Modelling of the teaching process in logistic systems by using of nested petri nets

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Nowadays, despite considerable success of interactive studying, there are many problems that are not decided. To them, first of all, can be added development of engineering methods of creation computer teaching systems as a type of information systems using modern development methodologies and technologies, in particular, CASE-technologies. In addition, it is actual the creation of methods of such evaluation of didactic and operational characteristics of the developed training systems.

Let's look through the extension of Petri nets, which is useful while modelling of the teaching process. We speak about so-called Nested Petri networks (Nested Petri Nets-NPN).

The appearance of a given variety of Petri nets is connected with the desire of researches to have a tool for adequate and convenient representation of complex systems with difficult hierarchical and multi-agent structure.

Nested Petri Nets are an extension of standard Petri net formalism in which chips that represent local resources in positions of the system network, can themselves be complex objects with network structure and be modelled with low-level Petri networks -they will be called - satellite networks.

Nested Petri nets (Nested Petri Nets - NPN) is one of the modern tools of modelling and research of parallel working systems that have certain independence and own activity. These features make attractive their use when modelling educational process, conducted by a group of students both in traditional educational process and interactive computer training.

In this article we first offered two-level teaching model, consisting of a central system and a set of systems – satellites, which model the individual behaviour of students. Interactive, in other words, largely, independent training with the use of modern information technologies is one of the main directions of improvement of the education system.