



INTRODUCTION TO GEOMEDIA AND THE GEOWORKSPACE eTRAINING

Introduction

Introduces the fundamental concepts of GeoMedia and the GeoWorkspace, including the GeoMedia Ribbon Interface.

Software

- GeoMedia

Data

- US Sample Data GeoWorkspace

Transcript

0:09

Hello and thank you for watching Hexagon Geospatial eTraining. In this module you will understand the fundamental concepts of GeoMedia and become familiar with GeoMedia and the GeoMedia Ribbon Interface.

To begin, you will look at a few basic concepts and terminology important for understanding and working with GeoMedia.

0:28

There are three fundamental concepts important to GeoMedia: the GeoWorkspace, the Warehouse and the Connection. Understanding these three terms can make getting started with GeoMedia easier and more intuitive.

The GeoWorkspace is the central document within GeoMedia. This is where data is viewed, edited and analyzed. The GeoWorkspace is saved with the .gws extension and contains all open windows, data, legends, warehouses, connections and more within an open instance of GeoMedia. A GeoWorkspace can be saved and reopened at a later time.

A Warehouse is where data is stored. There are many different types of warehouses including Oracle, Access, Arcview and many others. Multiple warehouses can be connected to GeoMedia and supply data simultaneously to the GeoWorkspace.

A Connection is the path used to “pipe” data from the warehouse to the GeoWorkspace and is given a logical name usually representing the data. The connection type is based on the type of warehouse being used and can be either Read-Only or Read-Write.

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Read-only connections allow data to be viewed and analyzed within a GeoWorkspace.

Read-Write connections are available for a number of databases including Microsoft Access, Esri File Geodatabase (FGDB), Microsoft SQL Server and several others. Defining a Read-Write connection allows data to be viewed, analyzed, and edited -- which updates the data immediately in the warehouse.

Here you can see how these items fit together. In the middle, you have a GeoWorkspace. Along the top there are a number of different read-only warehouses containing data, and at the bottom right is a read-write warehouse. Each warehouse has a named connection supplying data to the GeoWorkspace from the warehouse.

2:16

Now that you have an understanding of some fundamental concepts, you will take a look at a GeoWorkspace and become familiar with the Ribbon interface.

1. Begin by opening GeoMedia using the desktop icon. GeoMedia opens with a dialog box asking if you'd would like to start with a blank GeoWorkspace, a template, or an existing GeoWorkspace.
2. To use an existing GeoWorkspace, you can select from the list provided or select **More Files...** to select one that's been saved.
3. Navigate to the directory containing the GeoWorkspace you want to work with.
4. Select it, and click **Open**. You have opened *USSampledData.gws*, which is an example GeoWorkspace provided with GeoMedia.

This workspace has a predefined warehouse connection, legend, and map window displaying data. You will use this to become familiar with GeoMedia.

3:06

First you will need to understand the basic layout of the interface. Along the top of the interface is the Ribbon bar. The ribbon is composed of tabs that provide access to all functionality within GeoMedia.

Tabs are dynamic and available tabs will change based on the data and window types that are open. Each tab can be selected to display a different set of tools. Tools within a tab are divided into groups. Group names are displayed below the tools, along the bottom of the ribbon.

Above the ribbon is the quick access tool bar. This tool bar will remain available as you change tabs and can be customized to contain your most frequently used tools. You will see this in more detail in a few minutes.

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There are several different window types that can be displayed within GeoMedia including Map windows, Layout windows and Data Windows.

The data window is used to display non-graphic data, or attribute information. A Layout window is used to create high quality map compositions.

Here you can see a Map window used to display graphic data. On the left is the Legend. The legend is used to define which feature classes are being displayed from the warehouse and defines the styles and rules used to display them.

You can learn more on establishing warehouse connections and legends in a subsequent eTraining module.

4:24

You can easily adjust our view to show the data at full extent by:

5. Clicking the **Fit** button found in the **Extent** group on the **Home** tab. By default this GeoWorkspace contains a **North Arrow** and **Scale Bar**. After resizing your data, you can see that their placement is not ideal.

6. To move them around, you can simply click and drag them to a new position. You also have the option to turn them off.
7. Click on the **Toolbox** tab and within the **View** group, you can see the buttons to turn on and off the **Legend**, **North Arrow** and **Scale Bar**.

Turning off the buttons will remove the items from the Map window. You can turn them on again at any time.

4:59

Now you will see some simple navigation tools. There are a couple different options for zooming in and out of the map window. With the standard cursor active, you can use the scroll wheel on the mouse to zoom in and out of the data.

Scrolling forward with the mouse will zoom into the window while scrolling backward will zoom out.

You also have a number of navigation tools on the **Home** tab in the **Extent** group.

8. Select the **Zoom In** tool to activate it.
9. Next, draw a box around an area in the Southern US to zoom to this defined area. You can also click within the map view to continue to zoom in. The location of the cursor when you click will be centered in the window.
10. Once you are viewing the data at the desired scale, you can activate the **Pan** tool to move around the map window.
11. Click and drag to change the view. Notice that the **Zoom** and **Pan** tools will remain active until you turn them off.

You can deactivate these tools by clicking the **Select** tool from the **Selection** group on the **Home** tab, pressing the **Escape** key on the keyboard, or right clicking with the mouse.

6:03

Now you will see how to customize the Quick Access toolbar.

