DISTRIBUTED GIS: COMPUTING IN THE INTERNET AGE

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The Internet has been the most significant breakthrough in computing in the last decade. It has profoundly affected virtually all aspects of computing, and GIS is no exception. For GIS the Internet represents something of a conundrum because it is geographically independent of the real world. This presents major problems for commerce, language and the law. There have been many recent attempts to link the virtual and real geographic worlds of the Internet.

GIS has now graduated from single use, project-based systems, via workgroup departmental systems, to distributed enterprise information systems. This has raised both significant technical and organizational challenges. Web services and Geoportals are at the heart of resolving some of the complex integration issues. Web services offer a practical technical solution to connecting widely dispersed, heterogeneous systems. Geoportals offer both service catalogs and focused themed user experiences. Together they allow mobile and distributed GIS users access to a range of geographic content and capabilities.