

API Management Quality and ISO/IEC SQuaRE: A practitioners' perspective

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Abstract

APIs have become a cornerstone in software ecosystems: organizations have been increasingly connecting software applications to share complex digital assets. Nowadays, API management has become a trending research topic: managing APIs is non-trivial and organizations have been struggling with different quality-related issues. Thus, we aim to understand how practitioners perceive quality characteristics related to API management capabilities and requirements. As a de facto standard, we adopted the ISO/IEC 25010 (SquaRE) standard as the reference model and conducted a structured survey with professional developers, system administrators and software functional analysts based in Rio Gallegos City, Argentina. Questions were based on main API management capabilities provided in current literature and their relation with the ISO/IEC 25010 model's quality characteristics. After running a statistical descriptive analysis over 125 answered topics, results show that Functional Suitability and Security were perceived as the most critical quality capabilities, which can provide a basis for future research.

Semblanza del Ponente

Eder dos Santos es Licenciado en Informática y Especialista en Management Tecnológico, egresado de la Universidade Católica do Salvador (UCSal, Brasil) y Universidad Nacional de la Patagonia Austral (UNPA, Argentina), respectivamente. Actualmente se desempeña como Profesor Adjunto de dedicación simple (tiempo parcial) en la Escuela de Sistemas e Informática (UNPA), con orientación en Gestión de Calidad del Software. Asimismo, es investigador afiliado al Instituto de Tecnología Aplicada (ITA, UNPA), becario doctoral del Consejo Nacional de Investigaciones Científicas y Técnicas (CONICET), y se encuentra cursando el 1^{er.} año del Doctorado en Ciencias Aplicadas (UNPA), con orientación en API Management y Calidad del Producto Software.