

Best Green IT Initiative

JPMorgan

Datacenters represent 20 percent of JPMorgan's total energy bill and 80 percent of its carbon footprint, so it was a natural place to begin green investments. By implementing a global internal cloud for risk management, JPMorgan achieved a 50 percent reduction in the compute capacity required for derivatives risk computation. The 14-month project, which cost less than \$1 million, allowed the bank to save \$6 million in 2009 and reduce its carbon footprint by 4,500 tons of carbon dioxide per year.

Prior to the project, JPMorgan performed equity-derivatives risk management regionally on dedicated local resources. The project's goal was to improve compute re-use through the application porting to the Symphony Grid, which is powered by Platform Computing's Symphony platform, in a way that was able to leverage global compute capacity in multiple time zones, delivering greater throughput but without impacting service latencies.

The project was a major operational challenge as it required migrating 23 risk management applications—with some instances using in excess of 1,000 CPUs—without service interruption. By focusing the development work on supporting only the migration effort rather than feature enhancement, all applications were ported within 12 months.

Finding time to migrate the applications onto the new platform proved to be a challenge for the team responsible for the project. Due to the critical nature of these applications most migrations were restricted to weekends when other major work was not planned. This required planning the migrations up to nine months in advance.

As a result, JPMorgan was able to exit two datacenters and consolidate to more cost-effective regional datacenters while decommissioning or converting 10,000 CPU cores to Symphony nodes. —*Michael Shashoua*



JUDGE'S COMMENT: The project's return on investment is impressive and will surely appeal to firms with limited IT resources.



Alistair Dunlop

JPMORGAN REACTION

"We are thrilled our Pyramid Symphony Grid product was named the best green IT initiative in the 2010 AFTAs. This recognition reiterates JPMorgan's commitment to developing tools and solutions for our clients that will positively impact the environment."

—**Alistair Dunlop, executive director, JPMorgan**

"Banks and sales teams frequently tout the total calculation resources at their disposition, but what really matters is how they are using these resources. The Pyramid compute efficiency program has shown that JPMorgan could massively reduce the number of cores used while simultaneously providing improved service levels."

—**Richard Meyer, executive director and chief business technologist, JPMorgan**