Intel, GMS International, and DTR Business Systems

Intel technology-based hardware provides respected and reliable foundation for systems supporting freight clearance into and out of the United States.

Challenge	Software developer GMS International needed a name-brand hardware platform to accommodate the extraordinary reliability and availability requirements of its customers and businesses that work directly with the U.S. Customs Service to clear international freight imports and with the U.S. Census Bureau for exports.
Solution	DTR Business Systems met this need by adopting an Intel technology-based approach to the servers it builds for GMS, basing them initially on the Intel® Server Board SE7501HG2 and Intel® Server Chassis SC5200 or Intel® Entry Server Chassis SC5250-E and later on the Intel® Server Board SE7520BD2 and Intel® Server Chassis SC5300.
Benefit	The Intel technology-based hardware provides GMS International and DTR Business Systems a competitive advantage in their respective markets, and GMS customers a respected and reliable platform for running the software on which their highly time-sensitive business depends.

There are businesses that are time-sensitive, and then there is the business of clearing international freight. Customs house brokers, freight forwarders, breakbulk agents, and importers and exporters must coordinate communications and information exchange among themselves and U.S. Customs in a finely choreographed manner, without disruption or delay. If not, the cargo cannot be released, the trucker cannot be dispatched, and somebody's product is going to be late-to-market.

GMS International is a New Jersey-based business serving the international freight movement market since 1975 with turnkey software/hardware systems that streamline the handling of shipping documents and related paperwork, accounting, and data exchange. GMS develops the software internally and relies on a Southern California-based value-added integrator known as DTR Business Systems for the hardware. The engine of that hardware has always been an Intel® processor, but in recent years virtually the entire system has been made of Intel components. This is a move that DTR made largely on the urging of GMS, a move that is now benefiting DTR, GMS, and GMS customers alike.

Business Challenge

As GMS Vice President Scott Rockower explains, those GMS customers, typically the customs house brokers that are charged directly with clearing freight through U.S. Customs, operate in an environment requiring extraordinarily high levels of performance, reliability, and availability. For products to begin their journey beyond the United States or complete their journey into it, an extensive volume of documentation must be filed, reviewed, and approved by the U.S. Customs Service or U.S. Census Bureau. The brokers use the GMS ITEC* System to deliver this documentation to Customs and ensure that it is processed correctly and completely. "And that must happen within a given timeframe, or the entire process comes to a halt," Rockower says. "Moreover, these brokers typically run our system on a single server, so if that server goes down they have 10-20 employees waiting idly while a ship waits to dock or a truckload of perishable goods sits idle at the border."

A related challenge is liability. "If a broker sends erroneous or insufficient data to U.S. Customs, it could lose its license," Rockower explains. And homeland security concerns have raised the bar. "The events of September 11, 2001, and the implementation of increased security governing imports led to ever-greater requirements on the type, format, and volume of data involved. This placed even higher levels of accountability and responsibility on those responsible for clearing freight."

In response, the customs brokers and other businesses that GMS serves began demanding a name-brand hardware platform for their ITEC System. Rockower and his colleagues were happy to oblige, recognizing that name-brand hardware could help to differentiate their own company and boost business. So, in consultation with DTR, they discussed the idea of using one of the branded PC manufacturers that most GMS customers knew. "But we realized that was not a realistic option because our sales volume did not justify a large enough purchase of those brands to make such an arrangement cost-effective," Rockower says.

That's when DTR National Account Manager Tim Carlson suggested an Intel technology-based approach to the GMS team, and, according to Carlson, "Their eyes lit up." Rockower says this was largely because of Intel's unrivaled brand recognition: "The Intel name alone drives such an excellent perception of

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For Rockower, another attraction of moving to an Intel technology-based solution was his company's goal of standardizing on a platform that would be consistent even as customers upgraded. "Other branded PC manufacturers use components from an array of suppliers, and those suppliers can change from version to version of their servers," he points out. "By going with Intel, we could provide our customers a consistent hardware environment when it was time to upgrade a component or an entire server."

Business Solution

DTR has been building two or three servers per month for GMS, a process that also involves loading and configuring the operating system and the ITEC System software, all according to the needs of a given GMS customer. According to Carlson, Intel Engineering, Sales & Marketing play an instrumental role in this process, particularly in helping with the selection of drivers, firmware revisions, form factors, and power and cooling configurations.

