



Acrodex cleans up tech landscape with recycling initiatives

Printer cartridge reuse and end-of-use strategies allow this Edmonton-based HP partner to present an **environmentally friendly** set of products and practices **By Tim Wilson**

ACRODEX HAS AN ENTERPRISE-WIDE FOCUS ON THE ENVIRONMENT, and is seeing green across its operations, from remote desktop support and virtualization, to promoting solutions for videoconferencing and the recycling of electronic components and items. Given the amount of material used by some of Acrodex's larger customers, it only makes sense that this last item, materials recycling, be a central focus.

One example of materials recycling by Acrodex is a joint initiative with a key client in the energy sector. While this customer has over 5,000 operational staff, it faces a challenge familiar to anyone with a home office: what to do with empty printer cartridges?

John Abrahamson, Acrodex's Director of Sales, explains how Acrodex, which provides managed print services for this particular client, works with the customer in recycling HP printer cartridges so that it benefits the community at large. "We were fortunate to have our client's involvement in setting up a recycling program for HP cartridges, that we now manage for them on an on-going basis," says Abrahamson.

"We gather all of the empty printer cartridges from the client site, store them in our warehouse until we have several pallets of them together, and then ship them to the Edmonton Food Bank. The charity has a program where they ship them to Ontario, as part of a government recycling program, and the Edmonton Food Bank in turn gets money to go toward their program."

When one considers that this Acrodex client organization prints over 20 million pages a year, on over 500 printers, and roughly 2000 cartridges are utilized and recycled, both the environment and the community benefit greatly through this Acrodex-managed process. However, such an ambi-

tious program isn't necessary for the average Acrodex customer. For companies of all sizes, HP has its own program for cartridge return and recycling that makes it easy — and cheap — to recycle materials. Select HP inkjet print cartridge boxes contain a postage-paid return and recycling envelope, provided free of charge. This process can be done online as part of a three-step process that allows HP customers to send in used inkjet supplies.

In fact, through HP's Total Care program, companies can recycle any electronic devices, from PCs to rechargeable batteries. Materials that can be reused or recycled provide benefits to the environment, but such programs are somewhat easier to implement than the wholesale recycling of electronic materials. In order to make recycling of such components viable, the manufacturer has to be aware of the environmental impact from the get-go.

This is one reason why HP's global product content specification restricts or prohibits certain chemical compounds or materials in HP products or manufacturing processes. Suppliers must comply with the product content environmental guidelines in the General Specification for the Environment (GSE). This includes, in part, lithium and plastic marking specifications, chemical registration and restrictions on hazardous substances, battery material content and ozone-depleting substances.



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It is important to realize that these specifications are not only about making production, use and disposal safe, they are also about increasing the viability of recycling. If hazardous materials were included in HP products, many facilities would be averse to receiving them.

As it is, Acrodex has initiated — and we all benefit from — a strategy for dealing with such waste. “Acrodex is partnered with a primary recycling organization in Edmonton,” says Abrahamson. This end-of-use strategy then becomes not an inconvenience, or a ‘nice-to-have’, but instead a key point in the value chain, because Acrodex’s clients often swap out their PCs every four years. “We rely on this system to dispose of our electronic components and items,” says Abrahamson.

Because HP follows the GSE in such areas as plastic-marking specifications, the recycler knows exactly what it’s getting, how useful it is, and what its risk profile might be. The advantage here is that it not only makes the entire supply chain safer, it also makes it easier and more efficient to price and recycle materials.

By making intelligent decisions in the first place, organizations can reduce their footprint in the long run. Acrodex is doing its part here with an emphasis on videoconferencing and remote desktop support, both of which cut down on travel. On videoconferencing, Acrodex is pursuing the green mandate with a partnership with a Norwegian company, Tandberg ASA.

The combined videoconferencing hardware and services solutions implemented by Acrodex can help companies substantially reduce their travel plans. And finally, Acrodex’s service desk logs tens of thousands of calls and support tickets annually, and it’s estimated that about 20 per cent are “tier two”, meaning that they might traditionally require some travel. However, Acrodex can now solve about half of these remotely, using a variety of remote takeover and software packaging and downloading tools. And, of course, many issues can be avoided altogether with remote, automated software deployments and virtual desktop infrastructure (VDI) as provided by VMware.

CASE STUDY: Acrodex gets green with virtualization

By Tim Wilson

ACRODEX DOES A LOT MORE THAN PARTNER WITH HP FOR PRINTERS, toner and cartridges;

a big part of the firm’s business includes HP servers. On the server side, virtualization is a compelling green technology. For virtualization in the data centre, Acrodex leans heavily on VMware, the leader in the space.

