

The CEDRA Corporation's COMMAND OF THE MONTH

A monthly information bulletin

September 2010

FEATURED COMMAND

Deleting Polyline/
Polygon Vertices



Application Description

Anyone who has worked with polylines and/or polygons has come across the situation where it was desired to delete a group of vertices.

Sure you can use native ArcMap functionality to delete a vertex, one at a time, but when you have a lot of vertices to delete who wants to do that. The other alternative is to go through some sort of process of splitting and/or combining features to accomplish the task. Again, a painful exercise.

As such, the problem becomes how can one quickly and easily delete a group of polyline or polygon vertices.

The CEDRA Solution

The [Delete Vertices],  tool within the CEDRA-ArcView3-Tools toolbar, shown in Figure 1, can be employed to address this issue. This tool is the fourth from the right tool in the CEDRA-ArcView3-Tools toolbar.

Delete Vertices Tool Overview

The [Delete Vertices],  tool enables the user to select a feature, from which, a group of vertices will be deleted.

The first step in the process is to select the feature to be processed by making a pick on top of the desired feature. The user will then be asked to confirm the selection. The traditional CEDRA feature confirmation selection process is employed.

Once the feature has been identified, the vertices comprising the feature are displayed. The user is then able to define an implied rectangle that encloses the vertices to be deleted.

After the implied rectangle has been defined, the vertices are immediately removed from the feature, no user confirmation is required. The display is updated to reflect the deletion of the vertices and the feature remains selected so that additional vertices may be deleted, if appropriate.

Command Of The Month bulletin

This month's issue addresses how a user can delete a group of vertices from a polyline or polygon feature quickly and easily.

If a vertex is deleted, that should not have been, the user can employ the {Undo} [Delete Vertices] command to return the feature to its previous state.

Delete Vertices Operation

To use this tool, the user should:

- 1 Click at the  Delete Vertices tool.
- 2 Click in the ArcMap display at a polyline or polygon feature to



Figure 1 - The CEDRA-ArcView3-Tools Toolbar

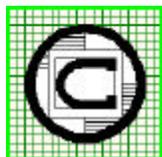
display the traditional CEDRA feature selection confirmation query box, see Figure 2.

- 3 Click at the **Yes** button to confirm the selection and continue, the **No** button to force the tool to ignore the current selection and determine if another feature is close to the pick, or click at the **Cancel** button to abort the command
- 4 Once the selection has been confirmed, **define an implied rectangle** in the ArcMap display by clicking at a corner of an implied rectangle and while holding the left mouse button down drag the cursor to the opposite corner of the diagonal, at which point, release the mouse button.

The tool will determine which vertices fall within the implied rectangle and immediately delete



Figure 2
Feature Confirmation Query Box



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those which do. The user is not asked for confirmation of the deletion. After the vertices have been deleted, the feature is re-displayed reflecting the vertices which have been deleted.

- **5 Repeat** Step 4 until all appropriate vertices are deleted.

To deactivate the command simply select another tool or command.

Shown in Figure 3 is a sample polyline feature that has been selected for processing. Once the user has confirmed the selection, as per Step 3, this is the type of display the user will see prior to executing Step 4.

The dashed rectangle shown in Figure 4 illustrates the shape of a sample implied rectangle that user is able to define. Note that the rectangle can be defined by any of the following diagonals:

- low left to upper right,
- upper right to low left,
- low right to upper left, or
- upper left to low right.

Summary

The [Delete Vertices],  tool is extremely useful in manipulating polyline and polygon features.

Note that this tool is available in all CEDRA software product offerings including the CEDRA-DataEditor and CEDRA-DxfExport products.

As always, users who have a need for functionality that is not presently available in CEDRA software should feel free to forward these requests to CEDRA, as well as, any other comments or suggestion you may have.

