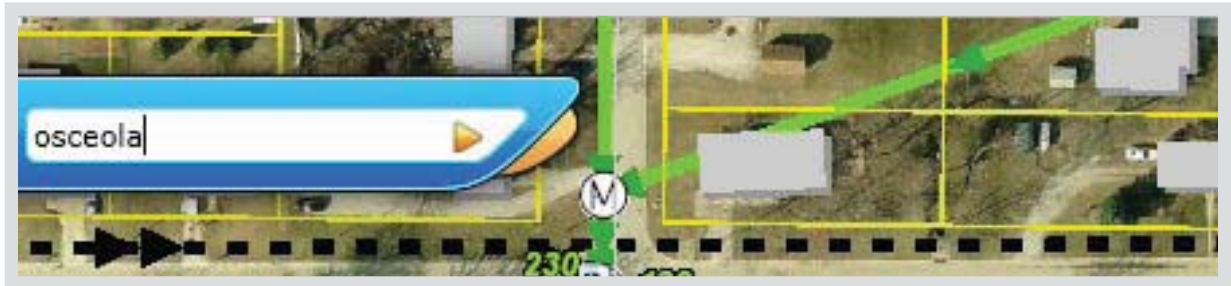
The map overview shows you the map extent you will be printing

6 Legal Disclaimer

Displays any legal information or disclaimers associated with the site.

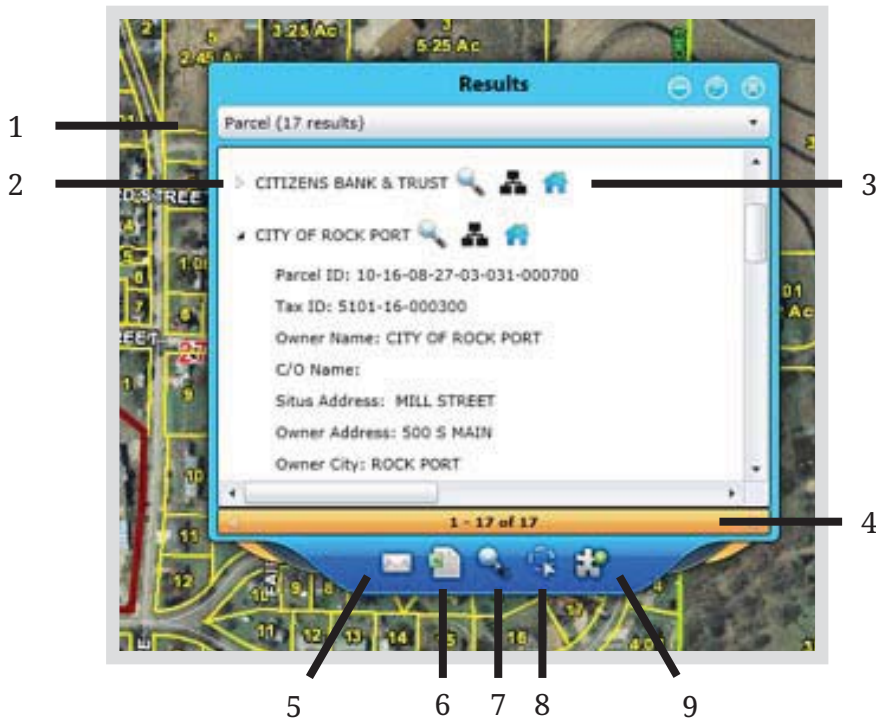
Quick Search Box

The Quick Search box feature appears on the right side of the Navigation Toolbar. To execute a search, type in a value and press enter. Quick Search automatically searches several predefined fields for the text entered. Entering more words will return fewer results. If a search does not return results, try entering fewer words to search for.



Search Results

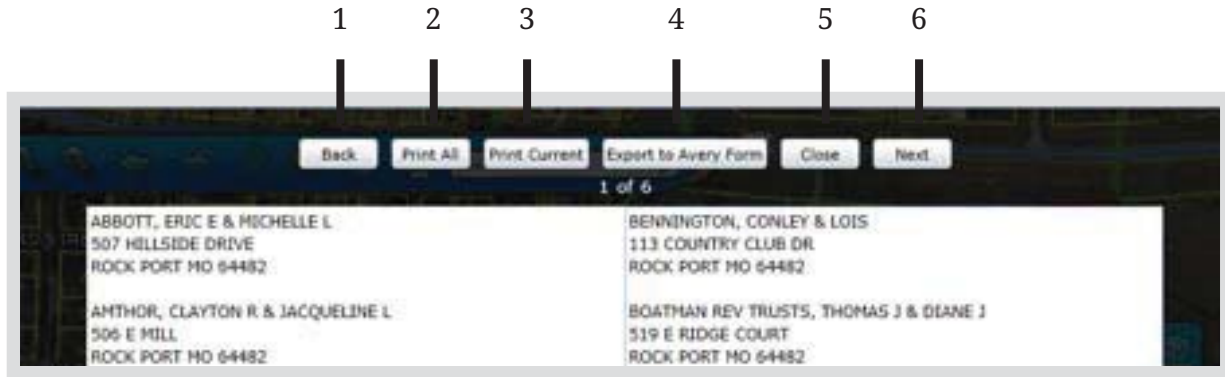
The Search Results window displays selected or identified features when using the following tools: Quick Search, Identify, and Advanced Query.



- 1 Filter Selected Layers
- 2 Results List
- 3 Feature Options
- 4 Results Count
- 5 Create Mailing Labels
- 6 Export to Excel or .CSV
- 7 Zoom To Results
- 8 Buffer Results
- 9 Create Thematic Map

Create Mailing Labels

Creating mailing labels from a set of results allows you to streamline any notification process your team may use regarding groups of people such as customers or property owners.



1 Previous Page

4 Export to Avery Form

2 Print All Labels

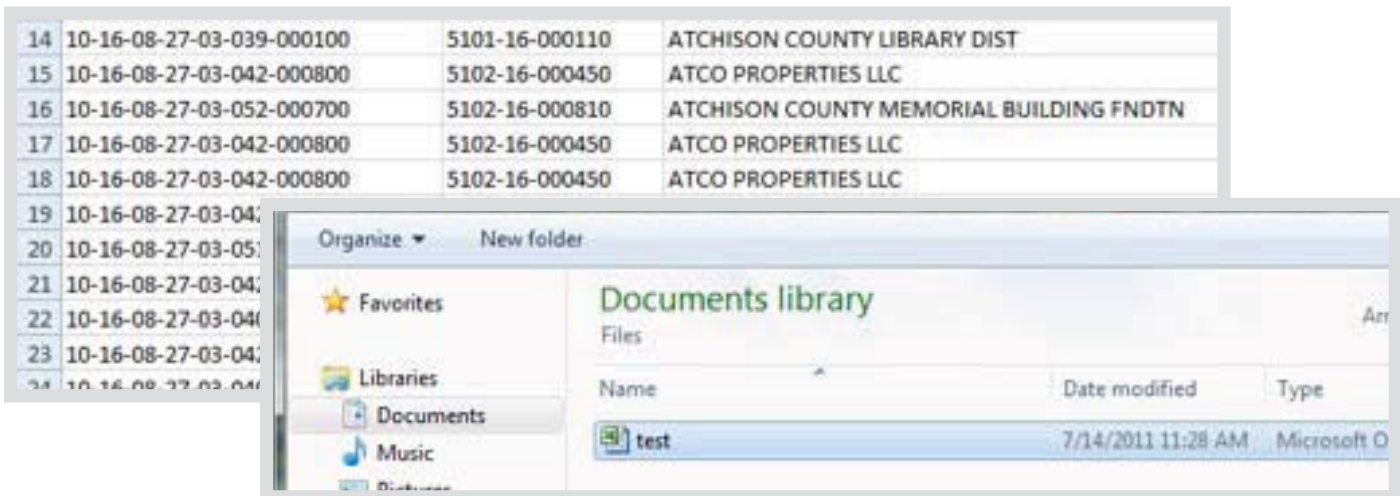
5 Close

3 Print Current Page

6 Next Page

Exporting to Excel or .CSV

Export to Microsoft Excel or .CSV and save your results set on your computer to easily share with your colleagues or print in a spreadsheet format.



