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AN ENHANCEMENT OF COMPUTING EFFICIENCY THROUGH GRID ENABLED GEOGRAPHIC INFORMATION SYSTEM HARNESSING DISTRIBUTED COMPUTING RESOURCES

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Abstract

The recent advanced geo spatial equipments like GIS (Geographic Information System) and experimentations need a lot of computational work like the very high analytical calculations, handling of huge datasets, image processing, high speed communication networks, near real-time response and data mining. These computational tasks are very difficult in a centralized architecture which can be visualized as super computer .This centralized architecture is very costly and unaffordable. So we go for the distributed architecture which is visualized as the grid computing. That is utilizing the idle resources in a network of computers. The real time grid computing enables smarter decision making. The GIS helps in the emergency preparedness and response application for the disaster management for the disasters like fires, floods, tornadoes, hurricanes etc. The paper deals about the usage of real time grid computing to perform the above mentioned computational work with less complexity and high efficiency.

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