GeoMedia Map Publisher

Visualizing Cartographic Edits

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Warning

About This Manual

The Work is an instructional document designed to be an integral part of the training course offered by Hexagon Geospatial. Hexagon Geospatial believes the information in the Work is accurate as of its publication date. Any specifications cited in the Work are subject to change without notice. The information and the software discussed in the Work are subject to change without notice. Intergraph is not responsible for any errors that may appear in the Work.

Acknowledgments

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This Tutorial

Tutorial Objective

This training tutorial is designed to illustrate the functionality and capabilities provided by GeoMedia® Map Publisher.

Tutorial Data Set

The sample data set used in the GeoMedia Map Publisher tutorial exercises represents a typical 1:50,000 scale map sheet produced by the Danish National Mapping Agency, Kort & Matrikelstyrelsen (KMS) – Danish Ministry of the Environment, National Survey and Cadastre.

It should be noted that the original data set provided by KMS represented a completed cartographic product prior to lithographic processing. However, liberties have been taken within the data set in order to illustrate a typical starting point in the cartographic editing process. The exercises provided in this tutorial do not necessarily represent standard workflows employed at KMS, nor do the exercises claim to represent the type of cartographic edits performed at KMS. The tutorial exercises simply illustrate standard cartographic editing procedures that mapping agencies and mapping companies would expect to be available using a cartographic editing software application such as GeoMedia Map Publisher.

The cartographic results produced within this training tutorial reflect the results of standard cartographic processes and editing concepts. The resulting data set should be viewed as a representative sample of the type of data modifications that typically occur during the cartographic production process, and in no way illustrate the "truth on the ground."

Hexagon Geospatial would like to extend its appreciation to Kort & Matrikelstyrelsen (KMS) for their cooperation in this endeavor.

Tutorial Text Conventions

There are several conventions used throughout the tutorial:

- ❖ Ribbon bar items are shown as: On the **Aaa** tab, in the **Bbb** group, click **Ccc**.

- ❖ Dialog box names, field names, and button names are depicted using **Bolded Text**.

- ❖ Information to be entered, either by selecting from a list or by typing, is depicted using *Italicized Text*.

Tutorial Prerequisites

Familiarity with the GeoMedia Desktop.

Section 1: Visualizing Cartographic Edits

Section Objective

This section will introduce you to visualizing cartographic edits in GeoMedia Map Publisher. You will learn about:

- ❖ Display Manager
- ❖ Cartographic Attributes
- ❖ The Map Window Legend

Tools Used

GeoMedia Professional and GeoMedia Map Publisher

Exercise 1: Display Manager

Objective:

Using the Display Manager as part of the carto editing process.

Task 1: Display Manager

GeoMedia Map Publisher provides several methods for visualizing the results of your cartographic edits including customizable graphic displays in the map window, reviewing cartographic attribute values assigned to individual feature instances as the cartographic edits occur, and variations in the portrayal of cartographic edited legend entries in the map window legend.

Display Manager provides a centralized location for defining a customized view of the cartographic edits in the map window. Display Manager can be invoked at any time in the workflow. It has no impact on the cartographic edits, other than the graphic portrayal of the displayed features in the map window. Display Manager provides the capability to globally define the Display status and/or Locatable status of the cartographic edits (by edit type), as well as adjusting the translucency of the non-edited source features. This combination enables you to emphasize the display of the cartographic edited features relative to the non-edited source features. For additional information, see Display Manager in the Help.

NOTE You can either continue working with the workspace from the previous tutorial or open the following workspace: C:\GeoMedia Desktop Training\Introduction to Mapping Manager\GeoMedia Map Publisher\Lessons\Lesson 6 Visualizing Cartographic Edits**Lesson 6 Visualizing Cartograohic Edits.gws**

If Display Manager is not displayed, select **Carto > Display Manager > Display Manager** from the ribbon.

