GeoMedia Map Publisher

Performing Style Conversions

Warning

About This Manual

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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: Performing Style Conversions

Section Objective

This section will introduce you to performing style conversions in GeoMedia Map Publisher. You will learn about:

- ❖ Converting symbols
- ❖ Converting linear patterns

Tools Used

GeoMedia Professional and GeoMedia Map Publisher

Exercise 1: Convert Symbol

Objective:
Convert symbols as part of the carto editing process.

> NOTE   If you are not satisfied with the result of any your style conversion and subsequent edit, simply delete the cartographic edit (**Carto > Cartographic Edits > Remove**), and try again.

> NOTE   Using the GeoMedia Professional **Delete** command (**Home > Edit > Delete > Delete Feature**) can be used on converted components, but *all components must* be deleted. It is therefore recommended that the **Remove Cartographic Edits** command be used instead of the **Delete** command. When cartographic edits are deleted, the feature instance automatically reverts back to its non-edited source.

> NOTE   In the event that you stopped working through the tutorial after the Performing Style Edits section, and exited GeoMedia, you will likely need to re-invoke Queued Edit. Follow the Queued Edit instructions in the beginning of the Performing Style Edits tutorial.

Task 1: Convert Symbol

The processing that occurs with Style Conversions differs from the processing that occurs with other types of cartographic edits. The primary difference is that **Style Conversions transform the original geometry into base geometry components** based on the active style definition. These transformed components can have additional edits performed on them, enabling you to manipulate the individual style components.

Convert Symbol converts symbol point style elements to equivalent GeoMedia geometries. The result of the conversion can be edited with standard GeoMedia editing commands.

> 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 4 Style Conversions**Lesson 4 Style Conversions.gws**

This lesson is record 10 of 14 in the Queued Edit dockable control.

1. Zoom in at the center of the map window a couple of times.

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2. Click the **Select Tool** and select the **Vindmll** (Windmill) feature instance centered on the Queued Edit crosshairs.
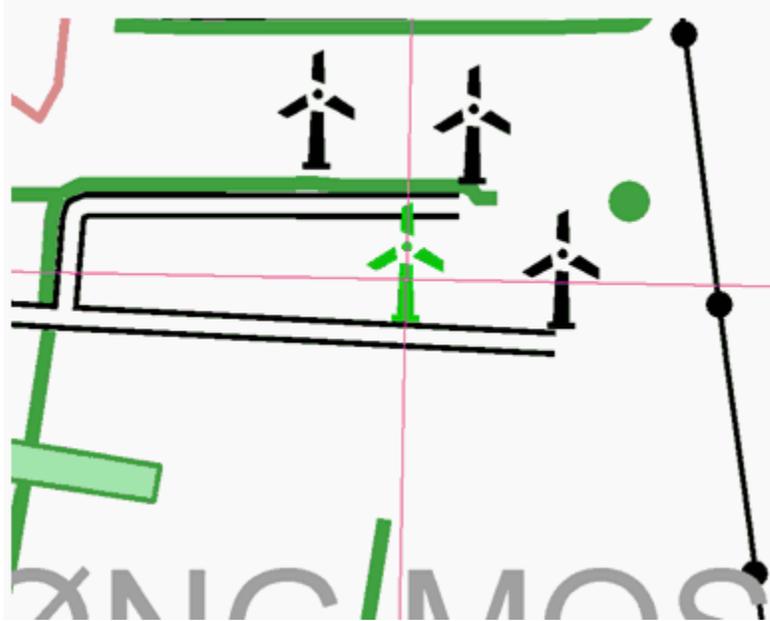

3. Select **Carto > Modify Geometry > Convert Symbol** from the ribbon. The point symbol has been converted, transforming the original point geometry into a compound geometry. The original style definition consisted of a single Symbol Style referencing a GeoMedia Feature Symbol File (*.fsm*) symbol. The symbol consists of five separate area geometries: the windmill base, hub, and three propellers. After the conversion, the compound geometry contains ten components: an area boundary (polyline) and an area fill (polygon) for each of the original five components. The area boundary is represented as a Linear Style component, and the area fill is represented as an Area Style component within the compound style definition. This is evident when hovering the **Select Tool** over the converted symbol. The area boundaries highlight independently of the area fills for each of the area components. Once the symbol has been converted, additional edits can be performed.

