

Abstract of Thesis presented to UFF as a partial fulfillment of the requirements for the degree of Master of Science (M.Sc.)

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The Publish/Subscribe paradigm implemented by Notification Systems, plays an important role in the context of distributed systems development, allowing the decoupling of the participants due to its anonymous and asynchronous communication. Although this characteristic assures greater flexibility, it is not transparent. The application code tend to include sections to handle the interaction with the Notification System used, creating dependencies. Distributed systems development can be also simplified by architectural modeling implemented by configuration systems. In this paradigm, the application components are divided between functional, related to the application domain and non-functional, related to application's support aspects, like communication tasks for instance. We propose in this work an adaptation of the Rebeca Notification System, making it possible to execute over the AC configuration system. With this adaptation, communication support configuration points are exposed and, using the interception capabilities of the AC system, we could isolate the interactions among application modules, what decreases code dependencies related to the Notification System. We also could turn event composition and mobility transparently supported. The proposed model is analyzed by the qualitative view, making evident the facilities that becomes available when compared to the original Rebeca system.