Parallel visualization is an emerging technology that uses computer graphics techniques to visualize data that is computed from distributed parallel computers. One of the main difficulties of parallel visualization is that developers often have to master the complexity of 3D graphics programming and parallel computing techniques into one solution. Current development of Java Internet connection and the open standard of VRML opens an opportunity for integrating VRML and parallel computing. The integration enables developers of parallel visualization to ease their programming efforts. In addition, scientific visualization can also be done in WWW environment by this integration. For this purpose, we develop a toolkit─ParaVRML, which is based on VRML and PVM. Our implementation supports a simple parallel script language, with user-friendly WWW interface. Our empirical results have shown that this integration is a feasible approach to achieve the goals.

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