FORMALIZING SEMANTIC INTEROPERABILITY TESTING FOR TEST CASE GENERATION

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ABSTRACT
The introduction of semantic web technology in Web Services (WS) has enables the meaning of the web content to achieve a machine process-able automation across the internet. To address the challenges of automatic WS test case generation, an ontology-driven approach with the purpose of improving test formalism is proposed. The semantic WS specification WSMO is used to describe the application logic of composite service process. A Petri-Net model is created to provide a formal presentation of the WSMO process model. The Petri-Net ontology is defined to incorporate the operation and IOPE semantic for test generation.

KEYWORD
Interoperability Testing, Formal Method, Test Case Generation