Some Strategies irn the Distributed and Mobile GPS System

Min Peng¹, Yanxiang He², Wensheng Hu³

1. College of Computer, Wuhan University, Wuhan, 430079, China, hhdawn@public.wh.hb.cn

2. College of Computer, Wuhan University, Wuhan, 430079, China, yxhe@whu.edu.cn

3. College of Computer, Wuhan University, Wuhan, 430079, China, xwindx@163.com

ABSTRACT

A distributed and mobile GPS system framework is designed in this paper. Some strategies are utilized in the system including multi-agents mechanism, CORBA middleware, and probe mobile agent and GML geo-spatial data description. A much wider range of mobile devices using wireless link technology are supported with GIS/GPS applications in our system. Moreover, these strategies can implement distributed GIS and be in favor of overcome bottle-neck of CPU and bandwidth of mobile end devices, offering system flexibility and extensibility both on the server side and client side. The implementation of the strategies is described in detail.

Keywords: Multi-Agent, CORBA, GPS, Distributed GIS Database, Wireless Device