Buffer Results

Create a buffer zone from your search results to quickly identify and notify affected areas and/or groups of people. Can be used in generating Mailing Labels (see [Mailing Labels](#) on page 8) and Thematic Maps (see [Thematic Maps](#) below).

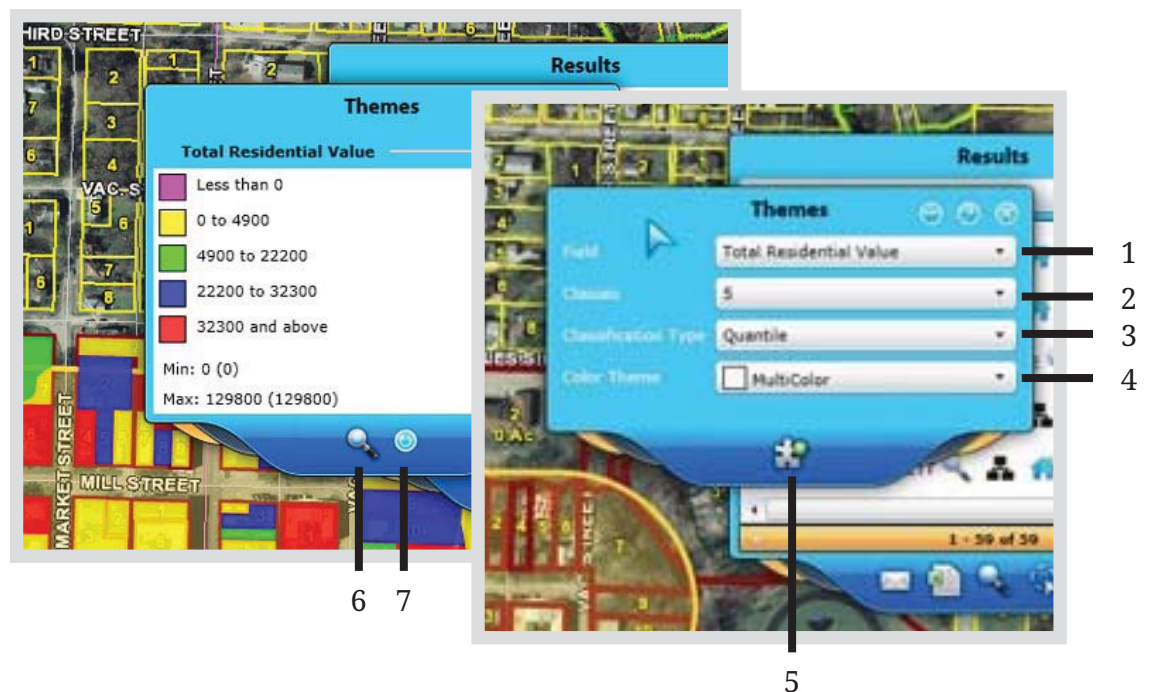


- 1 Type in a buffer distance in feet
- 2 Choose whether to buffer features or only display the buffer zone
- 3 Click OK to apply the buffer zone

Creating Thematic Maps

Map themes are a color coded overview of selected features based on selected field properties.

- 1 Select Field
- 2 Number of Classes. Increase to for a more narrow theme.
- 3 Pick Class Type
- 4 Color Scheme
- 5 Create Theme
- 6 Zoom to Theme
- 7 Clear Theme



Related Data Tables

Some map features may have related data associated with them such as sales history, reporting, or inspection history. The related data table window lets you view and export this data separately from search results.



1 Open Related Data

2 Related Data Type

3 Data History

4 Export Related Data to excel or .CSV

Sanitary Sewer Overflow Reports

Municipal officials can manage sanitary sewer overflow (SSO) reporting using related data tables in Integrity. Generate reports for government agencies and add/edit SSO events to your map using Editing (see [Editing](#) on page 26).

The screenshot shows the Integrity software interface. A map in the background displays a residential area with streets labeled 'LINDOLEN STREET', 'TEMPLE STREET', and 'AYERS STREET'. A red circle on the map indicates a Sanitary Sewer Overflow (SSO) event. Overlaid on the map is a 'Sanitary Sewer Overflow' data table. A 'Results' window is open at the top left, showing '1 result'. A 'Data History' window is open at the bottom, showing '1 of 1' records. A 'SELF REPORTING FORM FOR WASTEWATER BYPASS' is displayed on the right side of the interface.

Field	Value
Object ID	51
Point ID	20020
Permittee	
Permit Number	
Reported Date/Time	4/21/2011 10:47:07 PM
Permittee Representative	
County	
MO DNR Contact	
Overflow Start Date/Time	4/21/2
Overflow End Date/Time	4/21/2
Overflow Duration	
Estimated Vol Discharge(gallons)	

SELF REPORTING FORM FOR WASTEWATER BYPASS

Notification Information

Permittee (Municipality or Facility Name)	Permit Number	Overflow, Backflow Start Date / Time
<input type="text"/>	<input type="text"/>	<input type="text"/>
Person Representing Permittee Who Contacted MoDNR	County	MoDNR Office
<input type="text"/>	<input type="text"/>	<input type="text"/>

- 1 Open Related Data
- 2 Related Data Type
- 3 Data History

- 4 Export Related Data to excel or .CSV
- 5 Generate SSO Reporting Form

Property Record Card

Open the Property Record Card of a given Parcel in a separate printable web page. View deed images, land values, and any other data associated with the property.

The screenshot displays a web application interface for property records. On the left, a map shows a parcel highlighted in yellow. A blue sidebar on the left contains a search bar and navigation icons. The main content area is divided into two sections. The top section, titled 'Results', shows a list of 45 parcels, with the first one selected. The bottom section, titled 'Property Record Card', provides detailed information for the selected parcel. A 'Print Report Card' link is located at the top right of the record card. Below the record card, there are two 'Deed Image' links. A 'Back to top' link is at the bottom right of the record card.

Results

Parcel (45 results)

▲ CITY OF ROCK PORT

Parcel ID: 10-16-08-27-03-032-000100
Tax ID: 5103-16-000930
Owner Name: CITY OF ROCK PORT
C/O Name:
Situs Address: COR OF MAIN AND 1ST
Owner Address: 500 S MAIN
Owner City: ROCK PORT

Property Record Card

Atchison County, Missouri
Property Report Card
Parcel Number: 10-16-08-27-03-032-000100
Print Report Card

Address: COR OF MAIN AND 1ST
Contract:
City: ROCK PORT
CID#: 10-16-08-27-03-032-000100
Map Area: 10-16-8-27-3
Plat Page:
Listed:
Review: 0
Legal Description: LTS 1-2-3 BLK 25 MEEK'S ADD TO ROCK PORT

Deed: CITY OF ROCK PORT
DBA:
Router: 000-000-000
Subdir: [NONE]
Listing Date: 12/30/1899
Review Date: 12/30/1899

Acres: 0
MLS:
Tax Dist: 12152
Tax ID: 5103-16-000930
Sec/TWP/Range: 27 \ 65 \ 41
Entry Status: Inspected

