

Linux on zSeries Mainframe May Help Grid Builders in Certain Cases

Carl Claunch, Mike Chuba

IBM wants builders of grid systems to include Linux on zSeries mainframes. A compiled version of the open-source Globus Toolkit and partner support for some tools aid IBM's effort but don't provide complete support for grids.

NEWS ANALYSIS

Event

On 31 March 2003, IBM announced that three partners will support Linux on zSeries hardware:

- SuSE Linux announced that the open-source Globus Toolkit 2.2 is now available for Linux on the IBM eServer zSeries as part of SuSE's Linux Enterprise Server 8.
- Platform Computing announced that three of its products for distributed computing and job scheduling — Platform LSF, Platform Job Scheduler and Platform MultiCluster — would support zSeries Linux.
- Data Synapse announced support for zSeries Linux in its distributed computing and job schedule product, LiveCluster 3G.

Analysis

This announcement by IBM and its partners highlights some of the zSeries mainframe's advantages where distributed computing applications need high levels of availability and dynamic configurability. The products from Data Synapse and Platform Computing enable enterprises to include a zSeries Linux system in a distributed computing environment where jobs can be scheduled on the mainframe as well as on other platforms, mainly Unix-, Linux- and Windows-based. Such an environment does not meet Gartner's definition of a grid because it does not involve a single common job; instead, it deals with many independent and stand-alone activities.

Builders of grid systems can use parts of the Globus Toolkit to construct the coupled computing environment. Easily compiled for mainstream platforms, including those based on Linux, the Globus Toolkit v. 2.2 is also included in a version pre-compiled for convenience in SuSE Enterprise Server 8. Enterprises can use this Linux distribution to install the toolkit on Intel, RISC and mainframe hardware without taking the time to compile it. Those interested in the newer Globus Toolkit v.3, still in alpha status, would have to download it directly from the Globus organization and compile it for zSeries Linux.

Gartner does not foresee many enterprises purchasing new zSeries mainframes to serve as the basis for a grid computing, nor do we see many mainframe environments with significant idle cycles that might support grid applications. However, some unique situations may arise where zSeries mainframe may have some direct benefit. In some situations, enterprises building grids may value zSeries mainframe attributes such as high availability and dynamic reconfigurability. Overall, Gartner views this announcement as adding yet one more justification for enterprises to retain or upgrade zSeries installations.

Analytical Sources: Carl Claunch and Mike Chuba, Gartner Research

Recommended Reading and Related Research

- "Grid Computing: Dispelling the Hype" — A clear definition of what a grid is will help you separate marketing hype from genuine grid implementations. **By Carl Claunch**
- "A Five-Layer Model for Grid Implementations" — Enterprises can build grids by selecting and integrating components from the five layers of the Gartner grid model. **By Carl Claunch**

(You may need to sign in or be a Gartner client to access all of this content.)

REGIONAL HEADQUARTERS

Corporate Headquarters
56 Top Gallant Road
Stamford, CT 06902-7700
U.S.A.
+1 203 964 0096

European Headquarters
Tamesis
The Glanty
Egham
Surrey, TW20 9AW
UNITED KINGDOM
+44 1784 431611

Asia/Pacific Headquarters
Level 7, 40 Miller Street
North Sydney
New South Wales 2060
AUSTRALIA
+61 2 9459 4600

Latin America Headquarters
Av. das Nações Unidas 12.551
9 andar—WTC
04578-903 São Paulo SP
BRAZIL
+55 11 3443 1509