

ANNEX BULLETIN

Annex Bulletin 2007-32

August 17, 2007

An OPEN CLIENT edition

INDUSTRY TRENDS

Updated 8/17/07, 11:30AM PDT

Bank of Montreal zAAP-ing Its Way to Prosperity

zAAP-ed by IBM!

Mainframe Demand Soars As Specialty Engines Proliferate on Increased Java Workloads

Big Blue Enhances Security for Its Already "Fortress-like" z/OS

SCOTTSDALE, Aug 17 - The last time this writer was at this large Canadian bank's data center in northeast Toronto, the site was full of Amdahl mainframes. A quarter of a century later, it's an entirely different story. Amdahl and other PCMs (plug compatible manufacturers) have long bit the dust. And IBM mainframes are experiencing a real life renaissance in their Second Life, while zAAP-ing Big Blue's largest customers into prosperity.

Recent...

HEADLINES

[zAAP-ed by IBM! \(Analysis: Mainframe demand benefiting from specialty engines, Java\)](#)

[Profitable Growth Continues - Analysis of HP's 3Q business results \[Annex clients click here\]](#)

[Home](#)

Also check out...

[Index 1993-2007](#)

[Sun's Solaris to Shine on IBM's Polaris \(IBM to offer Suns OS on its hardware\)](#)

[The Greening of Big Blue, Part 2 \(IBM to save \\$250M in mainframe consolidation\)](#)

[IBM Beats the Street \(Analysis of IBM 2Q07 business results\)](#)

[Adios, Microsoft Vista! \(How I Failed Twice in Trying to Scale Mt. Vista\)](#)

[Burning the Track - Firing on all cylinders, Accenture raises forecast \[Annex clients click here\]](#)

[New Broom Sweeps Clean - Analysis of CSC's 4Q07 business results \[Annex clients click here\]](#)

[The Last of the \(PC\) Mohicans - Analysis of Dell's strategy changes; Linux, Wal-Mart](#)

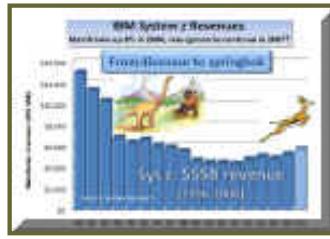
[BRIC by BRIC... to Top Line Growth - Echoes from IBM meeting for fin analysts \[Annex](#)

zAAP-ing? I know, who needs another industry buzzword, right? Well, this one is here to stay, at least within the mainframe crowd. zAAP stands for "zSeries Application Assist Processor," a mainframe specialty engine introduced by IBM in 2004. zAAP's are dedicated to running Java workloads under z/OS, accelerating performance. And these resource-hungry workloads are gobbling up gobs of Java MIPS like a Cookie Monster in a bakery (or Starbucks? - see the cartoon).

But the zAAP's best feature is their price.

"zAAP's are much cheaper to buy and run than the general purpose processors," said Jonathan Gladstone, a Bank of Montreal mainframe capacity planning specialist, in an Aug 15 conference with analysts.

They cost only about 1/8th of the general purpose processor's price, and require no additional software costs, he added. As a result, Bank of Montreal figures it is saving about \$2.8 million per year.



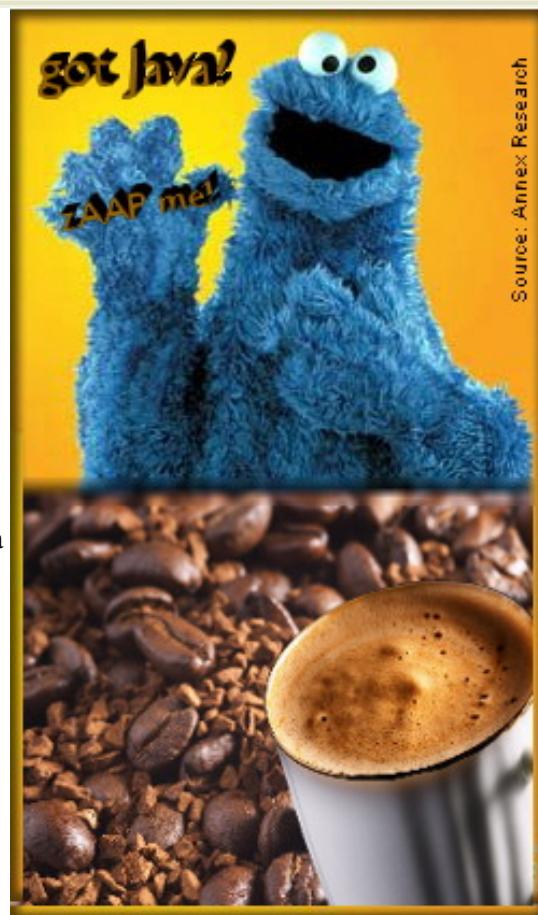
And IBM is loving it, too... all the way to the bank. For, the fourth largest Canadian bank is one of many mainframe customers that are flocking back to the product line that was once compared to dinosaurs. The specialty engine MIPS on System z were up 130% in the second quarter, according to Florence Hudson, the System z head of marketing. Mainframe revenues were up for the fifth consecutive quarter, while the System z overall MIPS shipments were up 45%, the eighth consecutive quarter of growth (see "[IBM Beats the Street](#)," July 18).