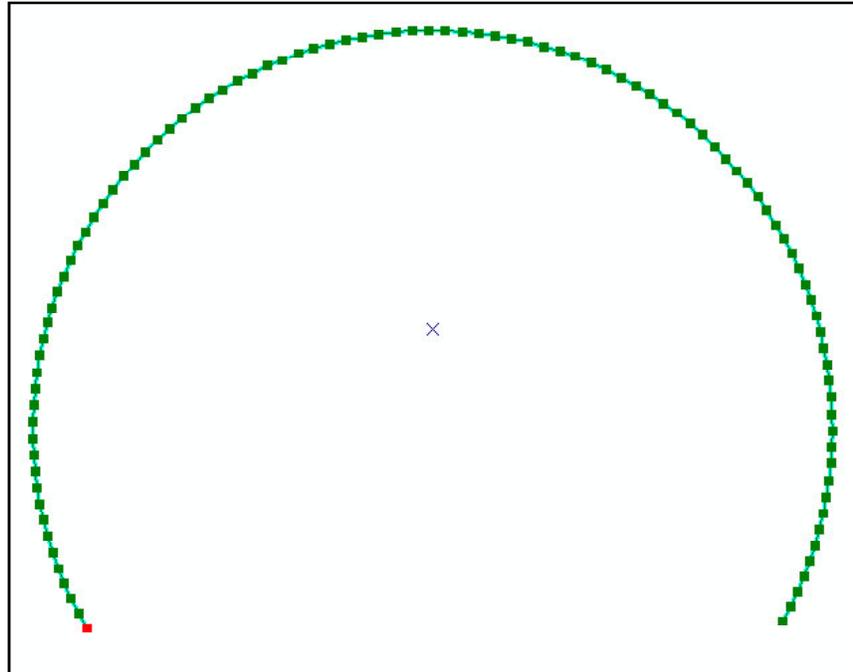


Figure 3 - Polyline feature with vertices highlighted

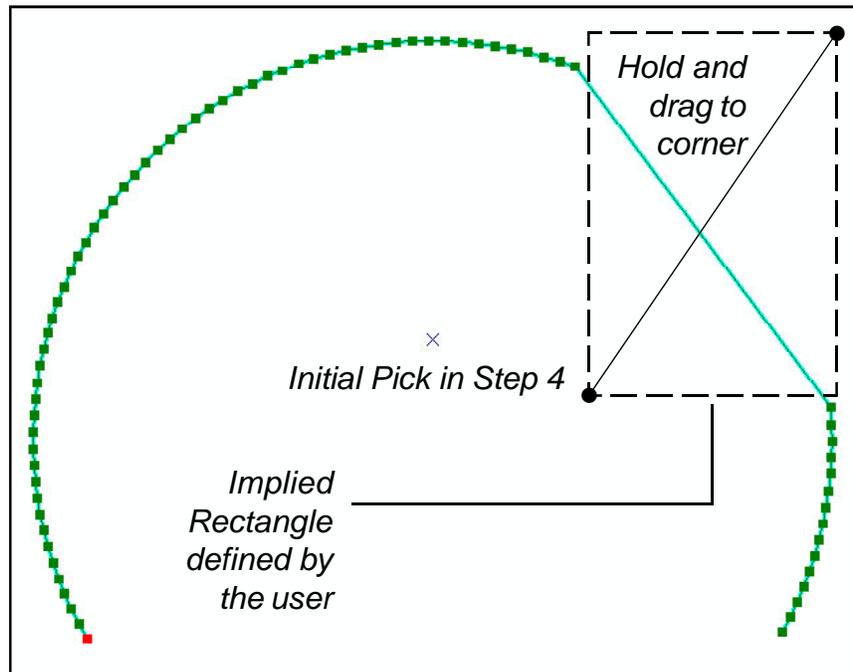


Figure 4 - Polyline feature whose vertices have been deleted

If you have a request for Command Of The Month, feel free to phone, fax or e-mail your request to The CEDRA Corporation.