

Business Process Compliance with the User Requirements Notation

Daniel Amyot

SITE, University of Ottawa, 800 King Edward, Ottawa, ON, K1N 6N5, Canada
damyot@site.uottawa.ca

Abstract

The User Requirements Notation (URN) [3,8], standardized by ITU-T in November 2008, aims to support the elicitation, modeling, analysis, specification, and validation of requirements, particularly for reactive and telecommunications systems. URN combines a goal view, expressed with the Goal-oriented Requirement Language, with a scenario view, expressed with the Use Case Maps notation. This unique combination proved to be useful in the description of business processes as well as of legislation and organization policies [5]. In this presentation, we will explore the modelling and evolution of business processes and policies and how several compliance issues can be addressed [1,2]. We will also discuss how recent extensions for key performance indicators [5,7] and aspect-oriented modeling [6], together with tool support [4], can be exploited in a compliance context. Examples from the healthcare domain will be used for illustrative purposes.

References

1. Ghanavati, S., Amyot D., and Peyton, L.: Towards a Framework for Tracking Legal Compliance in Healthcare. *19th Int. Conf. on Advanced Information Systems Engineering (CAiSE'07)*, Trondheim, Norway, June. LNCS 4495, Springer, pp. 218–232 (2007)
2. Ghanavati, S., Amyot, D., and Peyton, L.: Compliance Analysis Based on a Goal-oriented Requirement Language Evaluation Methodology. *17th IEEE Int. Requirements Engineering Conference (RE'09)*, Atlanta, USA, September. IEEE CS, pp. 133–142 (2009)
3. International Telecommunication Union: *Recommendation Z.151 (11/08), User Requirements Notation (URN) – Language definition* (2008)
<http://www.itu.int/rec/T-REC-Z.151/en>
4. *jUCMNav*, v. 4.3, <http://jucmnav.softwareengineering.ca/jucmnav/>, September (2010)
5. Pourshahid, A., Chen, P., Amyot, D., Forster, A.J., Ghanavati, S., Peyton, L., and Weiss, M.: Business Process Management with the User Requirements Notation. *Electronic Commerce Research*, 9(4). Springer, pp. 269–316 (2009)
6. Pourshahid, A., Mussbacher, G., Amyot, D., and Weiss, M.: Toward an Aspect-Oriented Framework for Business Process Improvement. *International Journal of Electronic Business (IJEb)*, Inderscience Publishers, Vol. 8:3, pp. 233–259 (2010)
7. Shamsaei, A., Pourshahid, A., and Amyot, D.: Business Process Compliance Tracking Using Key Performance Indicators. To appear in: *6th Int. Workshop on Business Process Design (BPD 2010)*, Hoboken, USA, September. LNBIP, Springer (2010)
8. *URN Virtual Library*. <http://www.usecasemaps.org/pub>