

TransCAD Notes for: Presto-Chango



Make My Centroids and Nodes One

What is this instruction for???? - You have created your network by cleaning up the nodes and road links and you have designated which nodes are centroids/external stations in their own column.

Well TransCAD assigns node ID's itself when you create your network and when you add centroids it gives them the next available node number. TransCAD will use those unique ID numbers when it creates the minimum paths and assigns during traffic assignment.

In our modeling, we typically want our node numbers (in the case of centroids/externals) to match our zone numbers so that we can use them in displaying results or analyzing what is happening from Zone A to Zone B. Well if you left the TransCAD unique ID as the identifier you might get confused when you post your centroid links, or you would always have to use two different columns to post the centroids and "other nodes".

This tip creates one ID field so that you can use your standard numbering convention for your centroids, external stations and other nodes. It allows the centroid number to become the ID number instead of the using the generic ID created by TransCAD.



Here's How:

Step 1: Open up your network that has your nodes & centroids

- 1) Turn on the endpoints layer

How? -With the Map Active go to Map Menu → Layers

*Unhide the endpoints layer by highlighting it and clicking Show Layer.

*Close the Dialog Box.

Step 2: Add a New ID Column

- 1) Open the table (dataview) for the endpoints by clicking on the dataview button (looks like an excel spreadsheet).
- 2) Click on the Dataview Menu and choose Modify Table
- 3) When the Modify Table Dialog Window pops up (as shown below), Click the Add Field Button.
- 4) Type in a Name type for the column (ie:New ID). The default value for the other fields is ok.
- 5) Click OK
- 6) Prompts you "Are you sure you want to modify table"-Let's say yeah for the fun of it!

Modify Table Dialog Window

Field Name	Type	Width	Decimals	Index
ID	Integer (4 bytes)	10		Yes
Longitude	Integer (4 bytes)	10		
Latitude	Integer (4 bytes)	10		
centroids	Integer (4 bytes)	10		

Field Storage Information

Name: Index

Type: Width: Decimals:

Default:

Field Display Settings

Width: Format: Decimals:

Display Name:

Description:

Record Information

Add Records

Click
On
Add
Field

Type
in
Column
Name

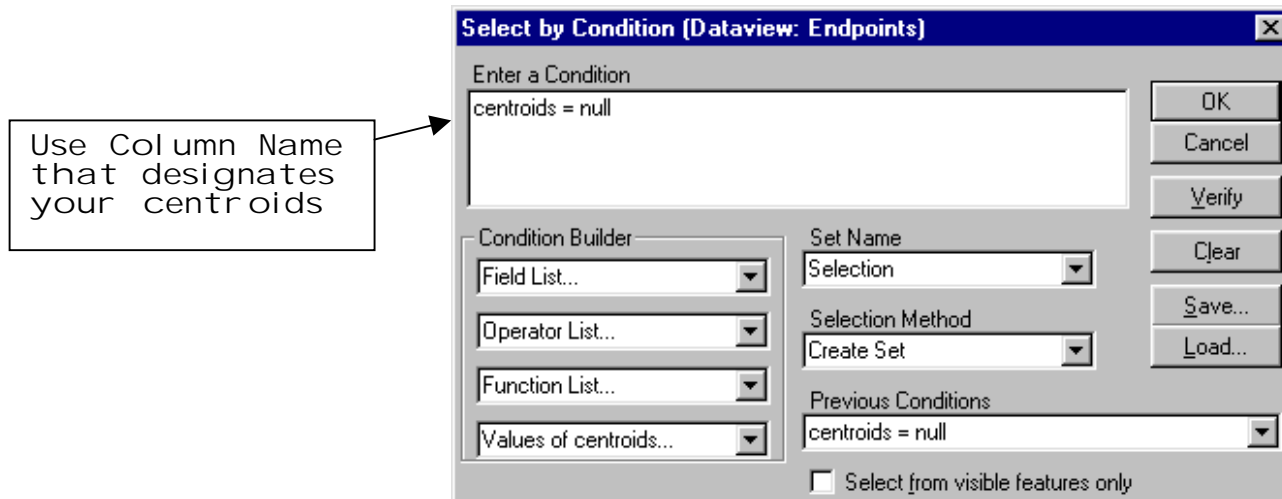
Step 3: Add the Centroids into the New Field

- 1) Right Click on the NEW ID Column Heading
- 2) Select the Fill Command
- 3) Choose the Formula Option
-In the formula builder enter in the name of the column containing the centroids (in this case Centroids)
- 4) Select OK...and then select it again!