*The **Display Manager** dockable control displays.*

*The **Display Manager** dockable control is displayed listing four Carto Edit Types: Style Edits, Geometry Edits, Converted Style Edits, and Suppressed Features. By default, the **Displayable** status and the **Locatable** status for Suppressed Features are in the off state. The **Display Manager** control includes the following buttons:*

Style edits displayable	
Style edits locatable	
Geometry edits displayable	
Geometry edits locatable	
Converted style edits displayable	
Converted style edits locatable	
Suppressed features displayable	
Suppressed features locatable	
Apply non-edited source translucency	☐ Apply non-edited source translucency: 0
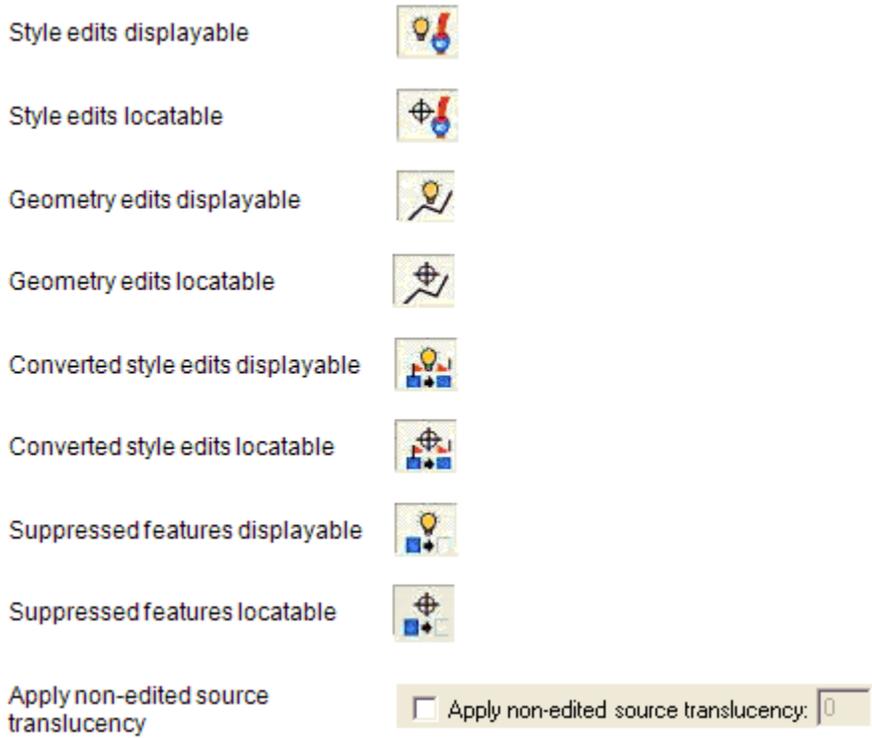
The buttons on the control are in the **On** state when they are pressed, and in the **Off** state when they are not pressed.

1. Make sure the **Display Manager** control is docked, or if undocked, move the **Display Manager** control to a position that allows you to see most of the map window. This view contains several Style Edits that were performed earlier in the tutorial.

2. For the Style Carto Edit type, click the **Style edits displayable** button so it is in the **Display off** state.
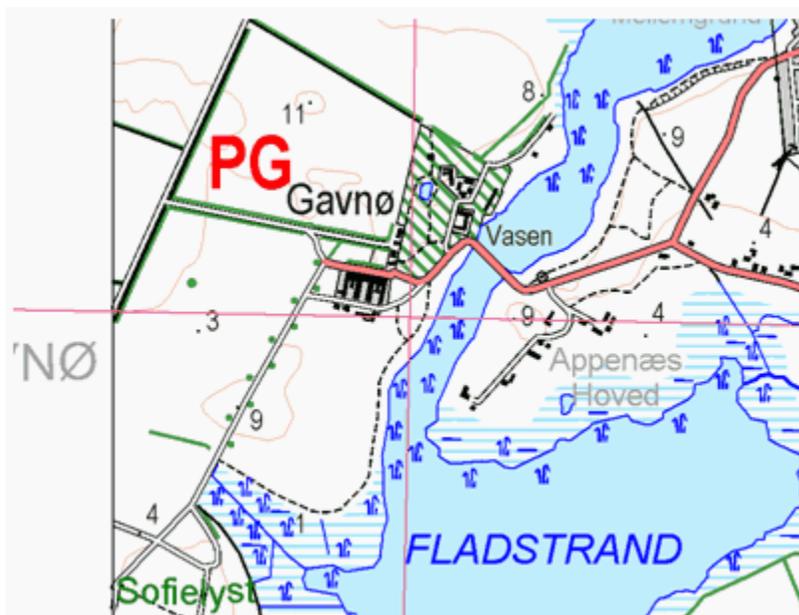
The display of all of the cartographic Style Edits is turned off.