The Intel technology-based servers that DTR builds for the GMS ITEC System were initially based on the Intel® Server Board SE7501HG2, including two Intel® Xeon™ processors with 1MB cache, dual-channel Ultra320 SCSI, and dual integrated Intel® PRO/1000 Server Network Connections. Depending on the scale of a customer's operation, the board and other components were housed in an Intel® Server Chassis SC5200 or an Intel® Entry Server Chassis SC5250-E. Early in 2005, DTR began basing those servers on the Intel® Server Board SE7520BD2 and Intel® Server Chassis SC5300 to give customers an even more powerful and versatile hardware foundation.

Benefits

GMS is providing the Intel technology-based hardware to new customers and to current customers in a gradual transition, replacing systems at regular upgrade times. But even after just a few customers had received the Intel technology-based hardware, Rockower was receiving positive feedback. "Customers are saying that the box itself just seems a lot more substantial, largely because of the way the chassis is designed with its easily accessible hot-swap power supplies and fans," he reports. "Customers like this even if they aren't doing their own servicing. Customers also like the fact that virtually all the components are made by Intel. There's just a greater comfort level overall."

For Rockower and his colleagues at GMS, scalability is another benefit of offering the Intel technology-based hardware. "Most of our current customers are more than adequately served by mid-range hardware, but it's good to know that if we wanted to do business with a company requiring, say, a quad-processor system, we could, and with essentially the same systems we are using now," he says. "Because virtually the entire system is Intel, it can be configured for 10 users, 100 users, or more—enabling us to easily offer our customers the configuration that makes the most sense for them." For his part, Carlson points out that such a "pure customization" service is not all that widely available, "and so it's a great differentiator for GMS and DTR alike."

Scalability also encompasses the operating system on which the ITEC System runs. As Rockower explains, running the system on Intel technology-based hardware gives GMS the flexibility to upgrade its operating system whenever it wants because the company can be confident that the new system will include drivers for Intel components. "This isn't necessarily the case when you are using components from other suppliers," he says. GMS is taking advantage of this and is in the process of adding SCO UnixWare* as an alternative platform.

Lessons Learned

As for lessons learned in implementing the move to Intel technology-based hardware, Carlson says simply, "We should have done this sooner." For initiating the move he is grateful to Rockower and his colleagues at GMS. In turn, Rockower speaks highly of Carlson's team and their work in providing a solid and complete hardware platform for the GMS ITEC System. "They take a lot of the work off my hands to ensure the system is fully integrated and working before I even see it," he says. "And they do it in such a thorough fashion that I have yet to get a machine that has failed. That's a huge advantage when you're serving a customer base as dependent on reliability and availability as ours."

Based on the satisfaction of GMS and its customers, Carlson wholeheartedly recommends Intel technology-based hardware to other integrators and distributors. "Not only can we give our customers a complete platform sporting the most respected name in computer hardware, but we also can enjoy a simplified approach to support," he notes. "One source for virtually all the components makes it much easier for us, for GMS, and for GMS's customers when it comes time for replacements or upgrades. This is in stark contrast to the situation you might be in with other branded manufacturers, whose component suppliers tend to change from one version of the platform to the next."

About GMS International

GMS is a family-owned business founded in 1975 and based in Cresskill, New Jersey. It sells turnkey hardware/software systems to businesses that handle shipping documents, paperwork, accounting, and data exchange in all areas of international freight movement. Its flagship product is the International Trade & Electronic Commerce (ITEC) System, which is based on the PROGRESS* 4GL database. GMS competes with about a dozen other companies in its market.

About DTR Business Systems

DTR Business Systems is a value-added integrator and distributor of Intel architecture-based computer hardware and systems to business, government, and education. It is headquartered in Walnut, California, and has offices in Atlanta, Phoenix, and Minnesota.

Intel® Technology

Intel® Xeon™ processor
Intel® Server Board SE7501HG2
Intel® PRO/1000 Server Network Connections
Intel® Server Chassis SC5200
Intel® Entry Server Chassis SC5250-E
Intel® Server Board SE7520BD2
Intel® Server Chassis SC5300
Intel® SCSI RAID Controller SRCU42X

Find out more about a business solution that is right for your company by contacting your Intel representative, or visit the Intel® Business/Enterprise Web site at intel.com/business or its industry solutions specific sites 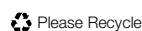at intel.com/business/bss/industry/