Values				
Assessed	Agriculture	Residential	Comm/Other	Exempt
Land	\$0.00	\$0.00	\$0.00	\$0.00
Drwg	\$0.00	\$0.00	\$0.00	\$0.00
Total	\$0.00	\$0.00	\$0.00	\$0.00
Tax Val	\$0.00			

2011 Midland GIS Solutions and Atchison County, MO

Back to top

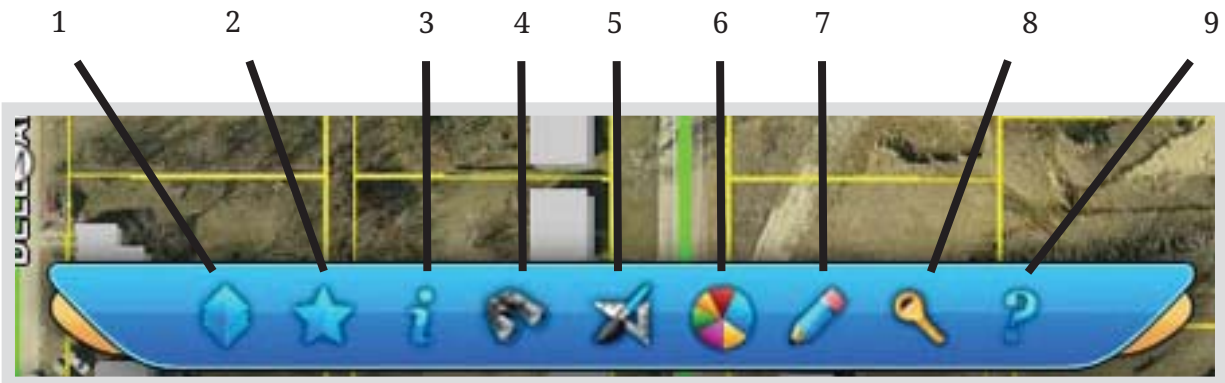
1 View Property Record Card

2 Print Property Record Card

3 View Deed Images

Advanced Toolbar

The Advanced Toolbar provides advanced tools for performing tasks such as identifying features, gathering information from the map, managing user accounts, changing map layers and bookmarking locations.



1 Map Layers

Click on the “Layers” tool to show layers and sub-layers within the map.

2 Bookmarks

Save your current map view or extent. These can be saved and are stored locally on your computer.

3 Identify Features

Select any features on the map by drawing various shapes to display their information.

4 Advanced Queries

Perform very specific searches by querying using this tool. Save your queries as well.

5 Draw / Measure

Create and measure graphics and text on the map for planning projects. Save/load drawings.

6 Create Reports

Create a graphical map report for a given layer and layer field set.

7 Map Editing

Directly add/edit map features such as manholes in a city, manage sign inventories, or manage your other spatial assets.

8 Account Management

Enter a valid username and password to securely login to Integrity™ to access additional authorized data, manage site users, or manage your account.

9 Internal Help Menu

Not quite sure what a certain tool or window does? You can quickly reference the internal help menu.

Map Layers

The Map Layers give you control over what features are visible on the map and what their visibility level is via the layer slider. Explore the available layers by clicking the arrow to the left of each layer to expand/collapse the list. Checking on/off layers will show/hide them on the map.



1 Save Layer States

3 Reset Layers to Default

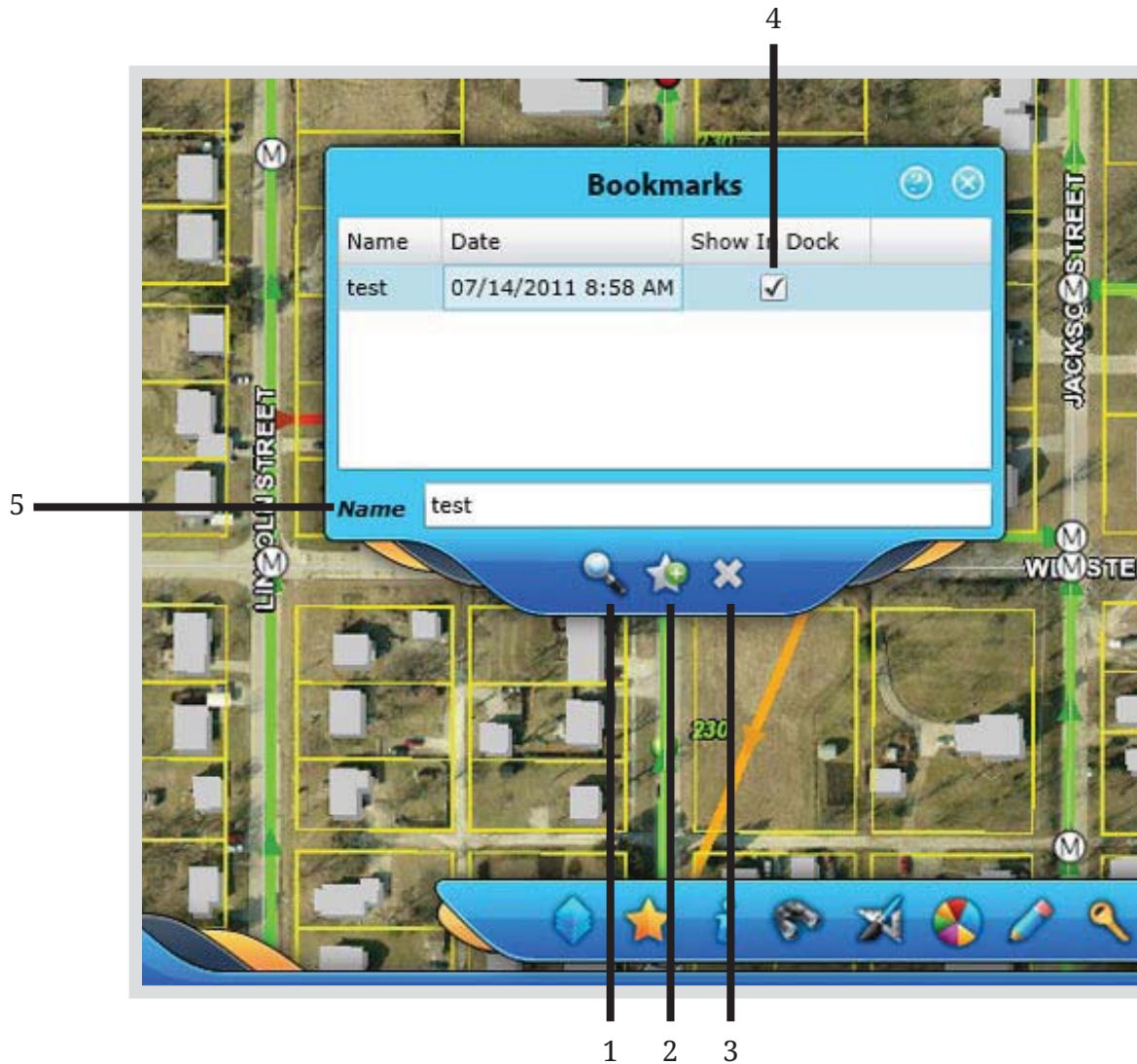
5 Expand / Collapse Layers

2 Load Layer States

4 Change Layer Transparency

Bookmarks

Create a Bookmark if you're working in a certain location frequently or have several points of interest that need to be revisited. Bookmarks are stored on the computer that created them and can be deleted or reloaded at any time through the interface below.



