Advanced VR Research Centre

RSSE
Research School of Systems Engineering

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Advanced Collaborative Environments for Distributed Systems Engineering Teams

Research is being undertaken to develop optimal methods for **linking geographically distributed teams** of people (systems engineers, designers, business analysts, etc.) in a way that allows **collective decision making** to be undertaken. The goal is to provide processes, tools and technologies to support **optimisation of a complex system involving different specialist domains**. New techniques will be developed to enable distributed model based simulations to become an integral part of an advanced collaborative environment. Management of non-heterogeneous data derived from a wide variety of sources will enable multi-criteria decision analysis to be performed for complex systems.

AVRRC Advanced Collaborative Environment

| | Global Shared Data Space | Distributed Model Based Simulations |
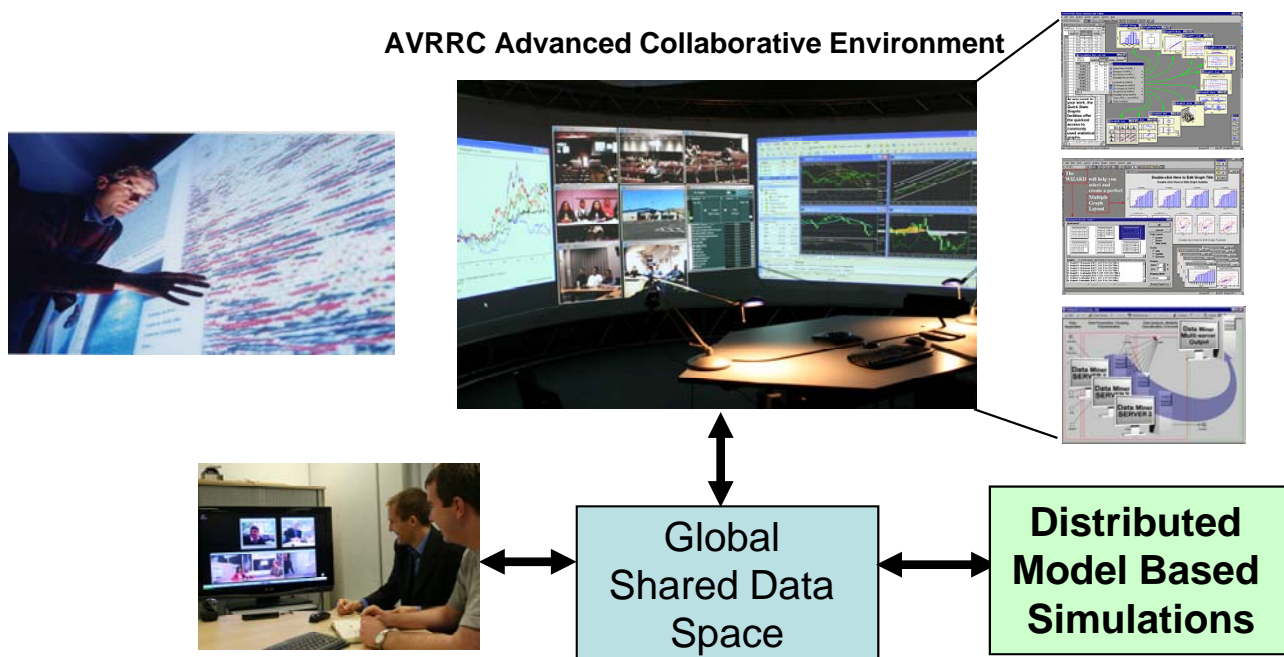
Our approach is to integrate complex system models with an interactive simulation environment.

Visual Analytics for collaborative decision making
New techniques involving advanced interactive visualization techniques are being developed to provide greater insight into the complexities of the emergent properties of the complex systems. The aim is to **integrate distributed models of a complex system with geographically coupled simulations to support real-time collective decision making.**

This is a multi-disciplinary research project involving computational science, human factors and systems engineering and builds on our extensive experience of distributed grid based systems (e-Science) and real-time modelling & simulation..

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