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Taking Grid to Market: IBM Announces Ten Commercial Grid Offerings

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IBM has made a trio of announcements concerning its grid computing initiatives, including the introduction of nine grid computing offerings targeting the aerospace, automotive, financial markets, government, and life science industries. These offerings include:

- **Financial Markets:** An Analytics Acceleration Grid to accelerate trading operations and increase computational throughput, and an IT Optimization Grid to better utilize computational and storage resources.
- **Life Sciences:** An Analytics Acceleration Grid to increase the number of calculations processed in drug discovery research, and an Information Accessibility Grid to provide unified data access across existing computational resources and assets.
- **Automotive and Aerospace:** An Engineering Design Grid to help manage costs by optimizing use of existing infrastructure, and a Design Collaboration Grid to enable data sharing and distributed work flow across partners.
- **Governments:** An Information Access Grid to help maximize resources used in data mining applications, and to simplify data sources and access through a unified data and file interface.

IBM is also conducting Grid Information Workshops to help companies determine how grid solutions can affect their organizations.

Additionally, IBM announced that it had completed a grid R&D project with Charles Schwab that the company claims reduced the processing time on a financial application from more than four minutes to fifteen seconds. IBM also announced that it has established master relationships with grid middleware vendors Platform Computing and DataSynapse, as well as working relationships with Avaki, Entropia, and United Devices.

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Grid computing may qualify as one of the most highly trumpeted and least understood technologies around. In theory, grid solutions can be used to pool all of a company's heterogeneous IT resources, from the desktop to the data center, allowing them to be viewed, managed, and allocated as a single computing entity. Not only can this help improve overall IT efficiency and cost effectiveness, but it can also provide enterprises a means of performing complex computational tasks by distributing them across existing IT infrastructures rather than on costly specialized hardware.

Understandably, this notion has lately caused something of a buzz in the industry, with major vendors including IBM, HP, Microsoft, Cisco, Oracle, and Sun queuing up to declare fealty to various grid-related standards efforts such as Globus, Legion, and the Global Grid Forum, and promising to play nice together in order to deliver on grid's utopian promise. Along with major vendor efforts, grid has inspired more than the usual share of tectonic industry rumbles and even been christened the "next Internet" by a few IT soothsayers.

Is there any substance to all this high tech styling? In truth, yes. While most of the buzz surrounding grid is relatively new, computational grids have been around for awhile, both in voluntary models (such as the SETI @Home project) and in solutions designed and deployed by the grid middleware specialists mentioned in IBM's announcement. In fact, the list of enterprises that have deployed grids developed by Platform Computing, United Devices, Entropia, and others include mainline enterprises such as Monsanto, IncyteGenomics, Pacific Life Insurance, Novartis Pharmaceuticals, and Gateway Computer.

So if grid appears to be for real, where does IBM's announcement fit into the greater scheme of things? First, it should be pointed out that that by their nature, grid solutions need to be measured by what is both possible and practical. Sure grids can be built and many have been and are being successfully used across a range of IT-enabled industries. But despite the hype/enthusiasm, grid computing remains for the most part a highly complex practice whose solutions require an enormous amount of customization. Additionally, while major IT vendors have made a good deal of strategic noise about grid, few have delivered differentiated grid solutions. HP, for example, has declared grid to be a major element of the company's still-evolving Utility Data Center solution. Sun has been quite aggressive about the usability of its Grid Engine solution, but the vast majority of its deployments have been comparatively small.

What makes IBM's announcement particularly interesting is the company's unique focus on creating commercial grid solutions to fit specific business/technical challenges. Does this mean that IBM's targeted grid offerings will be a slam-dunk success? Not at all. We see two potential dangers lurking here. First, the practical and financial benefits of grid are difficult to quantify, making it a particularly hard sell during tough economic times. Additionally, since any new market bears a fair share of buyer skepticism, grid's inherent complexity could work against it. This does not mean that making a market for grid will be impossible, just difficult. However, by focusing its initial offerings to a few key grid applications and specific industries, IBM is following a deliberate path to highly directed product and market development that we believe could offer the company significant future success.