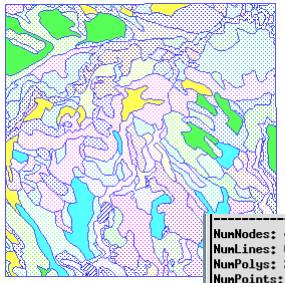
Vector Geodata Topology Types

DID YOU KNOW . . . *the TNT products provide integrated support for polygonal, planar, and network topology for vector geodata objects?*

Polygonal Topology

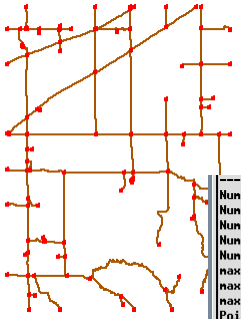


- *Highest, or strictest, topology type*
- *All lines start and end in nodes*
- *No two nodes can have same X and Y coordinates*
- *Lines do not intersect other lines or themselves*
- *Enclosed areas are defined as polygons*
- *A point can be in at most one polygon*
- *Topology for 3D objects maintained in the XY plane*
- *Use for objects with enclosed areas that have attributes*

Project File Maintenance Object Information

```
NumNodes: 420
NumLines: 629
NumPolys: 212
NumPoints: 0
NumLabels: 205
maxpoints: 32
maxlines: 43
maxislands: 1
PointType: 1 (2D X-Y)
VectorType: 0 (POLYGONAL)
```

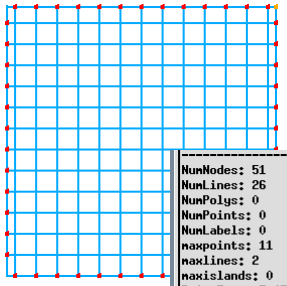
Planar Topology



- *All lines start and end in nodes*
- *No two nodes can have same X and Y coordinates*
- *Lines do not intersect other lines or themselves*
- *Topology for 3D objects maintained in the XY plane*
- *Use for objects with enclosed areas that do not have attributes*

```
NumNodes: 116
NumLines: 134
NumPolys: 0
NumPoints: 0
NumLabels: 0
maxpoints: 131
maxlines: 6
maxislands: 0
PointType: 7 (3D X-Y-Z)
VectorType: 1 (PLANAR)
```

Network Topology



- *All lines start and end in nodes*
- *Two nodes can have same X and Y coordinates*
- *Lines can intersect other lines and themselves*
- *Constraints imposed by 2D topology on 3D objects eliminated*
- *Use for objects with lines that should cross without intersection, such as a road network with overpasses and underpasses*

```
NumNodes: 51
NumLines: 26
NumPolys: 0
NumPoints: 0
NumLabels: 0
maxpoints: 11
maxlines: 2
maxislands: 0
PointType: 7 (3D X-Y-Z)
VectorType: 2 (NETWORK)
```

WANT TO KNOW MORE?

See the tutorial booklet entitled:

Vector Analysis Operations

MicroImages
microimages.com