1 Zoom to
Bookmark

3 Delete
Bookmark

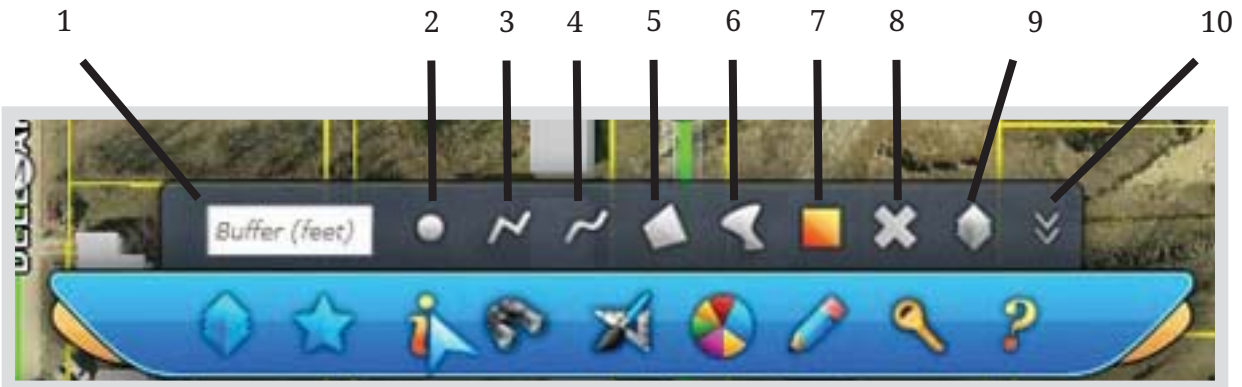
5 Name
Bookmark

2 Create
Bookmark

4 Show Bookmark
in Dock

Identifying Features

Identify lets you draw shapes as a method of selecting map features. Quickly identify a map feature or a set of features in an area quickly.



1 Apply Buffer

Set a buffer area value here (in feet). This will auto-apply a buffer to identified features.

2 Select by Point

Identify by clicking with a precise point

3 Select by Polyline

Identify by drawing straight lines.

4 Select by Freehand Line

Identify by drawing freehand.

5 Select by Polygon

Identify by drawing polygonal shapes.

6 Select by Freehand Shape

Gives your Identify tool a rectangular selection area.

7 Select by Rectangle

Identify by drawing rectangles.

8 Clear Selection

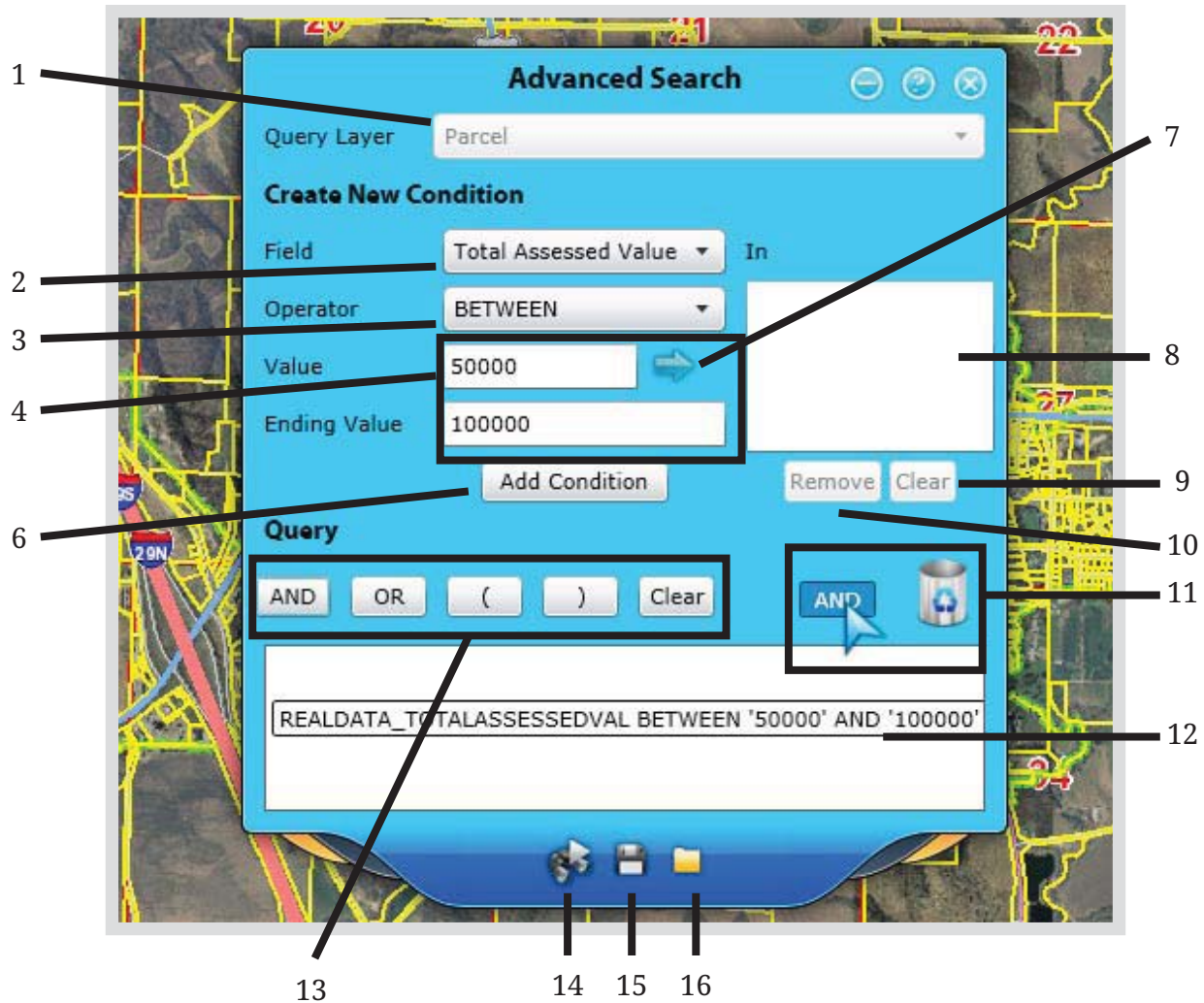
9 Toggle Layers

Make your Identify tool select either all layers or only visible ones.

10 Hide Identify Panel

Advanced Queries

To execute an advanced search or query click on the “Advanced Search” tool. A display window will appear on the left side of the Integrity™ viewer. Advanced Search accepts various inputs and values to generate an advanced query that yields very specific result sets.



- | | | |
|--|--|--|
| 1 Query Layer
Select the layer you wish to query. | 4 Values (Ending optional) | 11 Trash Can (drag conditions here) |
| 2 Field
Select a layer field. | 6 Add Condition | 12 Condition Statement Field |
| 3 Set Operator
[=], [<>], [<], [<=], [>], [>=], Like, Not Like, In, Not In, Between, Not Between. | 7 Add to 'In' Statement Field
Use with operator 'In' / 'Not In' | 13 Statement Field Operators
Add 'And', 'Or', '(' to Statement String or Clear. |
| | 8 'In' Statement Field | 14 Run Query |
| | 9 Clear 'In' Statement Field | 15 Save Query |
| | 10 Remove 'In' Query String | 16 Load Query |

Advanced Queries : Assessed Land Values

In this example we are going to use Advanced Queries to find Assessed Land Values within a county that are between 50,000 and 100,000 in value.

