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# Support of the complex engineering system productive life: analysis of the declarative and imperative approaches to virtual enterprise behaviour modeling

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*The article considers problems of business process realization for a virtual enterprise of the control and productive life support for high complicacy high-tech products on the base of PLM. We give an analysis of the enterprise real business process peculiarities providing the productive life support. Moreover, we consider the imperative and declarative approaches to productive life support business process description and problems of using the workflow technology control for their realization. The article proposes a business system description methodology. The last one includes process and structure characteristics description in the unified way on the base of the formal logic tools of the first order predicates and the calculus lambda.*

**Keywords:** *productive life support control, PLM, virtual enterprise, business process control, workflow control technology, imperative and declarative approaches.*

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