3. Click the **Style edits displayable** button so it is in the **Display on** state.

4. Check **Apply non-edited source translucency**.
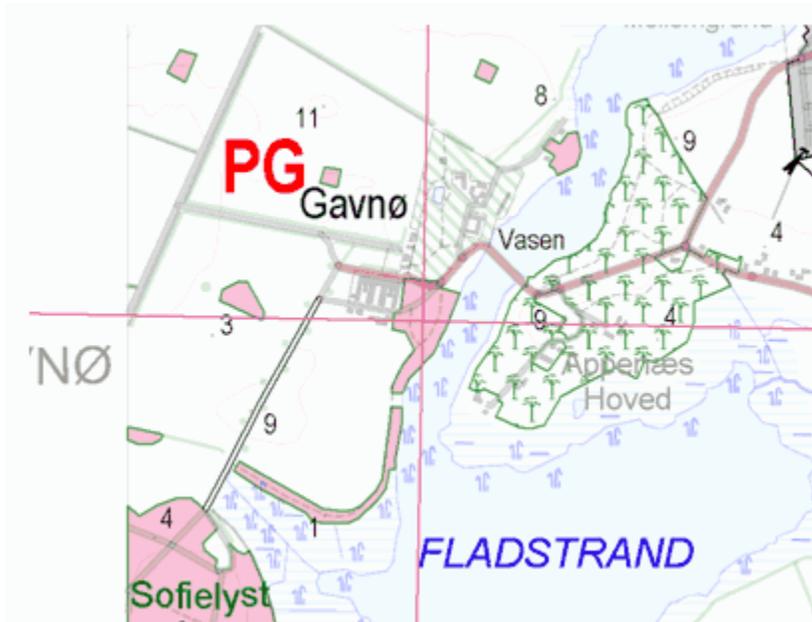
5. Type 80 in the text box, and press the TAB key.

The intensity of the non-edited source features has been reduced, emphasizing the cartographic edits.

6. Click the **Move Next** button on the Queued Edit dockable control, and review each of the map views for the previous edits. Stop when the record on the Queued Edit dockable control lists 6 of 14.

7. Click the **Geometry edits displayable** button so it is in the **Display off** state.


Notice that the display of the Windmills that were moved during the Create Cartographic Geometry lesson are turned off.

8. Click the **Converted style edits displayable** button so it is in the **Display off** state.

Notice that the display of the Windmill that was converted and modified during the Convert Symbol lesson is turned off.

9. Click each of the 'displayable' buttons except the Suppressed Carto Edit type so they are in the **Display on** state, and un-check **Apply non-edited source translucency**.
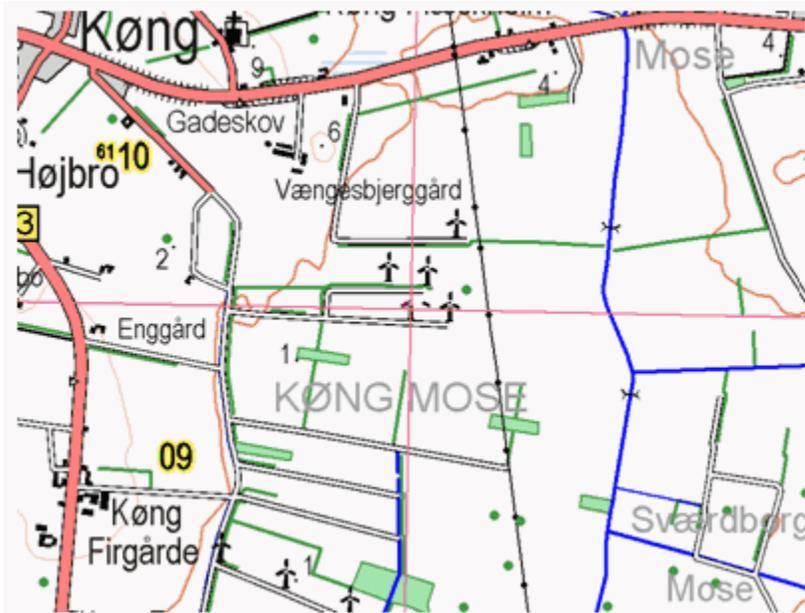
The display status for the features has been restored.

