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Sommario/riassunto	Advances in the capabilities of technologies applicable to distributed networking, telecommunications, multi-user computer applications, and interactive virtual reality are creating opportunities for users in the same or separate locations to engage in interdependent, cooperative activities using a common computer-based environment. These capabilities have given rise to relatively new interdisciplinary efforts to unite the interests of mission-oriented communities with those of the computer and social science communities to create integrated, tool-oriented computation and communication systems. These systems can

enable teams in widespread locations to collaborate using the newest instruments and computing resources. The benefits are many. For example, a new paradigm for intimate collaboration between scientists and engineers is emerging. This collaboration has the potential to accelerate the development and dissemination of knowledge and optimize the use of instruments and facilities, while minimizing the time between the discovery and application of new technologies.

Advanced Engineering Environments: Achieving the Vision, Phase 1 describes the benefits and feasibility of ongoing efforts to develop and apply advanced engineering environments (AEEs), which are defined as particular implementations of computational and communications systems that create integrated virtual and/or distributed environments linking researchers, technologists, designers, manufacturers, suppliers, and customers.

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