Abstract

Implementing Polygon Based Spatial Business Rules with ArcGIS 8.3
Track: Forestry, Wildlife, and Fisheries Management
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The enforcement of spatial business rules for polygon based databases has always been difficult to implement. Historically, spatial business rules have been implemented using static topological data structures supplemented with rules programmed within user applications. The ArcGIS GeoDatabase provides the promise of embedding these rules into the database model rather than application programs.

With the addition of cross-layer topological rules in ArcGIS 8.3 new options are available. Forestry systems typically have complex spatial rules that must be adhered to during the editing of polygon data. Implementing these rules within the GeoDatabase greatly reduces the knowledge required by the user, as well as removes the need for complex application programming.

This paper will review how these rules work in a typical forestry business flow. Issues and technical solutions will be presented with a focus on identifying techniques that will benefit the application developer and database designer.

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