- 1 Query Layer
From the dropdown select the 'Parcel' layer.
- 2 Field
From the dropdown select the 'Total Assessed Value'.
- 3 Operator
Choose the 'Between' operator.
- 4 Values
Enter 50000 in the first Value field and 100000 in the Ending Value field.
- 5 Add Condition
- 6 Run Query

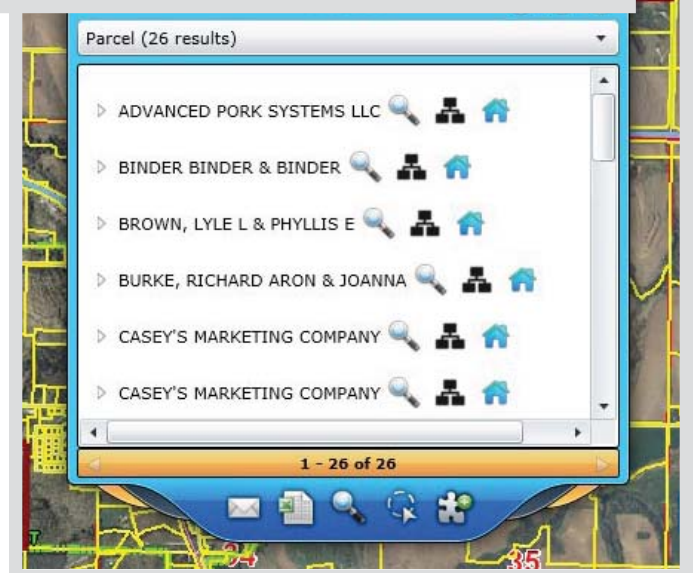


Now you can...

- 1 Utilize Search Results
Create mailing lables, themed maps, export the list to excel or .CSV all using the Search Results Window.
- 2 Save the Query and run it again easily.



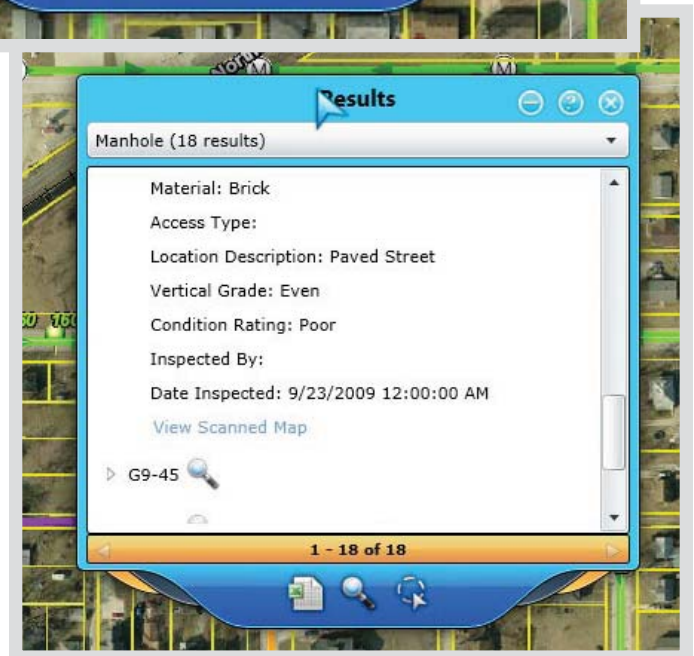
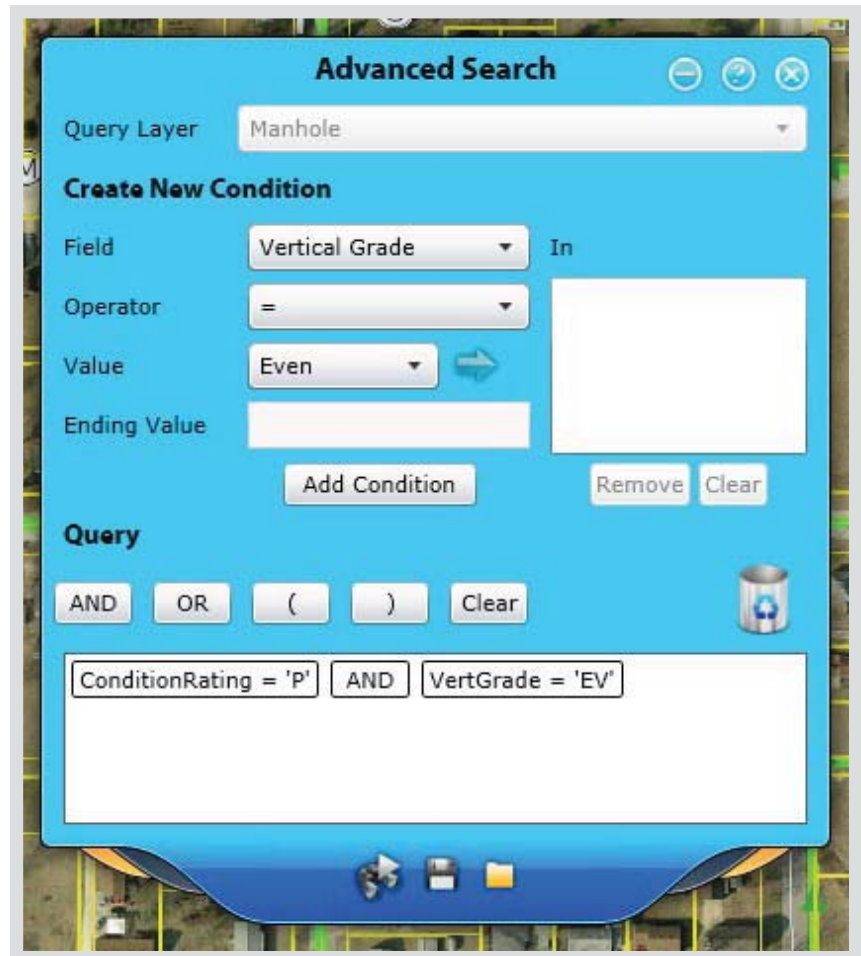
- 3 Load the Query Shortcut into the dock.



Advanced Queries : Manhole Condition Ratings

In this example we are going to use Advanced Queries to find Manholes on a given map with a Condition Rating of Poor and a Vertical Grade of Even.

- 1 Query Layer
From the dropdown select the 'Manhole' layer.
- 2 Field
From the dropdown select the 'Condition Rating'.
- 3 Operator & Value
From the operator dropdown select '='. In the Value select the 'Poor' rating.
- 4 Add Condition and 'And' to the Statement Field
- 6 Field
From the dropdown select 'Vertical Grade'.
- 7 Operator
Choose the '=' operator.
- 8 Values
Select the 'Even' value.
- 9 Add Condition and Run Query



Now you can...

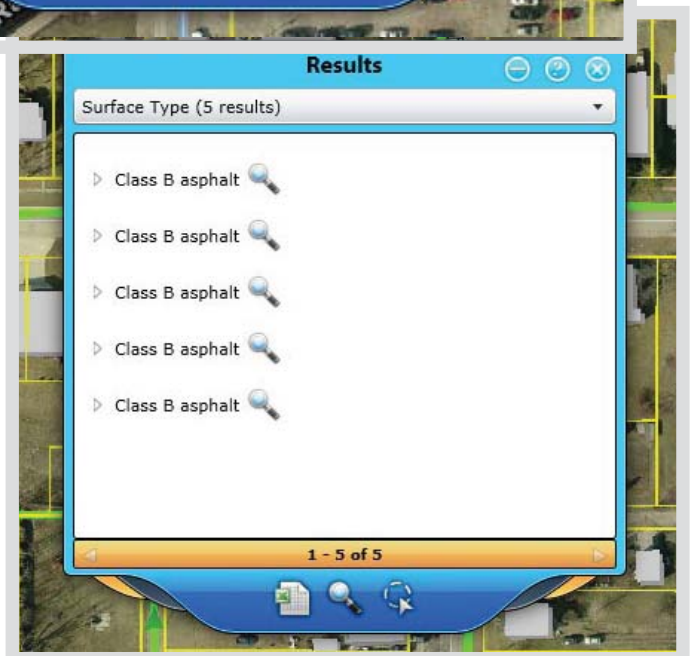
- 1 Utilize search results.
- 2 Save the Query and run it again easily.



