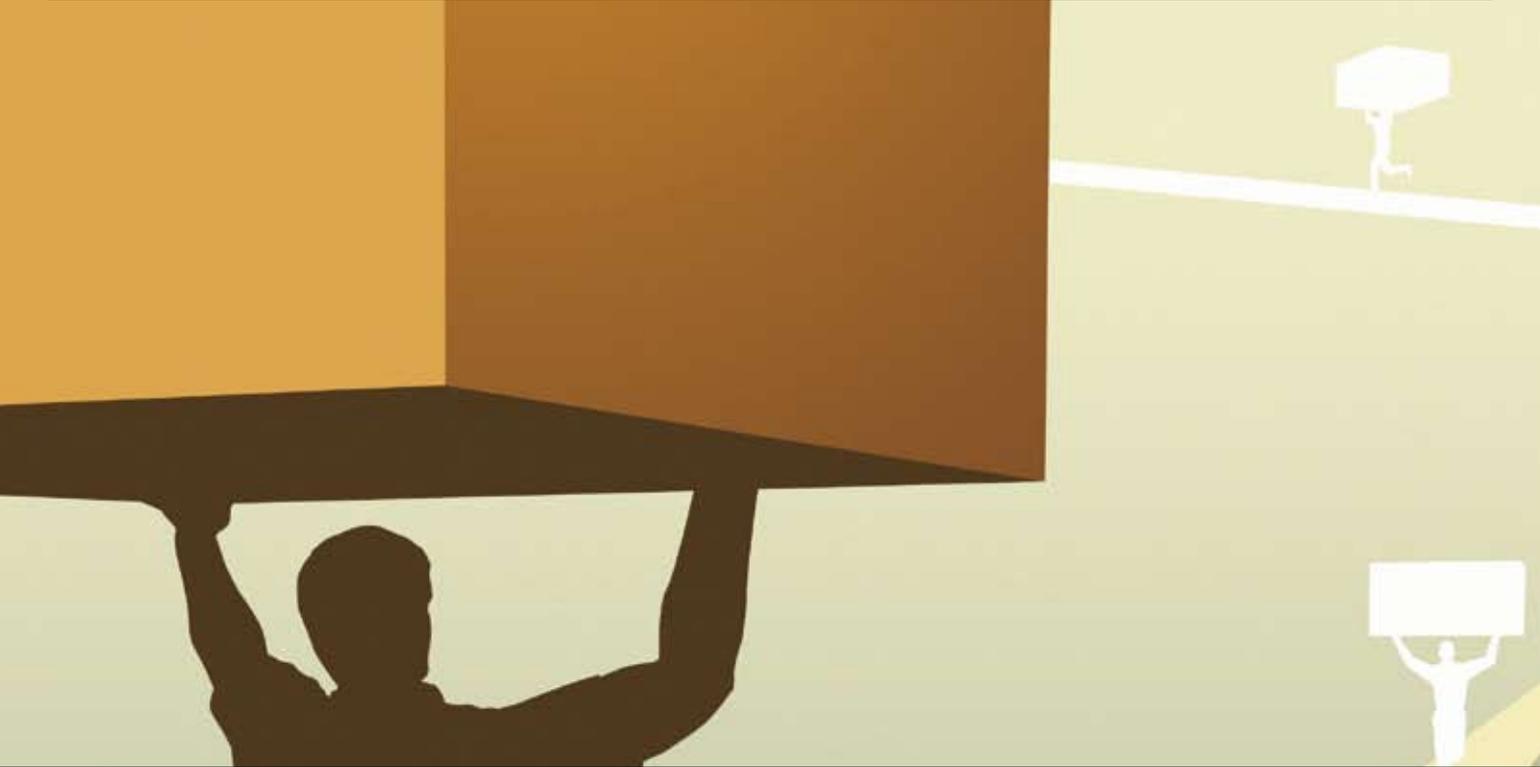


business integration

JOURNAL



The Next Wave: SOA Reference Models Are Appearing . . . Now What? BY DAVID S. LINTHICUM



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THE NEXT WAVE

SOA Reference Models Are Appearing . . . Now What?

this as we implement these architectures. It's a very different way of thinking about how systems work and play together, not only sharing simple information, but true behavior (or services) as well. The services, and how they bind to structured information flows, are the key.

As we begin to understand more about SOAs, several organizations are creating reference models so we can better understand the requirements of SOA or at least their view of the requirement. Indeed, almost everyone who builds SOAs today as a profession has some sort of reference model they work from, whether formal or informal. I'm even finding that my "12 Steps Toward SOA" column series that began last August (www.bijonline.com/Article.asp?ArticleID=993) is becoming a formal framework for many organizations.

However, these reference models are no substitute for understanding, but are nice checklists for functionality and provide a framework for interoperability structures and dependencies. I find that many reference models are patterned after traditional network models of days gone by, where you understand the concept from the most primitive (lowest level) to the most sophisticated (highest level). This month, let's look at emerging SOA reference models.

SOA-RM from OASIS: International standards consortium, OASIS, announced the formation of a new committee to develop a reference model that will guide and foster the creation of SOAs. The OASIS SOA Reference Model (SOA-RM) Technical Committee will promote the continued development of multiple SOAs and related standards by acting as a guide for those who create SOAs, as well as analysis of their functional components. Keep in mind this is a work in progress; the committee is still forming the framework. Indeed, you can join in; it's an open committee.

Specifically, the OASIS SOA reference model will offer an understanding of the core elements within an SOA and the relationships among those elements. The reference model itself won't be directly tied to any standards, technologies, or other concrete implementation details. Rather, it will be an abstract, designed for use as a tool by software and enterprise architects developing specific SOAs.

There are 45 members in the committee, but some of the

The notion of SOA is much more abstract and far-reaching than Web Services, as we've discussed here before. Nor are SOA solutions made up of single vendor solutions, such as Enterprise Service Buses (ESBs). We're discovering

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larger players, including Microsoft, have elected to sit on the sidelines. As this picks up steam, you can count on other players to join in.

I like this reference model (at least what I've seen of the work in progress) for a few reasons. First, it seems to be truly vendor- and technology-neutral. You don't see products, and at the core of the framework, it's conceptual. Second, they aren't locking down on a technology or standard, even Web Services. As I've stated in the past, SOA is a notion that transcends Web Services. Finally, the members seem to be motivated by a need to provide an understanding of this notion, not just another standard that gets popular or dies. That's the most important factor that would drive me to look at this model.

Your RM

Those of us building SOAs may find existing reference models are fine, and it's just a matter of selecting the right one. However, you may find that general purpose reference models aren't a good fit for your domain and requirements. Thus, you may want to define your own, perhaps from an existing model, perhaps from scratch. Here are a few things you should consider when creating or selecting a reference model:

1. Does this reference model reflect solution sets that are applicable in my problem domain based on my known requirements?
2. Does the reference model limit my understanding of SOA? Is it too narrow in scope?
3. Is the reference model proven in multiple problem domains?
4. Are the reference model vendor, technology, and standards neutral so I can have flexibility when moving forward?
5. Are there defined artifacts to leverage in the process, such as service descriptions and test planning?

Frameworks aren't magic, they are mere structures and lists that aid in understanding an SOA, its components, and how it links to your problem domain. First, you need to understand your own needs. Simply leveraging a framework won't guarantee success. However, the ability to leverage ideas and concepts that are already defined for you is much easier than defining them yourself for the first time. **bij**

About the Author

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