4. Click the **Select Tool** , and select the area fill component of the propeller on the left side of the converted Vindmll (Windmill) feature instance.

5. Select **Carto > Modify Style > Override Style** from the menu bar.

   *The **Override Style** dialog box is displayed and portrays the active style definition for the feature instance selected.*

6. In the **Area Styles** tree view, define the **Simple Fill Style (Vincmll)** to red.
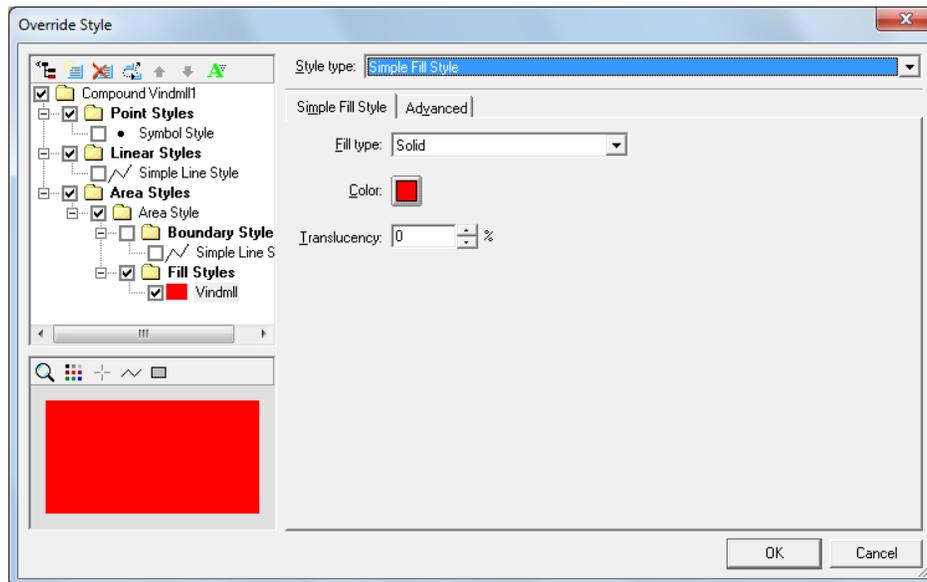
7. Click **OK**.

8. Click the **Select Tool** [⬚], and perform a multi-select on the area fill component and area boundary component of the propeller on the top of the converted Vindmll (Windmill) feature instance.

9. Select **Home > Edit > Delete** from the ribbon. Click **Yes** on the confirmation dialog box to delete two features.

10. Click the **Select Tool** [⬚], and perform a multi-select on the area fill component and area boundary component of the propeller on the right side of the converted Vindmll (Windmill) feature instance.

11. Select V**ector > Geometry > Move** from the menu bar. Drag the propeller to a new location.

12. Press ESC to terminate the command.

13. Select **Home > Selection > Unselect All** to clear the select set.
    note: the Unselect All will not be enabled if the select set is not still selected.
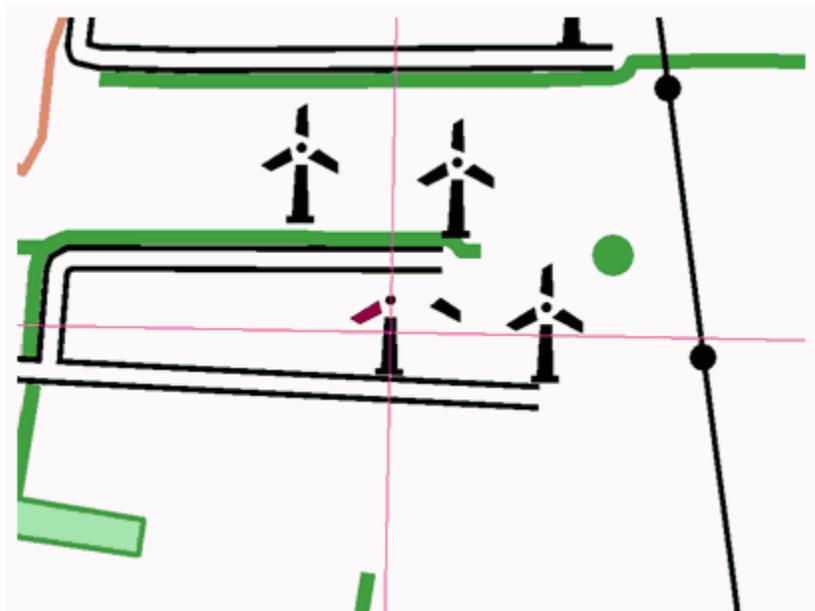
Multiple components of the Windmill symbol have been modified. While these types of edits may not represent typical edits one would perform on a standard Windmill symbol, this lesson does illustrate the powerful cartographic editing capabilities available when combining Map Publisher commands and standard GeoMedia Edit commands.