Advanced Queries : Road Surface Materials

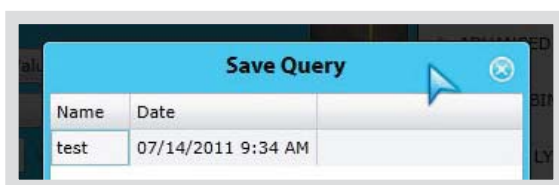
In this example we are going to use Advanced Queries to find all of the Asphalt roads on a map that were constructed after the year 2000.

- 1 Query Layer
From the dropdown select the 'Surface Type' layer.
- 2 Field
From the dropdown select 'Surface Year'.
- 3 Operator & Value
From the operator dropdown select '>' and in the Value field type in '2000'.
- 4 Add Condition and 'And' to the Statement Field
- 6 Field
From the dropdown select 'Surface Material'.
- 7 Operator
Choose the '=' operator.
- 8 Values
Select the 'Class B Asphalt' value.
- 9 Add Condition and Run Query



Remember you can ...

- 1 Drag your query strings to reorder them.
- 2 Save the Query and run it again easily.



Drawing / Measuring

All graphics and text drawn on the map will appear if the map is printed and all drawings can be saved and loaded for easy recall. Drawings do not interact with map data, they are for visual reference only and thus are **ideal for planning projects**. This tool also allows you to toggle on/off measurements to automatically measure any drawn graphics without having to use a separate tool.



1 Draw Point
Click once to draw a point

2 Draw Polyline
Click once to begin a line.
Double click to finish.

3 Draw Freehand Line
Click and hold to draw a
freehand line.

4 Draw Polygon Shape
Click once to begin a polygon.
Double click to finish.

5 Draw Freehand Shape
Click and hold to draw a
freehand shape. Release
to finish.

6 Add Text
Click the map to add text.
De-select the tool and double
click the text to edit.

7 Color Picker
Pick a color and draw
points, lines, and shapes.

8 Open Measure Settings

9 Measure Settings
Choose to display
measurements, set distance
and area units.

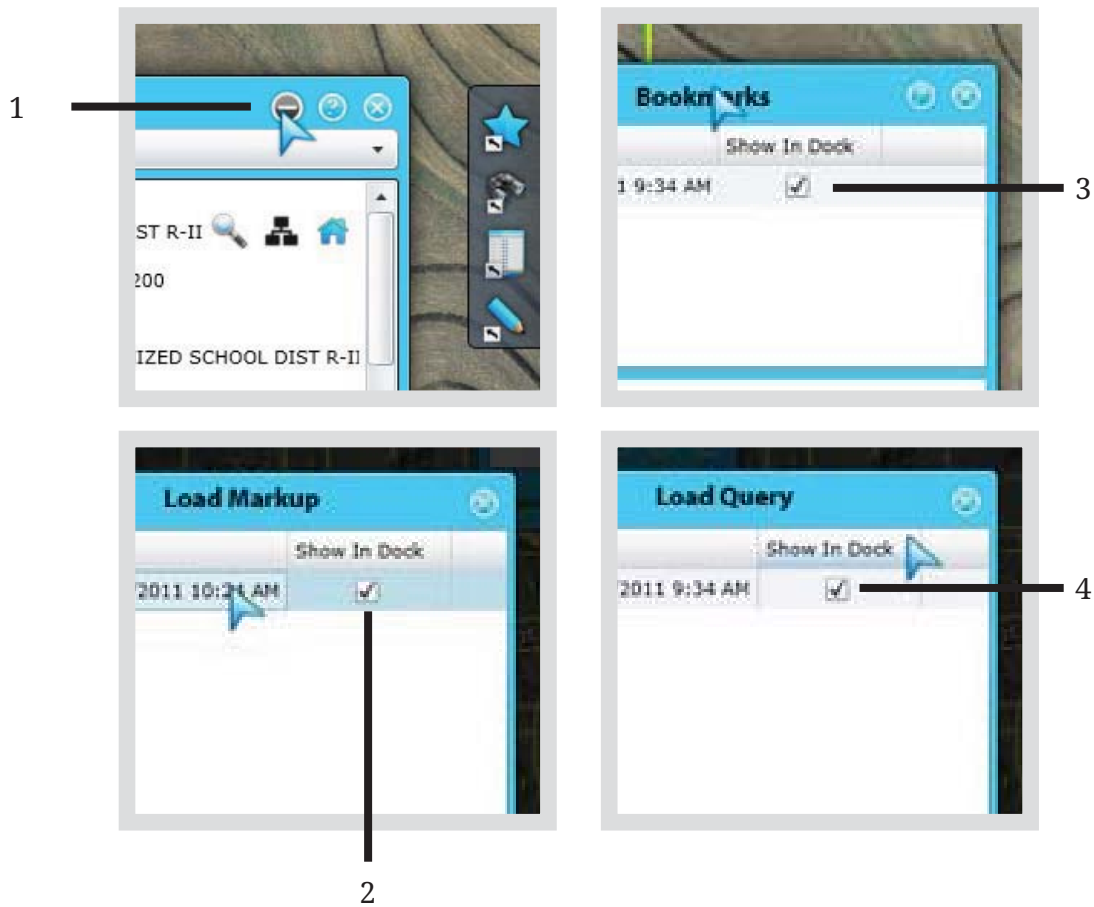
10 Load Drawing
Display a saved drawing

11 Save Drawing
Save your current drawing

12 Clear Drawing
Remove all map drawings.

13 Hide Draw / Measure Panel

The Dock



1 Windows

If a window can be docked it will have a [-] in the top right corner. Simply click it to minimize it to the Dock to conserve space.

2 Markup

To load a Saved Markup shortcut in the Dock create and save a markup drawing (see [Drawing Markup](#) page 23) In the list simply check off the “Show in Dock” checkbox.

