The Distributed Interactive Multimedia Synchronization Model Based On the Temporal Petri net

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ABSTRACT

The distributed multimedia synchronization is one of the most popular contents of computer science and technology. Petri Net is fit for analyzing the synchronization mechanism of distributed multimedia. This paper introduces the distributed multimedia synchronization based on the Petri net. Then it proposes and analyzes OCPN and some temporal Petri net such as TSPN and DTPN. It also discusses the interoperable Petri net. Based on these models, we put forward ISPN (distributed interactive multimedia synchronization based on Petri net) model, and interpret this model in detail. By using the model, the multimedia synchronization in distributed settings can be described accurately and effectively.

Keywords: Distributed multimedia; Multimedia synchronization; Object composition Petri net; Interoperable Petri net; Interactive multimedia environment