

Classifying Interoperability Conflicts¹

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Abstract.

A common path for application development is to pick the COTS or legacy products, choose a middleware product, and determine what additional functionality is needed to make it all work. While this may seem the most expedient and least costly way to develop an integrated application, unexpected interoperability conflicts can surface after implementation, deployment and/or evolution of any of the participating components. An interoperability conflict is any factor inhibiting communication of control or data among components.

Current research has shown that interoperability conflicts can be traced to the software architecture of the components and integrated application, making this level of abstraction a suitable domain for conflict description. In this paper, we describe and substantiate a set of architecture-based conflicts that embody the predominant interoperability problems found in software integrations.

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