3 Bookmarks

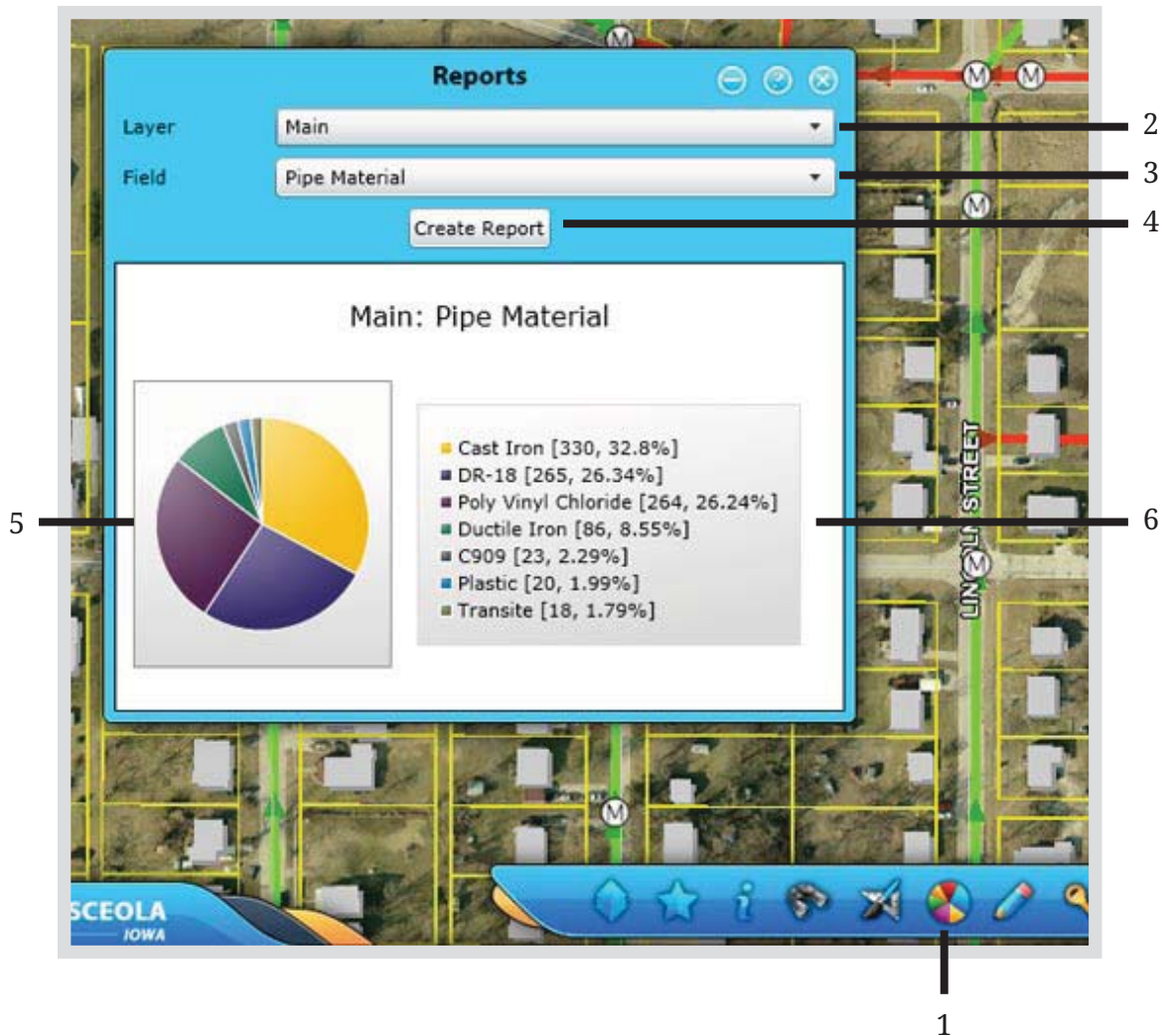
To load a Bookmark in The Dock create a Bookmark (see [Bookmarks](#) page 16). In the list simply check off the “Show in Dock” checkbox.

4 Advanced Queries

To load a Saved Query in the Dock create and save a query string (see [Advanced Queries](#) page 18) In the list simply check off the “Show in Dock” checkbox.

Creating Reports

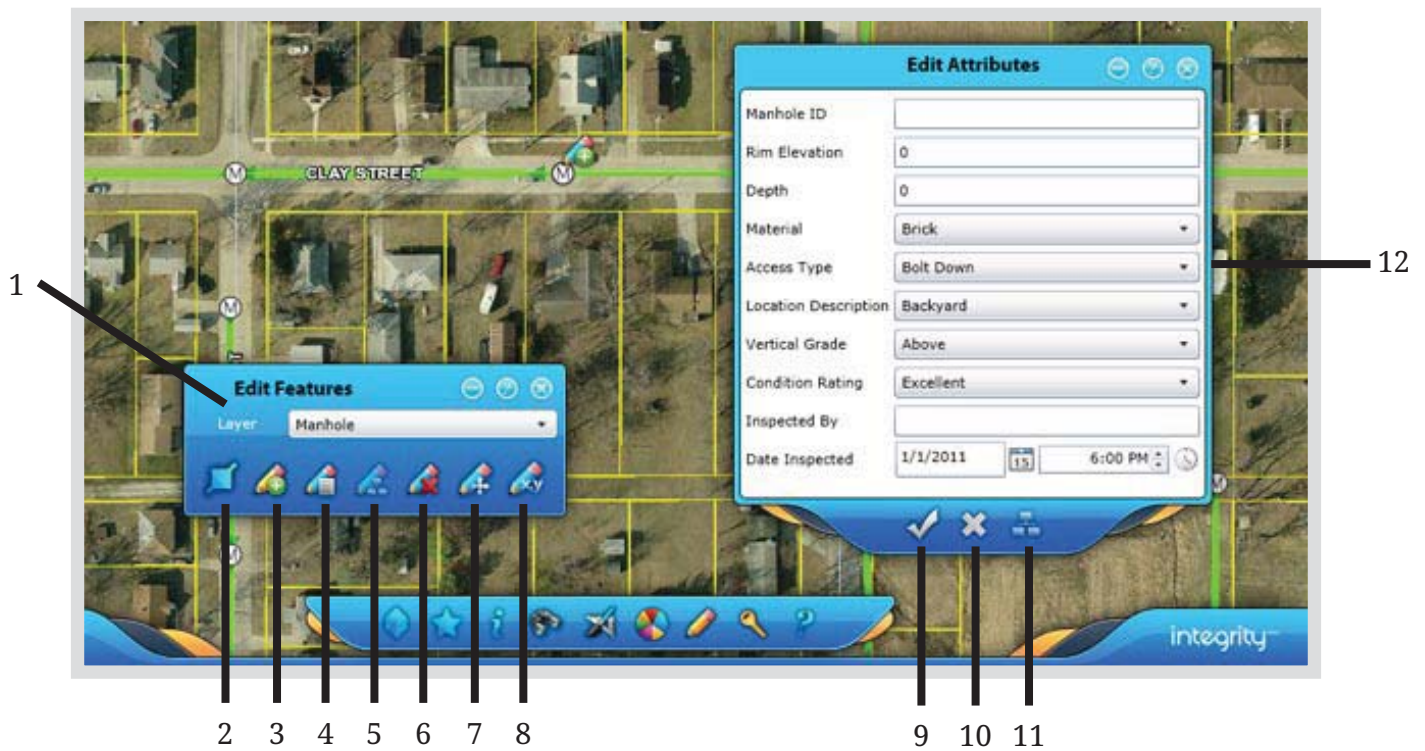
Reports let you see a graph-style overview of your map data such as road surface types and surface materials, manholes and their condition ratings, or sign inventories and reflectivity ratings.



- 1 Open the Create Reports Window
- 2 Select a Layer to Create a Report For
- 3 Select a Layer Field
This field will change depending on the layer you selected.
- 4 Create Report
- 5 Report Legend
Displays color coded list and shows other statistical data.
- 6 Chart
Displays a pie graph based on Layer and Field selections.

