Message from the Real-Time SOA Chairs

Welcome to the International Workshop on Real-Time Service-Oriented Architecture.

Our society has moved drastically toward a “network-centric computing infrastructure” in recent years. Automobiles, aircraft, factories, digital electronic apparatus, and enterprises require various communication channels and devices, which generate new applications that are expanding continuously. Along with this movement, a new paradigm is expected to lead future direction on related technologies. Most of applications in the above-mentioned areas can benefit from the use of the SOA (service-oriented architecture) paradigm, as a natural migration and evolution from the OO (object-oriented) architecture into the more flexible and powerful SOA. Up-to-date or emerging applications will need to be able to control their real-time responses. Therefore, we need to extend the current SOA into real-time SOA.

Real-time SOA is the new paradigm for building next-generation, real-time infrastructures and devices under service-oriented computing. Real-time computing and SOA have independent roots from computing points of view, which means rigorous study is required for setting the agenda and milestones for RT-SOA, not by simply combining both capabilities. From the real-time side, real-time embedded systems doctrine may provide substantial support such as safety, security, and reliability. From the SOA side, enterprise SOA doctrine may provide technologies such as powerful modeling, protocol, API, and dynamic configurations. Real-time SOA, therefore, may produce many desirable system capabilities.

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