



Oak Ridge National Laboratory



REALSIM: Data-Driven Simulation System for Training, Decision Support, and Policy Evaluations

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Prevent, Protect, Respond, Recover

Homeland Security Challenge:

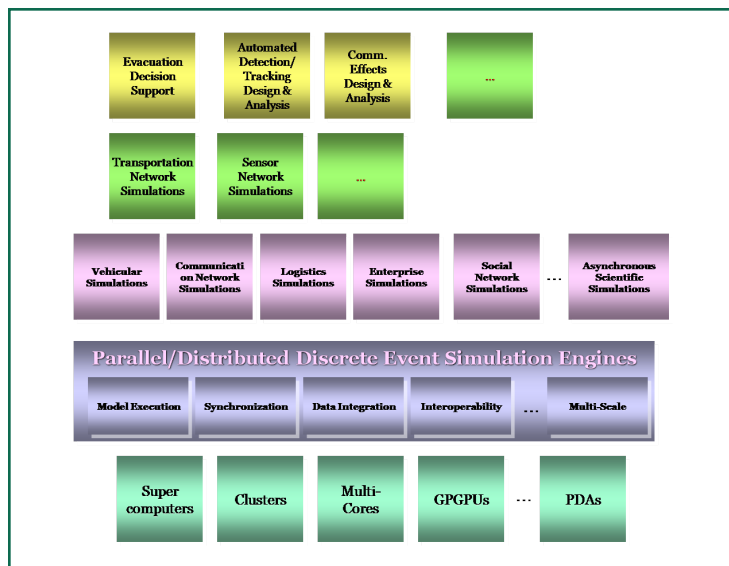
Local, state and regional officials need a capability to track material assets and key personnel; and to evaluate the effectiveness of proposed and existing local, state and federal policies relating to preparedness and response to disasters. There is also a need to improve the training of personnel that must plan and respond to disasters. In addition, there is a need to improve investment strategies for dealing with planning and response; and to enhance response ability on real-time decisions by real-time situational awareness.

Research Project Solution:

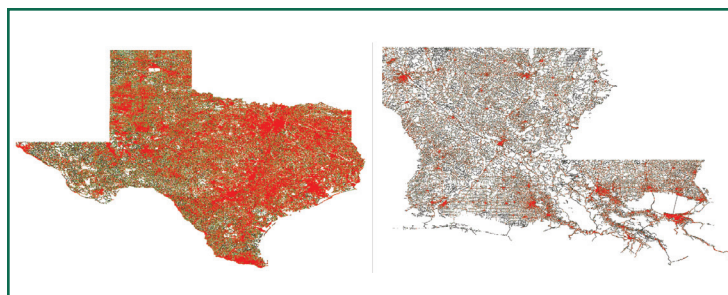
This project will develop a system that will consist of a core modeling and simulation capability that will be able to determine the dynamic movement and tracking of material assets and people based on real-time data feeds to the system. The system will simulate the dynamic movement and tracking of material assets and people based on simulated real-time data feeds to the system. The system will be capable of scaling from local to state to regional to national needs. It will have the capability to serve as a dynamic information repository and as an archive of information, and provide a flexible range of user interfaces based on open standards to provide interoperability to existing and future applications and data systems.

National Implications:

The system developed under this project has many applications. It can be used for purposes of training, event planning, and policy evaluations.



Layered Architecture of REALSIM Technology Components.



Interactive State-Scale Simulations on Graphical Processing Units (GPU).

www.serri.org

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