Esri Generalisation
Brief history and road ahead

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Esri generalisation development path

1990s – 2009 (8.x – 9.3.1) Feature based generalisation

2006 (9.2) Representations

2010 (10.0) Contextual generalisation

2012 (10.1) Partitioning

Post 2013 (10.2 and beyond)
- Additional parameters
- Multiple processing
- Additional themes
A brief history
Leveraging the geoprocessing framework
9.2 – Representations

Combined symbol and storage model

- Create custom symbols
- Add drawing behavior
- Control marker placement
- Mask features
- Move symbology independently of geometry
10.0 – Contextual generalisation

- **Merge Divided Roads**
- **Resolve Road Conflicts**
- **Delineate Built-Up Areas**
- **Resolve Building Conflicts**
- **Detect Graphic Conflicts**
- **Collapse Road Detail**
10.1 – Partitioning

• Process large data sets

Create Cartographic Partitions tool

Map sheets

Administrative Areas
Road ahead
Multi-scale maps = BIG data

Need for more powerful processing
Post 10.2 – Laying the groundwork

• 2D/3D visualization
• Cloud integration
• Unified symbol model
• 64-bit
• Multiple processors

...for the next big leap
New ArcGIS Professional application
Future generalisation research

• Hydrography
  • Collapse river polygons
  • Prune river network
  • Simplify coast lines
  • Simplify hydro polygons
  • Contour turn backs
  • Aggregate hydro polys

• Utilities
  • Pipelines, gauges, electrical networks
Future generalisation research

• On-the fly generalization
  • Clustering large numbers of points
  • What is possible with new processing capabilities?
Thank you