

2010 Survey: IBM Sweeps x86 Performance

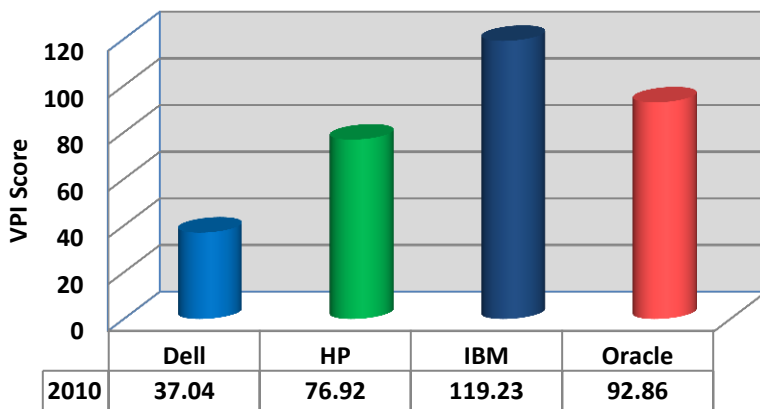
A major part of the **2010 GCG x86 Server Vendor Preference** survey is the Vendor Face-Off section. This is where we ask real-world data center personnel to rate the major x86 server vendors (Dell, HP, IBM, and Oracle) on a wide variety of technical, vendor support, and customer satisfaction criteria.

Vendors are rated in terms of their VPI score – a simple normalization technique we use to ensure that results aren't skewed. (For more details on the survey and methodology, [click here](#).) In simple terms, a VPI score of 100 is 'par'. Scores above 100 are good, and scores less than 100 – well, they're not so good.

It's also important to point out that there isn't an overall 'winner' or 'loser' in these surveys. We ask a lot of questions and cover a wide range of topics, some of which are more important to particular customers than to others. For example, some customers would value manageability more highly than performance, while others want high availability most of all. Are all x86 servers alike on these characteristics? According to the people who purchase, manage, and rely on them day-to-day, the answer is a resounding "No!"

In this set of survey results, we look at how our survey respondents rate and rank the leading vendors in terms of system performance. This first question asks customers which vendors' systems offer the highest 'Raw Performance,' which is defined in the survey as speed on benchmarks and normal workloads.

Raw Performance

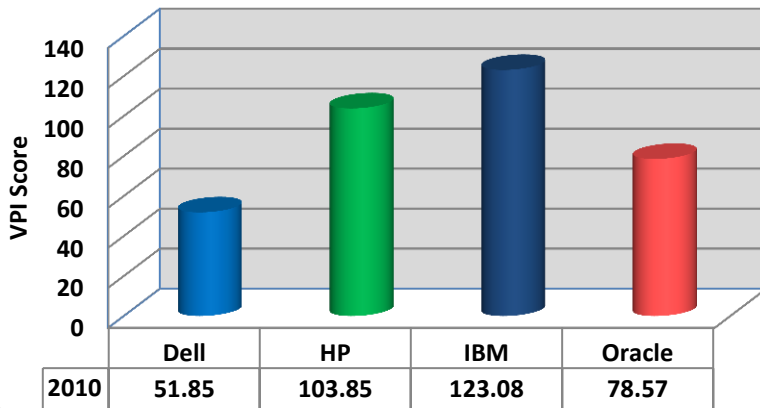


IBM notches a solid victory on this question, topping all competitors by a wide margin. This is a category that IBM has won for the past three years – and last year, the margin was even wider. IBM refreshed their server line in 2010 with performance in mind. The new systems include speedy Nehalem chips and new features, like MAX5 memory drawers and SSDs. Customers seem to have taken note.

HP's score on this category took a significant dip this year, while Oracle stayed stable and Dell managed to gain some ground compared to 2009.

This next question asks about performance from a different perspective. Here, we're asking which system performs best in the customers' data centers, on their workloads. Keep in mind that 95% of our respondents have systems from at least two vendors, and more than 70% have three or more server brands in their infrastructure.

Observed Performance

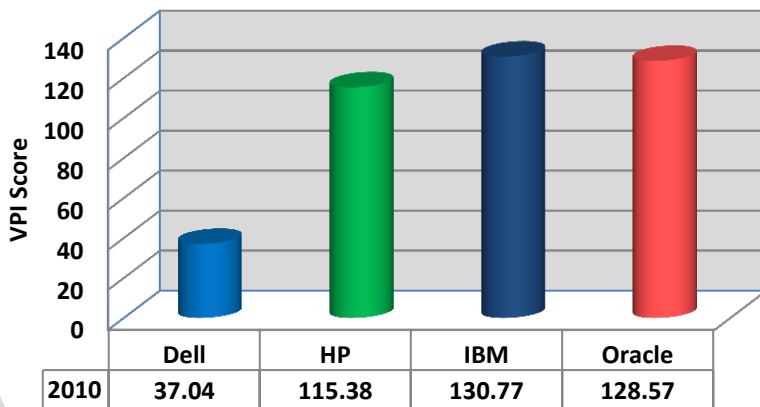


IBM takes home the gold in the Observed Performance category, easily topping their major competitors. This is a category where IBM and HP have been neck-and-neck in past years, but in 2010, IBM pulled away.

In 2009, IBM and HP tied with VPI scores of 100, while Oracle (then Sun) and Dell scored considerably lower. HP's score improved marginally this year, while both Oracle and Dell dropped when compared to their 2009 results.

Rounding out the performance section is a question on system scalability, asking which system customers are able to provide the best performance when moving from small to large configurations.

System Scalability



In scalability, it's a much closer game, although IBM has won this category in three of the past four years. This year, IBM beats out Oracle by a nose, while HP posts a good score but still comes up short.

IBM has traditionally offered the largest single-system images in the x86 server market, while the other vendors haven't offered systems with greater than 8 sockets. However, scalability – as judged by customers – isn't just socket count; it's also how well the system performs as configurations get larger.

According to our survey respondents, IBM once again rules the roost when it comes to system performance. Customers see IBM's System x servers as offering the highest performance on synthetic workloads (like benchmarks) and also on their own workloads in their data centers.

IBM's strategy of designing their own chipset and, essentially, extending the x86 system architecture seems to serve them well when it comes to customer perceptions surrounding performance. HP has been closer to IBM's results in past years, but this year, IBM's introduction of new systems seems to have had a big impact on our survey results. Dell doesn't sell performance as hard as either IBM or HP, and that certainly shows up in our survey results. Oracle, however, does sell performance as a key value of their systems – but with mixed results.

Our next set of results looks at another factor that is near and dear to x86 users – systems management and manageability. Which vendor has the best system management suite? Does any vendor rise above the pack when it comes to making servers that are inherently easier to manage? Our next installment of results is [here](#).

If you're interested in finding out more about this survey (demographics, expanded results, detailed GCG analysis), click [here](#).

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