NOTE The Displayable and Locatable behavior produced by the Display Manager command is dictated by the attribute value(s) stored in the **CartoEditType** attribute. As cartographic edits occur, the type of edit performed is written to the **CartoEditType** attribute defined for each feature listed in the GMMapPublisher Category. The attribute values correspond with the types of edits noted in Display Manager; Style Edits, Geometry Edits, Converted Style Edits, and Suppressed Features, and can include any combination of cartographic edit types performed. For example, a single feature instance may have had a Style Edit and a Geometry Edit performed on it. In this scenario, the value of the **CartoEditType** will be 'Style, Geometry' indicating that both types of edits were performed on the particular feature instance. When Display Manager processes this feature, the feature will remain displayed if either the **Style edits displayable** button or the **Geometry edits displayable** button is set to the *Display On* state. In this particular case, the display of this feature instance will not be turned off unless both the **Style edits displayable** and the **Geometry edits displayable** buttons are set to the *Display Off* state. In summary, when multiple edit types are identified in the **CartoEditType** attribute for a particular feature instance, that feature instance will remain displayed as long as there is a displayable button set to the *Display On* state for any of the cartographic edit types defined.

Exercise 2: Cartographic Attributes

Objective:

Learn about cartographic attributes.

Prerequisite: In order to see the cartographic attributes set as described in this exercise you must have comleted the following tutorials first:

- Performing Style Edits
- Performing Geometry Edits
- Performing Style Conversions

Task 1: Cartographic Attributes

As cartographic edits are performed in GeoMedia Map Publisher, information is stored to assist in the management of the cartographic edits. When a feature class is edited, an additional read-only attribute **CartoEditType** is added and populated for each feature instance within the edited feature class. For additional information, see Restoring Cartographic Edits to Their Original State in the Help.

1. Select **Home > Window > Properties**. Click **View at current scale**. Click **OK**.

2. Click the **Select Tool** (**Home > Selection > Select**), and select a Vindmll (Windmill) that was edited earlier.

3. Select **Home > Properties and Information > Select Set**.

   *The **Properties** dialog box is displayed. Review the value of the **CartoEditType**.*
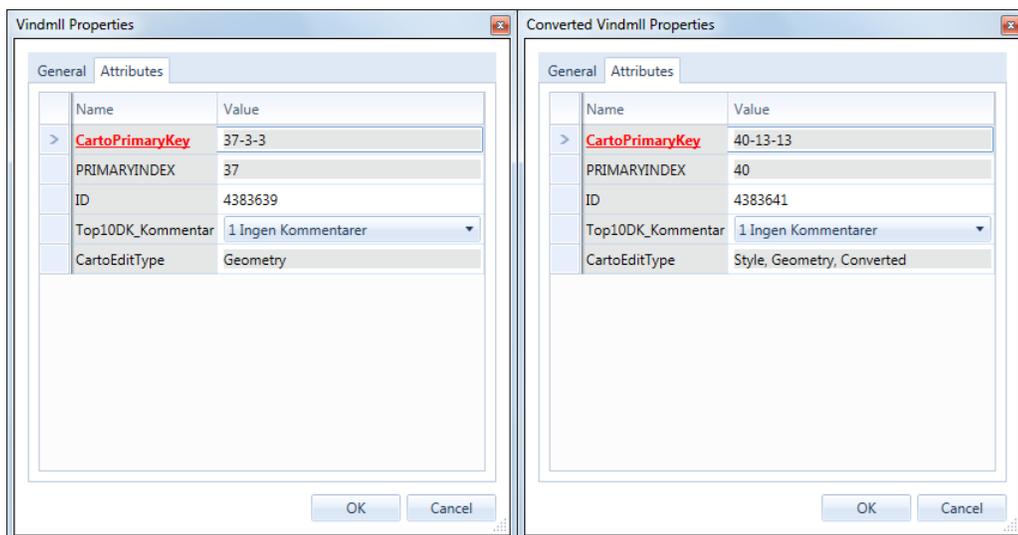
NOTE The **Properties** dialog boxes depicted above illustrate the difference in the **CartoEditType** attribute value when different types of cartographic edits are performed.

