Design and Experiments with YANCEES, a Versatile Publish-Subscribe Service

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Abstract:

Publish/subscribe infrastructures, specifically event notification services, are used as the basic communication and integration framework in many application domains. The majority of these services, however, provide poor or no extension mechanisms as well as insufficient configuration capabilities. As a consequence, different event notification servers have been developed previously to support the requirements from different application domains, resulting in implementations that are almost always incompatible with one another. These systems lack mechanisms that allow their use in multiple hardware and software platform configurations, and the flexibility to support different application domains, which have requirements in constant evolution. The YANCEES (Yet ANother Configurable Extensible Event Service) framework was designed to address these versatility issues, relying on a pluggable architecture. We demonstrate our approach, showing how the YANCEES framework can be used in the implementation of different services to attend the demands of many application domains.