

A Distributed Virtual Assembly Environment Using CORBA

ABSTRACT: The use of virtual environments to plan and evaluate assembly processes has been gaining significant acceptance in the engineering community. The prohibitive costs of immersive virtual environments and the availability of the Internet have brought to the forefront the need for methods for sharing the virtual environment during the assembly evaluation process. This will support true collaborative engineering. This paper presents the design and implementation of a CORBA-based distributed virtual assembly environment. The architecture is based on capturing key states and events in the virtual assembly process. This collaborative environment is based on the VADE system created at Washington State University. Test cases were conducted using this system and the results are presented in this paper.