So what zAAP really stands for is a Big Blue marketing coup. For, these "specialty engines" are a form of deep discounting that allowed IBM to drop the price for the largest and best of its customers with a strong appetite for 'CPU-hungry' Java workloads, while maintaining the high water mark pricing for its general purpose mainframes.

"zAAP's are so cheap that it is cost-effective to run them even at lower utilization rates," said Gladstone.

Add to it the virtualization trend, and the result was a huge increase in workloads and demand for mainframes. So our 2005 "[Poughkeepsie Spring](#)" seems to be yielding abundant harvests for Big Blue in 2007.

Which makes mainframes sort of like pineapples... on a two-year gestation cycle. :-) That's why Hawaiian farmers plant multiple fields each year so they have continuous pineapple harvests (kind of like what "virtualization" does to server farms). What IBM has now figured out is



[clients click here\]](#)

[Per Ardua Ad Astra - Analysis of HP's 2Q07 business results](#)
[\[Annex clients click here\]](#)

[The Greening of Big Blue - IBM to spend \\$1 billion on "going green"](#)

[Are We in "Buyback Bubble?" - Analysis of corporate stock buyback trends](#)

[IBM: Lowering Center of Gravity - Highlights of Partnerworld 2007, with Detailed Reports for clients](#)

[Growth Accelerating - Analysis of Capgemini's 1Q07 business results](#)
[\[Annex clients click here\]](#)

[To Buy \(back shares\) or Not to Buy? - Analysis of stock buybacks in corporate America](#)

[No Surprises in Good Opening Quarter - Analysis of IBM 1Q business results](#)
[\[Annex clients click here\]](#)

[IBM Stock Still Grossly Undervalued \(A preview of IBM first quarter business results\)](#)

[Accenture Beats Forecasts, Again \(Analysis of Accenture's 2QFY07 results\)](#)

[HPS, Capgemini Tie for "Gold" Results of Octathlon 2007](#)
[\[Annex clients click here\]](#)

[The Value of pi \(\$\pi\$ \) - Analysis of IBM System p and System i market and product strategies](#)

[IBM Profit to Grow Faster Than Revenue - Update to 5-yr IBM forecast](#)
[\[Annex clients click here\]](#)



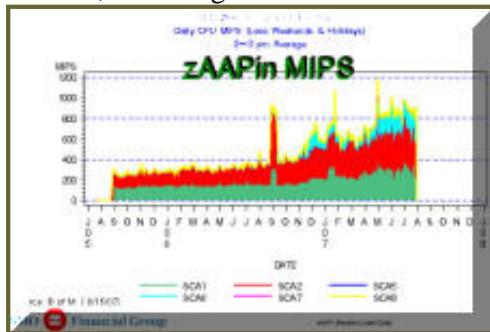
how to apply an agricultural practice to high tech and grow z pineapples in Poughkeepsie.



Add to it the general "greening" of Big Blue (see "[The Greening of Big Blue](#)," and [Part 2](#)"), and you can see while the cash registers at Poughkeepsie are ringing continuously as if it were Christmas all the time.

"The System z (mainframe) is the most efficient when it comes to power consumption and cooling," said Steve Garner, Bank of Montreal's manager of mainframe support services. He and Gladstone also lauded the System z security. "We've never had any breaches into our mainframe environment," Garner said. "Whereas you see it consistently in the Microsoft environment," he added.

And the bank has much to protect. It has over \$300 billion in assets, including two U.S. banks (Harris Bank and Harris Nesbitt), 1,200 branches, and 2,500 ATMs supported by three data centers spread within a 50 mile-radius around Toronto. They house eight mainframe footprints with thousands of MIPS and many other servers. And their workload has been steadily growing, as you can see from the chart on the right. So the bank's IT executives said that they had carefully investigated alternatives, such as Unix servers, before deciding to get zAAP-ed by IBM.



Now they are glad they did it. For, they would not have been able otherwise to justify the cost of running the Java workloads on the mainframe platform, Gladstone said. Better security and stability of the System z environment is an added bonus.

And the mainframe "Fort Knox"-type security just got better. The company enhanced today its "already fortress-like security for (z/OS) online commerce as well as the next generation of highly secure business transactions," IBM said in an Aug 17 release. Big Blue also announced new mainframe software that automates security administration and audit processes.

"The IBM mainframe has security built into nearly every level of the computer -- from the processor level, to the operating system to the application level," said Jim Porell, the System z Chief Architect. "Our security leadership is one of the many reasons why the world's top banks rely on the IBM mainframe for their financial transactions."

Guess there'd be no argument with that claim from Bank of Montreal.

Happy bargain hunting!