12. Move the cursor to the Quick Access toolbar.
13. Right click and select **Customize Quick Access Toolbar**.

This opens the customize dialog. The left side of this dialog has a dropdown menu with the title of each tab available. On the right you can see a list of all tools currently on the Quick Access menu. On the left, you can select the tab that contains the tools you want to add to the Quick Access toolbar.

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Once the tab is selected, all tools available on that tab are displayed in the **Commands** window.

14. Select **Home** and scroll down until you see a tool you want to add.
15. Select it and click the **Add** button.
16. Scroll down further to select and add more tools to the list.
17. Once you are done adding items, click **OK** to close the dialog.

The Quick Access toolbar has been updated and you can now see the **Fit All** and **Pan** tools.

6:55

You can also add tools directly from the Ribbon. To add a tool this way:

18. Navigate to the tool to add, right click and select **Add to Quick Access Toolbar**.
19. Now reopen the **Customize** dialog to remove and rearrange the tools on the customized toolbar.
20. To remove items, select a tool from the list on the right and click the **Remove** button. You can also click the **Reset** button to set the Quick Access menu back to the default tools.
21. There are arrows to the right of the tool list that allow you to rearrange the items on the toolbar. Simply select a tool and use the arrows to move it up and down.
22. When you are happy with the layout, click **OK** to update the toolbar.

7:35

Now you will take a look at Caching.

23. From the **Application** tab, select **Options**.
24. On the **General** tab, you have the option to add a check mark next to **Enable Caching**. A second dialog will open providing more information on caching.
25. Clicking the **Caching Explained** button will provide information about how caching works within GeoMedia.

It's important to know that although in many cases Caching can provide overall performance improvements, there are certain workflows for which caching is not recommended. For example, workflows involving multiple people simultaneously editing features in the same warehouse may experience reduced efficiency by applying caching.

26. Click the **Create/Refresh Cache** button to create the cache.
27. In the **File Locations** tab, scroll down to see where the cache is located.
28. Click **OK** to close the **Options** dialog.

8:26

Now you will look at various selection tools.

When moving your cursor over features in the Map Window, features will become highlighted with a cyan/blue color. This indicates which features will be selected by clicking the mouse at that location. Clicking turns the feature green indicating that it's now selected.

Multiple items can be selected by dragging a box around items in the map window.

The tools in the **Selection** group on the **Home** tab define the behaviour of the selection tool. Initially you had an Inside Fence selected, so for a feature to be selected it must be fully contained within your selection box.

29. Now turn on the **Overlap Fence** options and make a new selection. All items contained within or overlapping the fence are now selected.
30. Click the **Unselect All** button to unselect all features.

9:13

You can also activate the **Polygon Select** tool to draw any perimeter shape you need to select your features. To make a selection with this tool:

31. Click to digitize the polygon.
32. Double click to finish it.
33. Click once more to activate the selection.
34. Use the dropdown menu on the **Fit** tool and select **Fit Select Set** to zoom to the extent of the selected area.
35. Unselect the features and set the selection mode back to default rectangle.

It's not uncommon for multiple features to be stacked on top of each other within the map window. This can make it difficult to select a specific item.

9:49

You can use the Quick Pick function to help select the correct items. First you will set the cursor sensitivity that will define the quick pick zone.

36. From the **Application** menu, open the **Options** dialog and select **SmartLocate**.
37. Use the slider under **Size of cursor locate zone** to define the sensitivity of the cursor.

As you move the slider, a preview of the locate zone size is shown on the right. This zone is also used to define the snap radius when digitizing features.

38. After making changes, click **OK**.
39. Move the cursor to an area with multiple state boundaries and pause the cursor.

10:25

When multiple features are present, three small circles will display next to the cursor, indicating a Quick Pick option.

40. Clicking once opens a small box showing the number of features available for selection. Here you can see three.

As you move the cursor over the numbers, GeoMedia displays the feature class name and highlights the feature.

41. Move through the numbers until you highlight the correct feature, then click to select it.

10:50

From the **Windows** group on the **Home** tab, the **Properties** box allows you to define properties specific to this map window.

42. Type `Regional Index` to define the name of this window.
43. Then, select the radio button next to **Fit** and **Zoom Out**, change the value to `150` percent, and click **OK**.

With this option selected, each time you select a feature in the map window, the display will be updated to center the feature and display it at 150%.

11:18

44. Double clicking on a feature will open an **Attributes** dialog.

When a read-write connection is defined, the attributes can be edited directly in this dialog and the warehouse is immediately updated.

The General tab shows the **Area** for this feature. Notice the area units are set to meters squared – not always the best option to display area for an entire state.

The Units can be changed by clicking **Coordinate System** from the **Properties and Information** group.

45. In this dialog, open **Units and Formats**.
46. Under **Default units and precision**, select **Area**, set the units to miles squared, and the precision to two decimal places.
47. Click **OK**.
48. Now reopen the attribute table and check the **Area** value. The **Units and precision** have been updated showing miles squared and two decimals of precision.
49. When you are finished working with this GeoWorkspace you can select **Close** within the **Application** tab.
50. If needed, save any changes; otherwise, click **No** to close the GeoWorkspace.

The GeoWorkspace has been closed, but GeoMedia remains open, ready for the next project.

12:29

Thank you for watching this Introduction to GeoMedia eTraining module by Hexagon Geospatial. For more eTraining, please visit <http://hexagongeospatial.com/eTraining>.