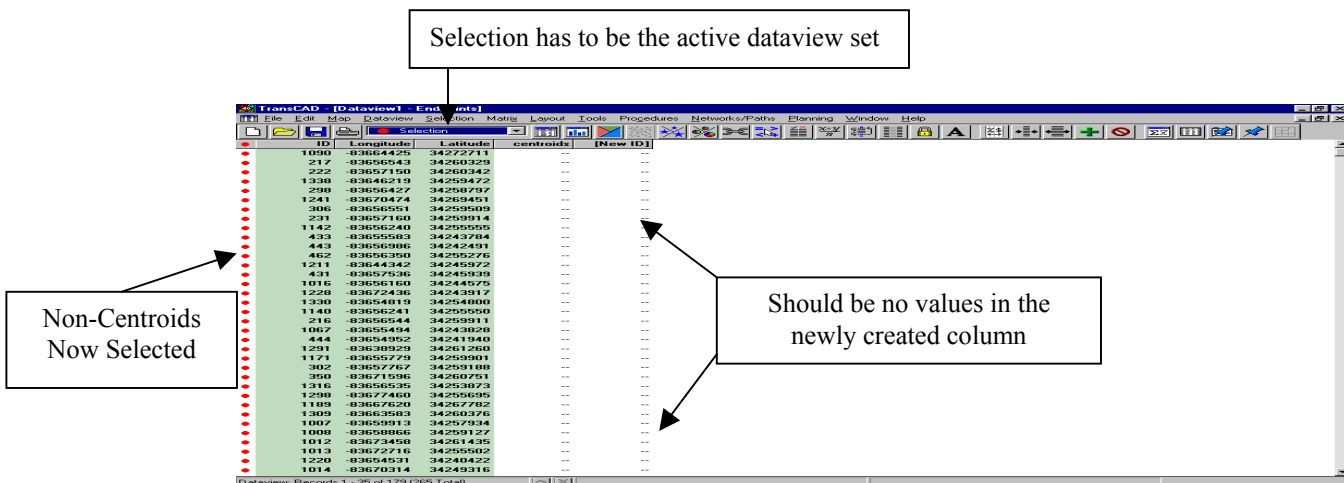
Step 4: Make a Selection Set of the Other Nodes in the Network

- 1) Using the select by condition button (has math symbols on it) or the Selection Menu and choose Select By Condition
- 2) When the dialog box comes up (as shown below) type a formula that will select only the nodes that are not centroids.

How? - Use the column name you created for your centroids and set it EQUAL to NULL



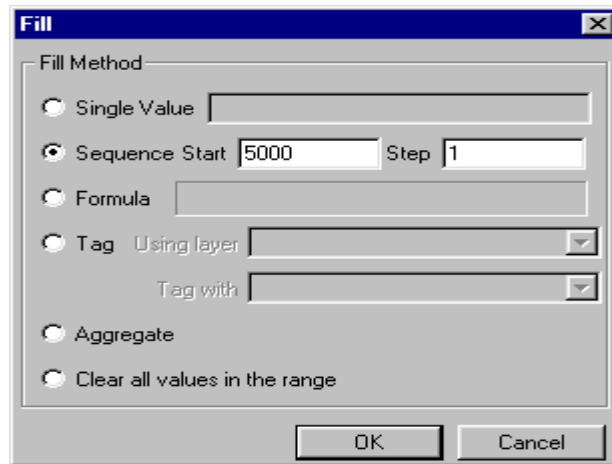
If you do this right then you should see the selection set on your network map with the non-centroid nodes denoted in a different color or in the dataview as shown below.