Bob Djurdjevic

[Click here for PDF \(print\) version](#)

For additional Annex Research reports, check out... [Annex Bulletin Index 2007](#) (including all prior years' indexes)

[The \(T\)ides of March Sink Markets Again](#) - Analysis of global economic & investment trends

[IGS: Growth Slows, Profit Surges](#) - Analysis of IGS 2006 business results [[Annex clients click here](#)]

[HP: Toward New Highs?](#)
(*Excerpts from analysis of HP's 1Q07 business results*) [[Annex clients click here](#)]

[Capgemini Caps Great Year, Saves Best for Last](#) (*Analysis of Capgemini's fourth quarter business results*)

[EDS: On Sunny Side of Street](#)
(*Analysis of EDS' fourth quarter business results*)

[CSC: Where Less Seems More](#)
(*Analysis of CSC's third quarter fiscal 2007 business results*)

[Fujitsu: Sales Up, Profit Down](#)
(*Analysis of Fujitsu's third quarter fiscal 2007 business results*)

[IBM Shatters Records](#) (*Analysis of IBM's fourth quarter business results*)

[IBM Stock Passes Century Mark](#) (*Analysis of Big Blue's Stock Performance*)

[Happy Days Are Here Again](#)
(*Analysis of Top 20 IT leaders' latest stock market and business performances*)

["Excellenture" Excels Again](#)
(*Analysis of Accenture's first quarter fiscal 2007 business results*) [[Annex clients click here](#)]

[Hedging the Bets](#) (*Analysis of latest institutional shareholdings of leading IT companies: IBM, HP,*

Or just click on [SEARCH](#) and use "company or topic name" keywords.

Volume XXIII, Annex Bulletin 2007-32
August 17, 2007

Bob Djurdjevic, Editor
(c) Copyright 2007 by Annex Research, Inc. All rights reserved.
e-mail: annex@djurdjevic.com

8183 E Mountain Spring Rd, Scottsdale, Arizona 85255
Tel/Fax: +1-602-532-7789

The copyright-protected information contained in the ANNEX BULLETINS is part of the Comprehensive Market Service (CMS). It is intended for the exclusive use by those who have contracted for the entire CMS service.

[Home](#) | [Headlines](#) | [Annex Bulletins](#) | [Index 1993-2007](#) | [Special Reports](#) | [About Founder](#) | [Search](#) | [Feedback](#) | [Clips](#)
[Activism](#) | [Client quotes](#) | [Speeches](#) | [Columns](#) | [Subscribe](#)

[Accenture, EDS, CSC, BearingPoint, ACS, Perot \)](#)
[Annex clients click here]

[Globalization Accelerates](#)
(Analysis of United Nation's annual survey of global investments)

[IBM: A \\$125-Stock?](#) (An update to "From Small Acorns Mighty Oaks Grow")

[Capgemini: Longest Sustained Stock Price Rise](#) (An update to "By Leaps and Bounds")

[HP: New King of the Hill](#)
(Analysis of HP's fourth quarter business results)

[IBM: From Little Acorns Mighty Oaks Grow](#) (Analysis of IBM's "State of the Union")

[Capgemini: By Leaps and Bounds](#) (Analysis of Capgemini's preliminary third quarter business results)

[Fujitsu: Good Performance Gets Better, More Global](#) (Analysis of Fujitsu's first half FY2007 business results)

[IBM: A Slam Dunk Quarter](#)
(Analysis of IBM third quarter business results)

[Accenture's Emphatic Year-end Accents](#) (Analysis of Accenture's fourth quarter results) [Annex clients click here]

[IBM: Services in a Box](#)
(Analysis of IBM Global Services' Ground-shifting Announcements)

[Strong Comeback by IT Stocks in Third Quarter](#) (Analysis of top 20 IT companies' market and business trends)

[Stock Buybacks: A Fading Fad](#)

(Dell, erstwhile "King of Fluff," suspends its stock buybacks)

[Capgemini: Growth Continues](#)
(Revenues, net profit up in double digits, margins also improve)

[HP Firing on All Cylinders](#)
(Stock sets new multi-year record following excellent third fiscal quarter results) [Annex clients click here]

[Power of Manpower](#) (*While others move to India, Russia... AMD invests in New York, hailing "phenomenal" quality of its labor force*)

[Ebb Tide Lowers Most Boats](#)
(Analysis of EDS' and CSC's latest quarterly results)

[IBM Stock Grossly Undervalued?](#) (*Analysis of stock market valuations of IBM and its major competitors) [adds latest Fujitsu, Capgemini results]*

[IBM vs. HP: A Tale of Two Blues](#) (*Both companies are doing well in business, but only HP is favored by Wall Street; Big Blue trying to change that now with its new "India Opus") [Annex clients click here]*

[Go East, Young Man!](#) (*A speech delivered in St. Petersburg, Russia, May 25, 2006; click here for slides*)

[IBM 5-Yr Forecast: Steady As She Goes](#) (*Emphasis on quality continued) [Annex clients click here]*

[Octathlon 2006: Accenture Again Wins "Gold!"](#) (*HP gets "Silver," IBM "bronze") [Annex clients click here]*



