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# z/Bottom Line

## From the Crystal Ball: The Mainframe in 2004

With 2003 now in the books and 2004 beginning with encouraging signs of economic optimism, what does the New Year hold for the mainframe? For this I had to look no further than the wise prognostications of the soothsaying master himself: Dr. Linus Streetmeyer III, Wizard Emeritus of the Global United Mainframe Society (GUMS) based in Bubblegum, Switzerland.

**ELV:** Dr. Streetmeyer, it's wonderful to visit with you again. Underneath that Einstein-ish mustache, why the big smile on your face?

**LSIII:** Eric, this is going to be a wonderful year. You know, the Chinese celebrated their New Year on January 22 this year, and according to them, it's the Year of the Monkey. However, I beg to differ—I think this is the Year of the Mainframe!

**ELV:** Year of the Mainframe? How so?

**LSIII:** After 40 years of the mainframe proving its mettle to allow computing to go forth and multiply, there are many exciting trends that will transform mainframe computing as we know it.

**ELV:** OK, I see you've actually brought your "Crystal Ball" with you. I must say, it actually looks like an old Windows Server with a globe for a monitor, but what does it tell you?

**LSIII:** Hey, these client/server systems are good for something! Here's what I see happening in 2004 for the mainframe, saving the best for last:

- **Linux computing on zSeries:** This year will be the standard test for Linux success on the mainframe. As we closed 2003, there were reports of at least 300 mainframe customers with at least one Linux application on the mainframe in production. Another 1,000 customers have it installed and are evaluating the possibilities for server consolidation and "infrastructure" applications (i.e., Web, e-mail, and domain-name servers). Shops are sorting out what works and what doesn't, and vendors are filling in the systems management gaps. I predict that by the end of 2004, the number of production deployments will at least have doubled, with a number of large installations as benchmarks.
- **Natural user interfaces:** For many years people have talked of GUIs (goo-ees), as the savior of the way we interact with information. But I like to talk of a different change, natural user interfaces, or NUIs (new-ees). With the ubiquity of IT being made available through point-and-click, iconic, hyperlink interfaces, the human now sees this as the "natural" way of working with information, a la the browser-based interface. These interfaces are everywhere: nearly all operating systems, handheld devices, cell phones, even public kiosks. The mainframe continues to offer the antiquity of the "green-screen" 3270. Every application, external or internal, including the systems administration interfaces, must transform into a NUI that everyone can use. I expect a UA3I (Users Against 3270 Interfaces) chapter to form in cities throughout the world. Friends just don't teach friends about 3270 screens.



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• **XML and Web services integration:**

The arcane labyrinth of data has made the CIO's job of integration nearly impossible. The platform-database-language-vendor-independent XML technology delivers the first, true "black-box" data interface. With exploitation using Web services standards, including Universal Description, Discovery, and Integration (UDDI), Web Services Description Language (WSDL), and Simple Object Access Protocol (SOAP), all the major application development environments, including .NET, Java 2 Enterprise Edition (J2EE), and derivatives are delivering support today. In 2004, you will see CIOs halt costly database migrations and rapidly move to this technology, melding the mainframe's data and applications into a directory style of accessibility.

- **Grid computing with mainframes:** Regardless of Grid purists who deny the mainframe's role in Grid computing, z/VM with zSeries computers are built to deliver this exciting concept. Grid computing offers capacity on demand (CoD) by leveraging underutilized resources in an enterprise, making them available when needed. This concept of "virtualization" of computing resources means the sum of the parts can be greater than the whole. Internal Linux servers can be interconnected through the zSeries' near zero-latency Hipersockets communication pipe, meaning these servers can communicate at speeds that no other platform can approach. And because all the communication is internal, security is improved with no network probe points to threaten the network. I believe we'll see some impressive stories of the mainframe's role in furthering the Grid cause in 2004.

- **VSE/ESA MIPs growth once again:** Many naysayers have been proved wrong about the resiliency of the continued success of the VSE/ESA customer base. With robust capabilities, including XML integration, e-business connectors, free software offerings for NUI system interfaces, and even Hipersockets support, VSE/ESA will show strong MIPs growth for 2004.

**ELV:** Dr. Streetmeyer, that's quite an impressive list, but you said you saved the best for last?

**LSIII:** That's true—and here it is. The most exciting forecast I see in the Crystal Ball: We'll be talking again about the bright future of the mainframe this time next year!

And that's z/Bottom Line. **Z**

### About the Author

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