Introduction

This eTraining module gives the basic definition of a warehouse connection, how to create a ware house connection, and how to define a legend to display data in the map window.

Software

- GeoMedia

Data

- Huntsville, AL

Transcript

0:09

Thank you for watching this Hexagon Geospatial eTraining module: GeoMedia Connections and Legends. In this module we'll understand the basic definition of a warehouse connection, how to create a connection, and finally how to define a legend to display data in the map window.

0:25

A warehouse is where feature data is stored. To view the data stored in a warehouse we must create a connection to the warehouse so the GeoWorkspace can access the data. There are two types of connections, read/write and read-only.

0:39

Many warehouses support read-only connections. This connection type allows the data to be displayed and analysed in GeoMedia, but it does not allow data to be modified. In many cases, that's all that's necessary.

0:51

Some warehouses such as Microsoft SQL Server, Oracle and others can support read/write connections. A read/write connection allows the data to be displayed and analysed, but it can also be edited and updated within the warehouse.

1:04

A single GeoWorkspace can have multiple warehouse connections accessing data from many sources.

1:10

When establishing a new warehouse connection it's important to consider the coordinate systems. There are two coordinate systems to consider, the source data coordinate system and the GeoWorkspace coordinate system.

1:20

By default, the GeoWorkspace coordinate system will automatically match the coordinate system of the first warehouse connection. When necessary, data from other connections will be transformed to the GeoWorkspace coordinate system. However the GeoWorkspace coordinate system can be changed at any time.

1:36

Legends are used to define the feature data that is displayed in the Map Window. Feature data can be expressed as Feature Classes, Queries, or Categories. Creating a named legend makes the existing legend available when creating new map windows or when appending or replacing an existing legend.

1:54

The Legend properties are used to manage the appearance and statistical reporting of the legend content. It is not used to change the style applied to the feature data defined in the legend. To learn more about how to modify display styles watch the eTraining module on GeoMedia Styles.

2:10

Each legend entry has a Legend Key that portrays the graphic symbolization used to depict the feature data. Legend Keys will vary based on geometry type and the active style definition for each legend entry.

2:22

In this graphic we see additional information displayed in the legend. There are a few of particular interest. The arrow indicates that this feature is locatable within the Map window. This means the feature can be selected for interactive analysis and/or interactive editing. The latter requires that the selected feature is associated with a read/write connection.

2:43

The scale bar lets us know that this feature class is set to display by scale. It will only appear in the map window when the viewing scale is within a specified range. Finally, the statistics show how many features within this feature class exist.

2:57

Now I'll open GeoMedia and demonstrate how to create a warehouse connection and a new legend.

3:02

Here I have GeoMedia open. I'll start by:

1.   Creating a new GeoWorkspace from a saved template.

2.   From the Application tab select New and in the dialog box that opens,

3.   Navigate to the saved templates, select the one that you would like to use and click New.

3:26

4.   From the Application menu select Save As to save this as a working GeoWorkspace.

5. After navigating to the Output directory, give the GeoWorkspace a name and click Save.

3:36

This opens a new GeoWorkspace base on the saved template parameters, including predefined Warehouse connections, GeoWorkspace Coordinate System, and Nominal Map Scale.

3:45

6. To view the existing warehouse connections from the Manage Data tab, select Warehouse > Warehouse Connections.

3:51

This opens the Connections dialog that shows the existing connections including the connection name, type, and location of the warehouse. Here we see two connections, Regional Data and USA Sample Data – both connecting to Microsoft Access databases.

7. For now, click close.

4:08

We can set a default warehouse preference from the Application menu > Options. The File Locations tab in this dialog shows and defines the default locations for many different file types.

8. Using the scroll bar, find Warehouse files, select it, and click Modify.

4:23

9. Browse to the folder you would like to use as the default warehouse location and click OK. The location is updated and saved in the Options dialog.

10. Click OK to close it.

4:33

Now we'll create a new Warehouse Connection.

11. Navigate back to the Manage Data tab, and select Warehouse > New Warehouse Connection.

4:41

We'll use this dialog to define the connection. On the left is a list of available connection types. We'll connect to an Access database and here you see two options for this type of database; Access and Access Read-Only. The Access connection type supports read/write operations in Geomedia. In this case, we will create a read/write connection.

12. Select Access from the list.

5:05

13. Next give the connection a name such as Local Data.

14. For the Connection description, key in **Huntsville Alabama** since the data in this warehouse is for this geographic area.

15. Finally, browse to find the database.

5:20

Notice that we are automatically taken to the default folder previously defined in the Options menu.

16. In this folder, select HSVLocal.mdb and click Open.

17.   To finalize the connection, click OK on the New Connections dialog.

5:34

Now we'll create a new legend to display the feature classes available through the New Warehouse Connection.

18.   From the Home tab, select Legends > Add Legend Entries.

5:54

The Add Legend Entries dialog shows all available warehouse connections. Here you see the three active connections for this GeoWorkspace.

19.   Use the plus icon to expand Regional Data to see all of the feature classes within this warehouse.

20.   To select all feature classes, add a check mark to the top level check box. Remove the check marks in front of any feature classes you don't want to display in the legend.

21.   When finished, click OK.

6:08

The feature classes have been added to the legend to top left of the map window. I'll resize my window for a better view.

6:15

Within the legend pane, we see the 5 feature classes. One feature class, States, is listed twice. The count shows there are a different number of features for each legend entry. One contains 4, the other contains 49.

22.   Right click on a legend entry and select Fit by Legend Entry. This will fit the view to the extent of this feature class.

6:37

This first States feature class contains the states seen here. The other States feature class contains 49 states.

23.   Since we are working with Regional Data, right click on this feature class and select Delete.

24.   Click Yes to confirm. The feature class has been removed from the Legend but the data remains in the warehouse. If needed, you can re-add this feature class at any time.

25.   We can rename the Map Window by opening Properties on the Home tab.

26.   Type **Downtown Huntsville** as the Map window name then click OK.

27.   Finally, select Legends > Named Legend to give this legend a name and make it available in other map windows.

28.   Type, **Huntsville, AL** and click OK. The legend is now available to use in other Map Widows.

29.   We can now save the GeoWorkspace.

7:21

With the data connections established and the legend displaying the feature classes of interest, you are now ready to continue with your workflow.

7:29

Thank you for watching this eTraining module from Hexagon Geospatial. For more eTraining please visit hexagongeospatial.com/eTraining.