

# Jordan University of Science and Technology

## Interfacing and Coordination for a DEVS Simulation Protocol Standard

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**Abstract:** We propose a flexible and scalable message-oriented mechanism allowing interoperability between seven different DEVS implementations towards DEVS standardization. The main objective of the proposed protocol is to enable different DEVS implementations to interface and coordinate among each other to simulate the same model structure across their diverse domains. To do so, the proposed simulation protocol uses SOAP-based Web-Services technology as the communication framework to exchange control and simulation messages. The objective is achievable with minimum design changes to each DEVS implementation, mainly by hiding the detailed implementation behind a wrapper and focusing only on the exchanged messages.