Web Editing

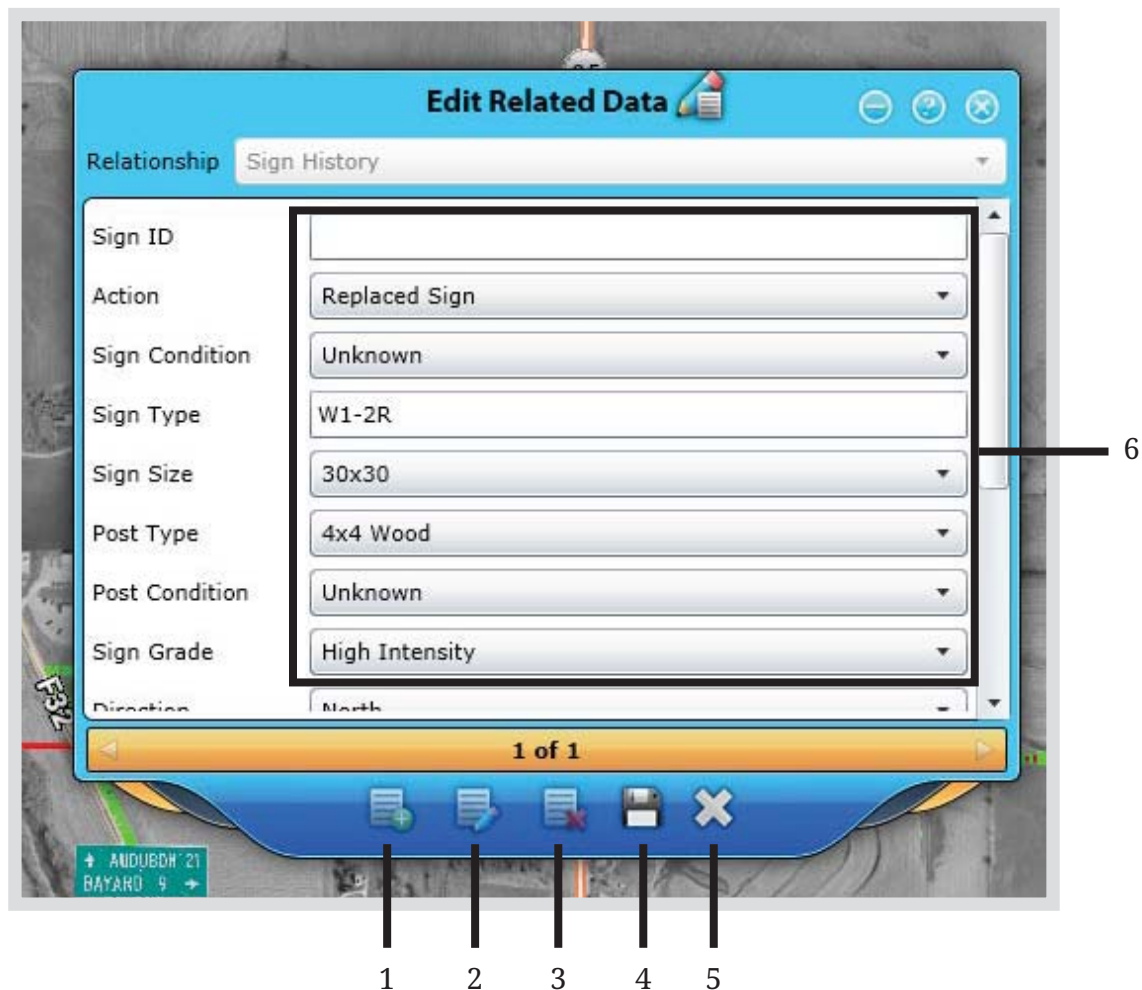
Web editing allows site administrators to directly edit certain types of data directly from their Integrity site such as sign inventories, water networks, and other organizational infrastructure elements.



- | | | | | | |
|---|--|---|---|----|---|
| 1 | Editing Window
This controls all web editing. | 5 | Add related data tables or edit existing related data | 10 | Cancel changes
Cancel new feature additions or changes. |
| 2 | Toggle on / off snapping | 6 | Delete a feature | 11 | Related Data
This is a shortcut to a feature's related data tables (if related data exists). |
| 3 | Add a new feature to the layer | 7 | Move a feature | 12 | Attribute Window
This window allows you to add new features or edit existing feature attributes. |
| 4 | Edit an existing feature's attributes | 8 | Show feature coordinates | | |
| | | 9 | Add feature / accept changes | | |

Web Editing : Related Data Tables

Related data tables hold historical information about a feature like maintenance history and sales data.



1 Add Record

Add a new related data table record.

4 Save Changes

Save a new related data table or changes to an existing one.

2 Edit Record

Edit an existing related data table.

5 Cancel Changes

Cancel changes made to an existing record.

3 Delete Record

Delete an existing related data table

6 Related Data Attributes

Any related data attributes can be found and edited here.

Web Editing Example : Managing Sign Inventories

In this example we are going to use Web Editing to add new signs and perform maintenance.

- 1 Select a Layer
In the Editing Window select the 'Sign' layer.
- 2 Add a New Feature
Select 'Add New Feature' - then place the marker where the feature needs to be added.
- 3 Fill Out Attributes
Fill out all the fields present in the 'Edit Attributes' window.
- 4 Click 'Accept' to add sign
- 6 Record Maintenance
From the 'Edit Attributes' window click 'Related Data' at the bottom.
- 7 Add a New Record
Click the 'Add New Record' button in the 'Edit Related Data' window.
- 8 Fill out Related Data
Fill out all the related data fields.
- 9 Click 'Save' to add the related data table



Recap of Example

- 1 You added a new sign to an inventory
- 2 Recorded the first maintenance entry

Account Management

Login / Logout and access account management by clicking the 'key' icon in the Advanced Toolbar.

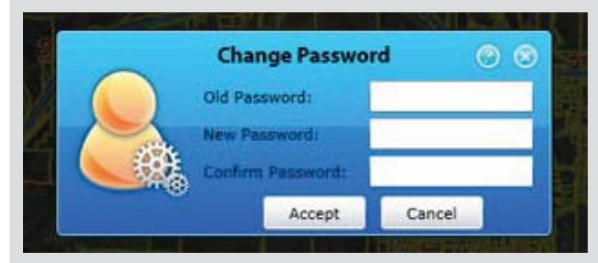
1 Logging In / Out

Enter a valid username and password and click on "Login" or press Enter. You can obtain this from the Integrity site owner.



2 Change Your Password

To change the password of an account, you must be logged in with a valid username and password. Click on the User Login button again to open the User Login window. Fill out the Change Password form and click "Accept".



3

Username	Date Created	Last Login	Is Logged In	Read Level	Write Level
a1	11/30/2010 10:17 AM	01/01/2000 12:00 AM	<input type="checkbox"/>	1	0
a14	01/27/2011 9:18 AM	07/14/2011 8:17 PM	<input type="checkbox"/>	1	
a19	12/09/2010 12:49 PM	07/14/2011 2:55 PM	<input type="checkbox"/>	1	
a21	02/16/2011 9:01 AM	07/05/2011 3:25 PM	<input type="checkbox"/>	1	
a22	02/28/2011 11:03 AM	07/15/2011 6:52 AM	<input type="checkbox"/>	1	
a23	03/15/2011 2:09 PM	03/17/2011 8:29 AM	<input type="checkbox"/>	10	
		12:00 AM	<input type="checkbox"/>	10	
		9:40 AM	<input type="checkbox"/>	10	
		8:40 AM	<input checked="" type="checkbox"/>	10	
		12:00 AM	<input type="checkbox"/>	10	
		11:35 AM	<input type="checkbox"/>	10	
		4:25 PM	<input type="checkbox"/>	10	
		8:57 AM	<input checked="" type="checkbox"/>	1	
a31	05/25/2011 1:07 PM	01/01/2000 12:00 AM	<input type="checkbox"/>	1	

4

Username: New User

New Password: []

Confirm Password: []

Read Access Level: 0 [] Set to 0 to disable account.

Write Access Level: 0 []

Site Admin: No Yes

Submit Cancel

3 Managing Users

To manage site users your account you must be set as an administrator. From here you can Add, Edit, or Delete Users. See who's online, user Read/Write levels - bigger numbers mean access to more data.

4 Adding / Editing a User

You can add or edit a user to your Integrity site using this interface. Top level administrators have sole access to this feature.

Legal Information

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Other Resources

Integrity Product and Support Site

www.integritygis.com

Integrity Product Blog

www.integritygis.com/index.php/blog

Tutorial Videos

<http://vimeo.com/channels/integritytutorials>

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