Step 5: Completing the New ID numbers for the Non-Centroid Nodes

- 1) ***Make sure your selection set is the active layer in your dataview***
- 2) Right Click on the Column Heading New ID
- 3) Select the Fill command
- 4) Fill the NEW ID column using the Sequence button.
This will put all of your nodes to in a set order. Just make sure you start at a number higher than your centroids or externals...and leave some spaces for future centroids!!!!

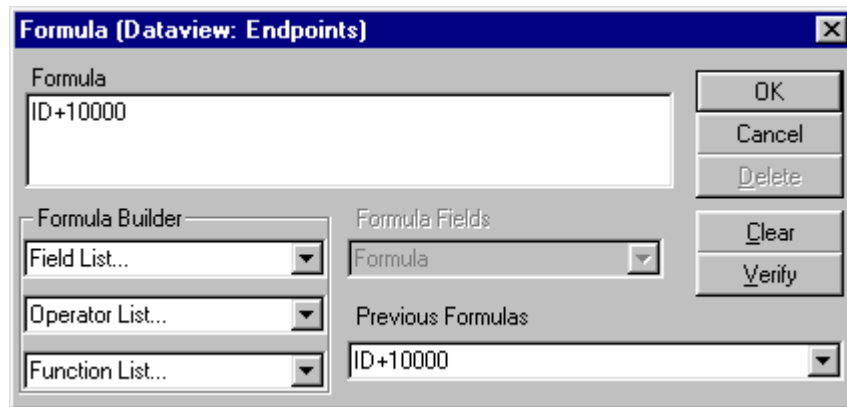
Fill Dialog Box



Note: You can choose the Formula option as Step 3
-In the formula builder enter ID + 10000 (see below)
(This step takes the unique Transcad node ID and puts it into the New ID column for all the nodes that are not centroids)



Why add 10000?? - because that way the centroids and the other nodes are not accidentally duplicated in this New ID number



- 5) Close the dataview and **NO you don't have to save the endpoints table!!**

Steps 6 & 7 are Important



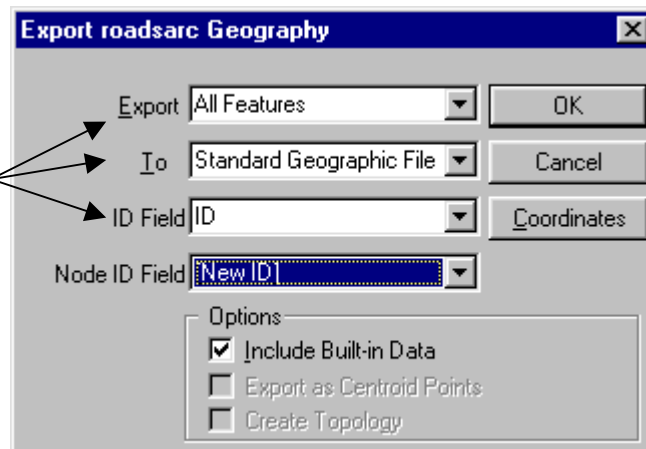
Step 6: Exporting the New data with a new unique node number

- 1) Make the roads layer active on the map

(Make sure the linework is the active layer or you will export the wrong data)



- 2) Go to the Tools Menu → Select the Export Function
The Export Window should pop up (as shown below)
- 3) Fill out the window as shown below noting:
 - *Export ALL FEATURES (not the selection set)
 - *It is a STANDARD GEOGRAPHIC FILE
(the default-compact geographic file cannot be edited)
 - * The NODE ID FIELD - is the New column you just created!
- 4) Click OK and save the file as something logical



Step 7: Check to make sure you exported the data correctly

- 1) Close the map you were using, you don't need to save it.
- 2) Now open the new geographic file you just exported
- 3) You should be able to post the ID for the nodes and see the zone numbers as the centroids on your map

If you open your map and only see dots....then guess what???? You didn't have the line layer active when you exported your data. See Step 7 and try that part again!

Happy TransCADDING!!!!

