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"BPELanon": Anonymizing BPEL Processes

Marigianna Skouradaki¹, Dieter Roller¹, Cesare Pautasso², Frank Leymann¹

¹Institute of Architecture of Application Systems, University of Stuttgart, Germany {skouradaki,dieter.h.roller,leymann}@iaas.uni-stuttgart.de ²Faculty of Informatics, University of Lugano, Switzerland c.pautasso@ieee.org

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¹ Institute of Architecture of Application Systems, University of Stuttgart, Germany {skouradaki, dieter.h.roller, leymann}@iaas.uni-stuttgart.de
² Faculty of Informatics, University of Lugano, Switzerland c.pautasso@ieee.org

Abstract We are currently developing a performance benchmark for Workflow Management System. As a first activity we are collecting real-world processes. However, to protect their competitive advantage, some companies are not willing to share their corporate assets. This work's objective is to propose a method ("BPELanon") for BPEL process anonymization in order to deal with the problem. The method trans-forms a process to preserve its original structure and runtime behaviour, while completely anonymizing its business semantics. Anonymization is a complicated task that must meet the requirements we outline in this paper. Namely, we need to preserve the structural and executional information while anonymizing information such as namespaces, names (activity names, variable names, partner link names etc.), and XPATH expressions that may reveal proprietary information. Furthermore, the names contained in the anonymized process should be chosen carefully in order to avoid conflicts, preserve privacy, and file-readability. Multi-ple dependency relations among process artifacts raise the challenge of fulfilling the aforementioned requirements, as a unique change in a file potentially leads to a flow of changes to other related process artifacts.