14. Select **Home > Properties and Information > Map Display**. Set the Display Scale to 1:12,500, and click **Apply**. Click **Close**.

15. Click **Move Next** on the Queued Edit dockable control (make sure the Select set properties are set to Center at Current Scale).

Exercise 2: Convert Linear Pattern

Objective:

Convert Linear patterns as part of the carto editing process.

Task 1: Convert Linear Pattern

Convert Linear Pattern converts a line pattern from a style definition to individual editable geometries. The Pattern Line Style definition can be applied to linear features or to the boundary of area features. For additional information, see Convert Linear Pattern in the Help.

This lesson is record 11 of 14 in the Queued Edit dockable control.

1. Select **Home > Window > Properties**. Make sure the **View at current scale** option is selected. Click **OK**.

2. Select **File > Options** and click the **Placement and Editing** tab. Make sure the **Maintain coincidence** check box is not checked.

3. Click the **Select Tool** , and select the **Hoejsp** (High Tension Line) feature instance centered on the Queued Edit crosshairs – this is the same feature instance that was modified earlier with the Replace Style and Flip Patterned Line commands.
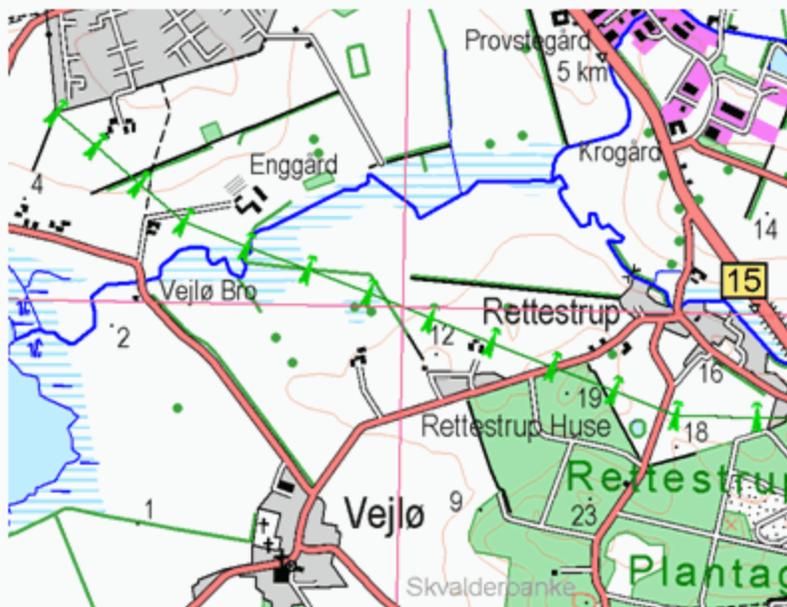
4. Select **Carto > Modify Geometry > Convert Pattern** from the ribbon.

    Don't forget to hit Escape to exit.

    The line pattern has been converted, transforming the original linear geometry into a compound geometry. The original style definition contained two components: a Simple Line Style used to portray the alignment of the High Tension Line, and a Pattern Line

Style used to portray the location of the Tower symbols positioned along the High Tension Line. The resulting compound geometry also has two components: a line representing the original alignment, and a point representing the symbol placement for the towers. This is evident when hovering the cursor over the converted line pattern. The symbols highlight independently from the line. Once the line pattern has been converted, additional edits can be performed on the individual components. The point geometry can be stored in the Cartographic Edits database as a single point geometry collection, or as separate, individual point geometries. To specify if the points should be stored as a geometry collection or as individual point geometries, use the right-click mouse button to bring up a context menu to define the desired option.

