A Process-Aware Goal Description Language for the Internet of Things Community Computing Environments

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(Pt9)Abstract— This paper proposes an abstract language for de- scribing process-aware goals to be accomplished by collaborative smart-objects communities over the Internet of Things (IoT) plat- forms. The proposed abstract language is based upon the process- driven IoT-community computing model [1] that is derived from a conceptual integration of the process-aware collaborations and the standardized IoT framework announced via the ITU-T SG131 Y.2060. We assume that a group of collaborative smart- objects communities can be built-up statically, dynamically, or autonomously and their process-aware goals can be specified and achieved adaptively over an IoT-based community computing environment. We also strongly expect that the proposed abstract language will deliver us a meaningful means in specifying and achieving adaptive process-aware goals of the IoT-based communities formed in a ubiquitous computing society.

Keyword— community computing model, the Internet of Things, Web of Things, smart-objects collaboration, process-aware goal description language, ubiquitous community computing architectures and systems



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