

Architecting COTS Component Services¹

L. Davis R. Gamble

Department of Mathematical and Computer Sciences
The University of Tulsa
600 South College Avenue
Tulsa, OK 74104 USA
+1 918 631 2988
{davisl, gamble}@utulsa.edu

Abstract.

Web services-based service-oriented architectures (SOAs) promise on-demand integration with little conflict, within the confines of XML, *.wsdl*, etc. With the growing use of COTS components for service-oriented integrations, the current methods for enabling them to participate in SOAs as web services does not encompass what is necessary for interoperable, secure and evolvable systems. The formal description of web services has not been broadened to accommodate these requirements. Thus, understanding what enables COTS components to participate as services in a SOA is essential to make SOAs a viable paradigm for COTS integrations. In this paper, we define example services that can be used as solutions in a distributed, service-oriented COTS integration. Software architecture can express integrated system design by identifying needed integration functionality independent of communication mechanisms. Therefore, we describe these services in architecture terms to illustrate the approach. This eliminates the reliance on specific protocols, thereby facilitating COTS integration.

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