## Effectiveness of the "Architecture as code" approach in management of IT-architecture of an enterprise

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*Abstract.* The need for enterprise architecture increases as business scales, and with the current interest in ecosystems, it is one of the most in-demand issues for study. The article provides a comparative analysis of existing approaches to management of IT-architecture of an enterprise. As a result of the study, several problems specific for the approaches under consideration were synthesized, one of which is the isolation of the IT-architecture from the corporate one. As part of the goal of mitigating the identified risks, the author proposes to use an innovative "Architecture as a Code" approach, which is devoid of identified vulnerabilities. The article pays special attention to exploring the capabilities of this principle, and how it makes the process of managing IT architecture as a Code" approach. For this purpose, a study of the "Diagram as a Code" concept was conducted, which showed the fundamental difference between the concepts. The features of virtualization and reuse of program code, which are the fundamental principles of the approach, were studied in detail. Based on the principles and criteria, the author formulated and classified the requirements for the successful integration of a new process into the organizational structure of the enterprise.

*Keywords:* architecture design, "Architecture as a Code", system analytics, architecture refactoring, TOGAF, Archimate

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