This article presents a brief look at the IEEE Fourth International Workshop on Enabling Technologies. The efforts of the working groups are outlined, and the effects of new, emerging technologies are discussed.

The IEEE Fourth International Workshop on Enabling Technologies: Infrastructures for Collaborative Enterprises (WETICE ’95) was held 20 to 22 April 1995 at the Coolfont Resort in Berkeley Springs, West Virginia. The workshop was sponsored by the Institute for Electrical and Electronics Engineers (IEEE) Computer Society and organized by the Concurrent Engineering Research Center (CERC) at West Virginia University, with support from the American Association for Artificial Intelligence and in cooperation with the Association for Computing Machinery Special Interest Group on Office Information Systems.

WETICE ’95 attracted 38 participants from the United States, Canada, Finland, Germany, Italy, Japan, The Netherlands, New Zealand, and the United Kingdom. Many of these participants presented papers on technologies used for collaboration, including multimedia, the World Wide Web (WWW), and CORBA (common object request broker architecture).

As in previous workshops, the participants came from a variety of backgrounds in engineering, medicine, computer science, and business management. Attendance was kept small but broad to facilitate effective group discussions. The organizers feel that WETICE attendance is still strong because it offers an immediate forum for technology discussion not found in any other venue. We surveyed a small group of participants and found that many enjoy WETICE because they can discuss their interests and make contributions in the working groups.

Three working groups met in parallel during the workshop to discuss complementary issues in collaboration technology research: (1) tools, (2) environments, and (3) process. The tool group discussed what types of activity collaborators need from tools, what tools exist, what services are needed, and how tools will evolve in the next few years. The environment group focused on standards issues, including how standards evolve and how developers can plan frameworks for the graceful evolution of their product in immature application domains. The process group discussed the use of tools in collaborative environments to enable users to automate or partially automate their work flow to better understand it and improve the process of collaborative work.

This year was a turning point in research on collaboration technologies, thanks to the proliferation of the WWW. There was more consensus than ever this year about the direction of collaboration technologies and their application in real work environments. New network technologies, such as the multicasting backbone (MBone) and the WWW, helped to emphasize the benefits of shared knowledge and focus discussion on specific topics. It is my observation that this year was the first in which clear technologies have emerged as leaders in distributed applications. Most of the WETICE ’95 participants felt that more tools will become distributed and that they will need to address collaboration issues.

The papers presented at the workshop covered a broad spectrum of topics, but all had the underlying theme of using technology to enable collaboration in many fields. I believe the papers and working-group reports were novel in content, addressing state-of-the-art issues that currently form the frontier for this exciting area of research.

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