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SeCloudBPMN: A Lightweight Extension for BPMN Considering Security Threats in the Cloud

Authors: Somayeh Sobati Moghadam

Abstract: Business processes are crucial for organizations and help businesses to evaluate and optimize their performance and processes against current and future-state business goals. Outsourcing business processes to the cloud becomes popular due to a wide varsity of benefits and cost-saving. However, cloud outsourcing raises enterprise data security concerns, which must be incorporated in Business Process Model and Notation (BPMN). This paper, presents SeCloudBPMN, a lightweight extension for BPMN which extends the BPMN to explicitly support the security threats in the cloud as an outsourcing environment. SeCloudBPMN helps business's security experts to outsource business processes to the cloud considering different threats from inside and outside the cloud. In this way, appropriate security countermeasures could be considered to preserve data security in business processes outsourcing to the cloud.

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