5. Click the **Select Tool**, and select one of the towers from the converted **Hoejsp** (High Tension Line) feature instance.

6. Select **Vector > Geometry > Edit > Edit** from the menu bar.
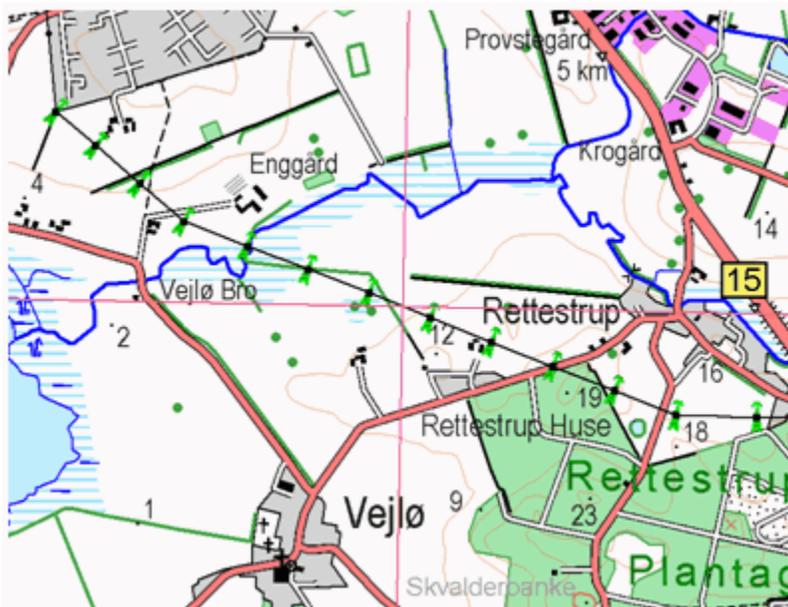
The towers remain highlighted, and display editing handles at the origin of each symbol. When a symbol is selected for editing, the handle will change from a square to a circle.

7. Delete one or two towers. Click on the tower(s) you want to delete.

   The handle changes from a square to a circle.

8. Right click and select **Delete Vertex**. Click **Yes** on the confirmation dialog box.

9. Move one or two towers by dragging them to the new location.

10. Press ESC or click the **Select Tool** to terminate the command.

11. Select **Vector > Selection > Unselect All** to clear the select set.
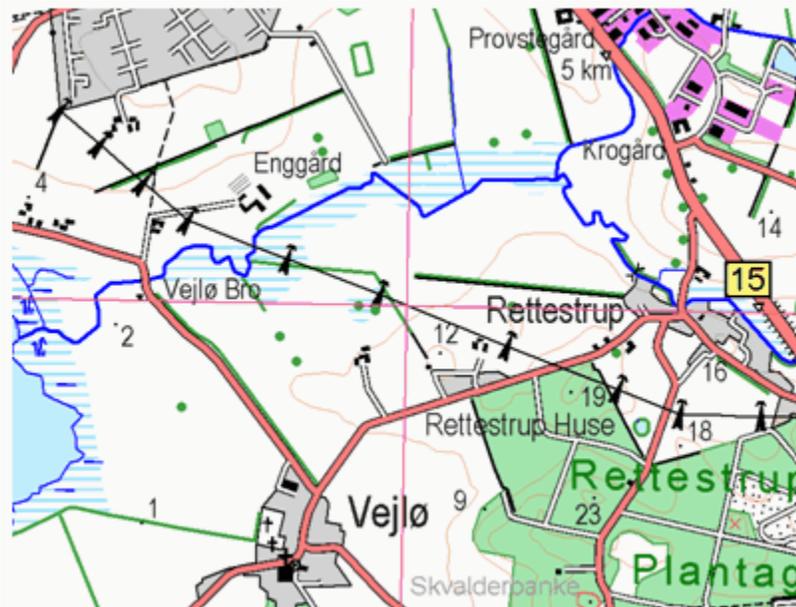
The combination of the **Convert Linear Pattern** command and the GeoMedia Edit Geometry commands provides the ability to customize the representation of patterned lines well beyond the default pattern style definition.

12. Select **Home > Window > Properties**. Click **Center at current scale**. Click **OK**.

13. Click the **Move Next** button on the Queued Edit dockable control.

14. Select **File > Save** to save the **GeoWorkspace**.