

Do Grids Play? Relationship of Computer Games and Grid Architectures

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Modern multiplayer computer games played over the Internet require high-performance, dedicated server hosts which maintain the game state and communicate with participating game clients. Such distributed game systems must scale to multi-server topologies for massively multiplayer games which host huge virtual worlds for thousands of users. Due to this increasing performance demand, computer games can benefit from being implemented as interactive services in a grid. The talk presents some concepts of this emerging area of research regarding computer games as a "killer-application" for the grid. However, computer games can provide more than just being an application which can be adapted to a grid. Especially for massively multiplayer games, a lot of research has been done in the areas of scalable network topologies, "area of interest"-computation and -communication as well as state consistency concepts of continuous systems, i.e., systems that change their state independently from user inputs. The talk discusses some of these concepts and their possible impact on the development of future grid architectures.