



++++thinking networks+++++

We hang together or we hang alone

Joe Skorupa is research vice president at Gartner Inc. and an expert on the increasingly vital interplay of networks and applications in the blossoming world of SOA. He spoke with *F5 World's* editorial director, Bill Laberis.

Q What's going on between networks and applications today?

A When processes and business-critical applications moved to an Ethernet/IP network, the concept of application awareness emerged, meaning that the network could recognize whether the traffic was Oracle traffic or file transfer or e-mail, and it could apply some simple quality of service. But it didn't understand the content or the context of the traffic. Today, all business-critical processes are network-based, and they are moving to an architecture where they are Web-enabled. So we are seeing the emergence of application-fluent networking, where the network needs to understand the underlying protocols and messages and what's going on with a particular transaction to understand how to best treat it.

Q Does the emergence of SOA add new network challenges?

A With SOA and its highly distributed application architecture, you open up the possibility of lots of messages flying back and forth, not only inside an organization but between business partners—and even between a business and an external service provider. It becomes a far more complicated environment, and if the network is not very closely integrated in the development and delivery of that application, it won't work well in terms of performance, availability, and security.

Q What's the business value of the network and applications teams working together more closely?

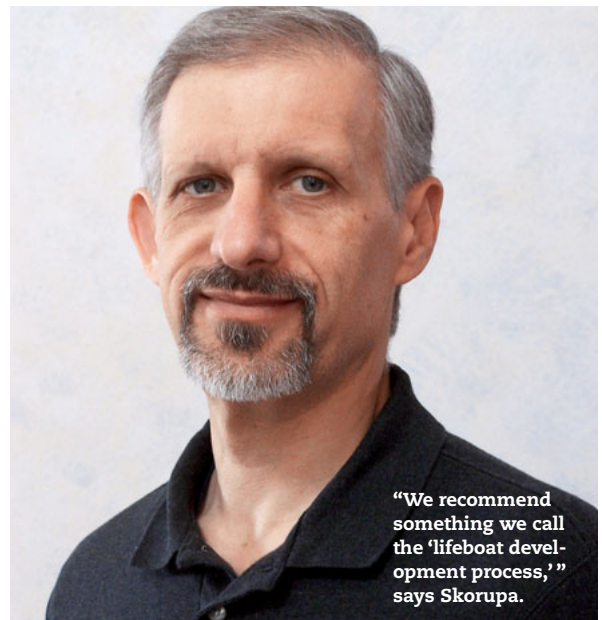
A Simply put: If they don't, the application won't work. And by *won't work*, I mean the business may need a response time of five seconds per transaction for a new application, but you're delivering five *minutes* per transaction. Yes, the application functions, but you're going out of business because you can't serve your customers. You have to be working together to get the performance, availability, and cost structure that you need to run the business.

Q Are companies typically aware of the problem and its harmful potential?

A No. We have lots of conversations with our networking clients where the application has been deployed, it doesn't work, and they're told by the developers, "It's your problem, go fix it. We wrote the application, it worked just fine in the lab; it was tested locally with 200 people at headquarters and it worked fine. We turned it on globally and now it doesn't work anymore."

Q What's a company to do?

A We recommend something we call "the lifeboat development process." Get people in charge of all key functions, including application architecture, application development, server architecture, operations, network architecture, storage, and security, and put them all together in one room. Include the application's business stakeholder. Operate on these instructions: "You are all in a lifeboat



"We recommend something we call the 'lifeboat development process,'" says Skorupa.

lost at sea. There will be no individual survivors, and that means there will be no individual heroes. You will either all reach shore successfully, or you will all die a terrible death."

Q What happens at these meetings?

A Understanding and improved interactions. For example, most application guys think that if you increase the bandwidth, latency goes down. However, latency is determined by speed of light, and that means it takes nearly a quarter-second to go around the globe, no matter what the bandwidth is. Understanding things like this, you can begin to have the appropriate interactions, and the tradeoffs get made.

Q What's the end result of this approach?

A It's an opportunity to use the network as a significant strategic advantage to lower costs, reduce development cycle times, improve the effectiveness of applications, and get to market sooner with better customer service. We're really talking about the benefits of embedding intelligence in the network, building an application-fluent network, and making the company more competitive. ✨