

Return of the Dinosaurs: *The IBM System/390 and the Age of Network Computing*

You remember mainframes, those enormous, lumbering dinosaurs from an earlier eon of computing. They died out—Didn't they?—when smaller, fast-moving life-forms called client/server systems moved in and took over the jungle. Or maybe it was the catastrophic arrival of the Internet that spelled their final doom.

But look again. From IBM's point of view, the mainframe, in particular the System/390, is not only alive and well, it's poised for a major comeback.

A position paper on IBM's web site states the case this way: "Client/Server systems don't yet scale up to connect large organizations well and haven't proved to be robust enough for mission-critical applications. In addition, the cost of maintaining client/server systems is high, much higher than anyone expects." As a result, a new model of Network Computing is emerging, one that combines the best features of the old mainframe model with the distributed intelligence of client/server systems and the open standards of the Internet. For large enterprises, the S/390 is a logical keystone in this new network architecture. It offers the high capacity needed to store and retrieve vast amounts of data and make it available over networks, as well as proven security, reliability and centralized operation.

Dennis Wallace, System/390 Product Manager for [Dickens Data Systems](#), echoes this analysis: "The advantage of the mainframe is the ability to manage the entire enterprise from one system, one location, one entity. The new mainframes offer high availability, internal DASD, and the openness for today's enterprise needs."

IBM is positioning the S/390 product line to fill a number of niches in this new age of Network Computing: A network hub for data storage and delivery. A secure web server for Internet commerce. An application server for data mining and high-end business intelligence applications.

What's also key is that all of these roles can potentially work together. Internet commerce will allow customers to define and "pull" the products they want through the supply chain. Secure servers will process the transactions and capture critical business data, which can then be made accessible to intelligent analysis tools for searching, summarizing and detecting hidden patterns--making possible smarter business decisions.

In September of 1996, IBM announced major enhancements to the System/390 family. These included new CMOS servers, operating system upgrades and a platform for Internet commerce called Internet Connection Secure Server for OS/390™. The new version of OS/390 also provides extended services for compatibility with UNIX applications, and IBM simultaneously announced a joint project with Bristol Technology to allow future porting of Windows NT applications. All of the new OS software is Year 2000-compliant.

So when you think of the System/390 , don't think about those old, clumsy dinosaurs you learned about in school. Think instead about the "new dinosaurs" postulated in recent years by a younger generation of scientists and popularized by the film Jurassic Park. These dinosaurs were smart, nimble and well-adapted to the environment. And these dinosaurs, according to the new theory, never died out: They evolved into birds.

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