The Media Grid is a public utility for digital media. Based on new and emerging technologies, the Media Grid builds upon existing Internet and Web standards to create a unique network optimized for digital media delivery, storage, and processing.

The Media Grid supports Quality of Service (QoS), broadcast capabilities, military-grade security, distributed parallel processing and advanced rendering features. Together these features create a novel software development platform designed specifically for networked applications that produce or consume massive quantities of media and media-related data.

Applications enabled by the Media Grid include: on-demand digital cinema and interactive movies; distributed film and movie rendering; truly immersive multiplayer games and virtual reality; real-time visualization of complex data (weather, medical, engineering, and so forth); telepresence and telemedicine (remote surgery, medical imaging, drug design, etc.); vehicle and aircraft design and simulation; and similar high-performance media applications.

The Media Grid does not replace or circumvent existing grids, clusters, or rendering farms—it provides uniform and simplified access to a wide range of such systems. Like the Web before it, which shields users and developers from the complexity of the Internet, the Media Grid provides a unified view to an otherwise complex system. In the same way that the Web simplifies Internet development and provides a standard browser interface for text-oriented information and basic media content, the Media Grid makes it easy for developers to access computational resources provided by existing technology vendors such as Sun Microsystems, Oracle, IBM, Hewlett-Packard, Microsoft, and others. By making digital media content and processing power available through standardized and unified Application Programming Interfaces (APIs), grid services, and Web services the Media Grid provides a public computing infrastructure that developers and owners of high-performance computer systems benefit from.