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Digital enterprise synthesis based on web services composition

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Аннотация:

Today every customer is a digital customer, and every enterprise is a digital enterprise. The significantly changing business environment requires the enterprises to rapidly change their structures, processes and systems in order to save their customers and to remain competitive and compliant to the requirements of the modern digital economy. Existence of a large number of digital services in the Cloud does potentially possible both fast changing of the enterprise, and assembly of the new enterprises of atomic services. Automated planning algorithms are important part of such synthesis. In this chapter, we suggest to apply the theory of the formal grammar and the appropriate procedures as means of automated planning support for web services composition. Service composition tasks can end up being very complex, due to the security needs, especially while carrying out accounting and billing, dealing with personal data, managing access rights. A composite service can thus be defined using multiple smart-contracts that may be distributed on multiple ledgers. © 2018 Nova Science Publishers, Inc.

Ключевые слова:

Automated planning, Blockchain, Digital enterprise, Formal grammar, HTN planning, Web services composition