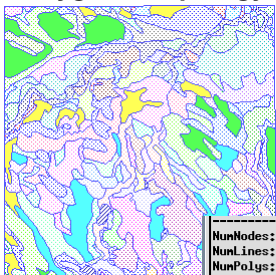


Vector Geodata Topology Types

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

Polygonal Topology



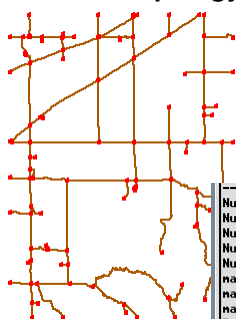
Project File
Maintenance
Object Information

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

- 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

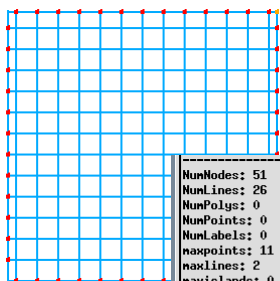
Planar Topology



```
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)
```

- 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

Network Topology



```
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)
```

- 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

WANT TO KNOW MORE?

See the tutorial booklet entitled:

Vector Analysis Operations

