August 24, 2009

Gregg Willhoit,
DataDirect Technologies

Re: Authorized Use of IBM Specialty Engines/Processors

Dear Gregg,

I am writing in response to your inquiring regarding the authorized use of IBM Specialty Engines/Processors.

For years, IBM has been taking actions to substantially reduce the Total Cost of Ownership ("TCO") per unit of work performed on the IBM System z infrastructure. These actions include offering Specialty Engines/Processors such as the Integrated Facility for Linux ("IFL"), System z Application Assist Processor ("zAAP"), and System z Integrated Information Processor ("zIIP"). IBM has authorized our customers to use these Specialty Engines/Processors exclusively to process certain types of workloads designated by IBM. For example, customers are authorized to use zAAPs to process certain designated Java workloads and zIIPs to process certain designated workloads that are written and execute in non-task, enclave Service Request Block ("SRB") mode. Because of such limited authorizations, IBM offers lower prices -- including lower prices for the processors themselves and lower incremental software and maintenance charges -- than it does for general purpose capacity ("CP capacity"). Consequently, Specialty Engines/Processors enable customers to process these designated workloads less expensively than they could using CP capacity.

IBM licenses customers to use the IBM Licensed Internal Code ("IBM LIC") that is included in each IBM System z machine, and licenses various IBM programs, only to the extent of the IBM authorizations that customers acquire. In the IBM license for IBM LIC (see, http://www.ibm.com/systems/support/machine_warranties/machine_code.html for the current version), this limitation is an express condition of a customer's right to use IBM LIC. In the case of Specialty Engines/Processors, the authorization only extends to processing the limited workloads designated by IBM. In addition to such license limitations, IBM also implements technological measures in z/OS and the IBM LIC to control and limit the types of workloads processed by these Specialty Engines/Processors. This structure -- which forms the foundation of the Specialty Engine/Processor model -- has always been evident to customers, ISVs, analysts, and others interested in the IBM System z infrastructure. It goes without saying that IBM also reserves the right to implement additional technological measures to validate and/or ensure these Specialty Engines/Processors continue to process within the applicable IBM authorizations and this structure.

You have inquired about the propriety of taking actions to interfere with the normal and intended operation of z/OS and IBM LIC in order to enable Specialty Engines/Processors to process workloads beyond those designated by IBM. Any such activity, by whatever means, would exceed customer's authorized use of the Specialty Engines/Processors and would constitute a breach of applicable agreements with IBM. This would also be a change to the environment, requiring customer to purchase additional authorizations. Customers would then pay applicable charges for software and maintenance associated with such capacity in accordance with their authorizations.
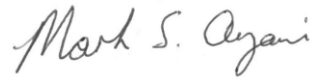
As is widely known, IBM provides a means for customers to activate the computing resources/capabilities that are included in a System z machine as built-in-capacity, but which have not been authorized (e.g., additional processors, memory, and capabilities). IBM sells Miscellaneous Equipment Specification ("MES") upgrades, which include modifications of LIC and provide the necessary authorizations. In particular, IBM sells such MES upgrades for customers who wish to convert Specialty Engines/Processors to CP capacity in order to execute general purpose workloads.

To be clear, if customers use Specialty Processors/Engines to process workloads beyond the IBM authorizations, then customers must pay the hardware, software and maintenance pricing associated with full CP capacity.

Customers seeking to expand their use of existing hardware (e.g., Specialty Engines/Processors) for use with additional workloads should contact their IBM representative regarding additional authorizations and applicable pricing. For

questions or comments about the information in this letter, please contact me via email (anzani@us.ibm.com) or telephone at (00) 1 845 435 1722; or Ray Jones via email (rayjones@us.ibm.com) at telephone at (00) 1 781 676 7630. Thank you.

Sincerely,

Mark S. Anzani
VP and Chief Technology Officer, IBM System z