The dialog box on the left defines the **CartoEditType** attribute value as 'Geometry'; the
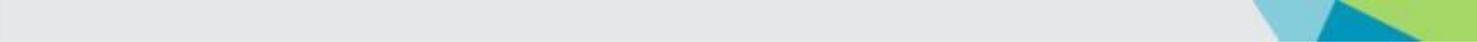
result of a single cartographic edit (the **Create Cartographic Feature** command used on a Vindmll in the Create Cartographic Feature exercise of the Performing Geometry Edits tutorial).

The dialog box on the right defines the **CartoEditType** attribute as 'Style, Geometry, Converted'; the result of multiple cartographic edits (the **Create Cartographic Feature** command used on a Vindmll in the Create Cartographic Feature exercise, and the **Convert Symbol** and **Override Style** commands used on the same Vindmll in the Convert Symbol exercise of the Performing Style Conversion tutorial and the Override Style exercise in the Performing Style Edits tutorial).

The **CartoEditType** attribute is written only to features that have had cartographic edits. Features that belong to legend entries that have not had cartographic edits performed on them will not have the **CartoEditType** attribute.

4. Click **OK**.

Exercise 3: Map Window Legend

Objective:

Learn about the Map Window legend in a cartographic editing environment.

Task 1: Map Window Legend

In addition to **Display Manager**'s ability to uniquely portray cartographic edits, plus the addition of cartographic edit attributes being added to the edited features, GeoMedia Map Publisher also provides the ability to visualize which of the legend entries have had cartographic edits performed on them. When the **Cartographic Options** are defined, one of the optional settings available is the ability to define the **Carto legend entry title**, which modifies the font characteristics of legend entries that have had cartographic edits. In this tutorial, the settings were defined to make the edited legend entries bold, with a cyan color.
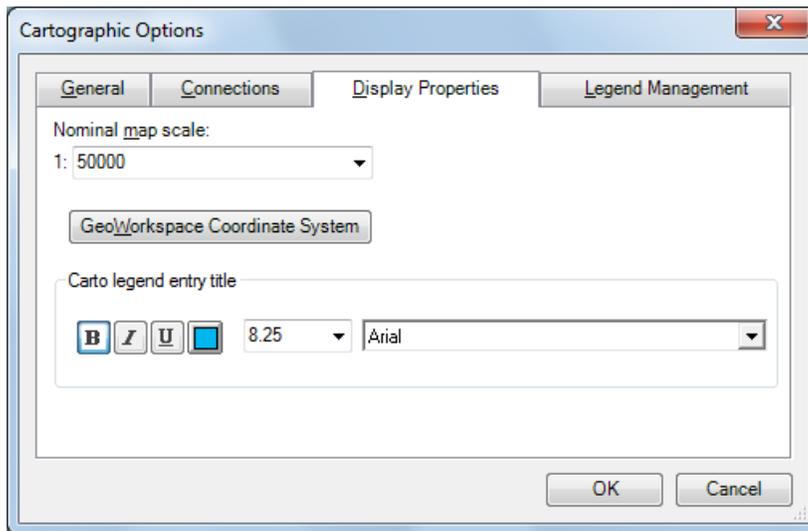
Throughout this tutorial, as cartographic edits have been performed on the various features, those legend entries that referenced the features that had cartographic edits performed on them have had their legend entry title modified to reflect the settings specified in the **Cartographic Options** command.

You can see in the illustration above the effects of the specified **Carto legend entry title** settings specified in the **Cartographic Options** command. The legend entry titles of those features that have had cartographic edits performed on them have been modified to Bold with a cyan color. This capability provides a quick visual representation in the map window legend to determine which features have had cartographic edits.

This view also illustrates the effect on legend entries after cartographic edits have occurred. The initial Punkt_diverse (Miscellaneous Point Symbols) legend entry identifies 342 instances. After cartographic edits have occurred, the feature count has been reduced to 335. This is due to the suppression of the Burial Mound instances that occurred during the Suppress Feature lesson. Note that the reduced feature count is obtained by making sure the **Suppressed features displayable** button is in the 'Off' state on the Display Manager dockable control. The Vindmll (Windmill) legend entry has been transformed from a standard legend entry to a 'group' legend entry containing the cartographic edited feature instances (Vindmll), combined with the converted feature instances (Converted Vindmll).

The **Carto legend entry title** setting on the **Display Properties** tab of the **Cartographic Options** command is an optional setting that provides visual feedback in the map window legend

to assist in identifying those legend entries that have had cartographic edits. It is an optional setting, and is not required. It simply provides visual feedback for the cartographic editing environment.