“We are running VMware on HP servers in data centres,” says Yasmin Jivraj, President of Acrodex. “This business is strong enough for us to have a specific practice devoted to it, and we are definitely marketing the green message.”

There is no question data centres in Canada and around the world have a significant impact on the environment, primarily on the power they use. Server consolidation through virtualization can dramatically reduce the amount of power and cooling capacity used in the data centre.

According to Acrodex, server virtualization allows an organization to condense its servers from a 1:1 ratio of hardware to server operating system to ratios of 4:1, 8:1 and even up to 30:1 or more. This means that in a data centre of two hundred servers, it’s common to see server consolidation reduce the number to six physical servers or less.

Jivraj adds that it’s also easy

to see how consolidation can have an impressive impact when one considers that it’s normal to see power usage of over 400 watts and heat output in the area of 300 BTU per hour per CPU (i.e. 1200 BTU per hour for a four-CPU server).

For its part, HP has embraced virtualization, recently announcing that the VMware ESX Server 3i will be broadly integrated with ProLiant (HP’s family of industry-standard server, storage, blade and facility solutions) so that virtualized servers can be started up in minutes.

Specifically, VMware’s ESX 3i ‘ultra-thin’ hypervisor software will be integrated on 10 models of HP ProLiant servers.

What this means is that even in smaller data centres, the implementation is easy and the effect is significant.

Recently, Acrodex delivered a report to a client that showed how consolidation of 32 physical servers down to two physical servers would result in reductions of power consumption.

The report showed how Acrodex could bring it down from 12.8 KW to 3.9 KW and heat output from 17,481 BTU per hour down to about 998 BTU per hour.

This will obviously result in a significantly greener data centre.

There are also other ways that Acrodex can assist with server consolidation to reduce the environmental impact of the data centre.

Acrodex has a client who has put a project on hold pending the outcome of the virtualization readiness assessment Acrodex is performing. The project on hold is to expand the data

centre in power and cooling capacity, as well as physical size, to a value of approximately \$400,000. Through server consolidation, they will not only eliminate the need for these upgrades, but reduce the current usage rates.

Jivraj reports that the customer will benefit from not having to move forward with physical renovations, since Acrodex can help them to reduce the space requirements to as little as one-third or less of what they currently use. So the client gains the additional advantage of eliminating the impact, albeit temporary, that the construction project would have had.

Virtualization can also provide real environmental benefit, and cost savings, by moving the majority of the desktop operating systems to a virtual environment in the data centre. The common PC is a power-hungry device, and virtualization can

help employees share devices.

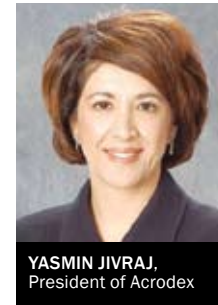
“The traditional PC can be replaced with a thinner network terminal-type device,” says Jivraj. “This uses far less power and has the added benefit of less moving parts, which reduces support requirements. The thinner device connects the user to the desktop operating system

running in the virtual server environment, and the user is provided with an equal or better desktop experience.”

The third component, storage, can also leverage virtualization. HP is active in this area with its StorageWorks Enterprise Virtual Arrays (EVAs) and, more specifically, products such as StorageWorks EVA4400, which is designed to deliver affordable virtualized storage with better capacity utilization, and easier management, of on-demand storage activities.

For Jivraj at Acrodex, the combination of HP and VMware makes for a strong virtualization profile, and a healthy green message.

“We are excited about the fact that our work can have such a significant impact,” she says, “helping our clients reduce their carbon footprint as they strive to be better corporate citizens.”



YASMIN JIVRAJ,
President of Acrodex

COMPANY PROFILE: Acrodex

Acrodex, Inc. is a full-spectrum, enterprise-wide technology solutions provider. The organization has had a presence in Canada for over 23 years, and has over 500 employees supporting clients from its headquarters in Edmonton and from regional offices in Vancouver, Calgary, Winnipeg, Fort McMurray and Toronto. Acrodex’s business portfolio even includes a development centre in Bangalore, India. Acrodex has strategic partnerships with a wide variety of vendors, including HP, which was Acrodex’s first major hardware partner. At present, Acrodex provides a complete range of information technology-related professional services, products and solutions to large and mid-sized businesses. Industry client breadth extends across a number of business sectors, including government at all levels, energy, telecommunications, education, transportation and health care.

The company has four main business areas: Hardware Provisioning, Software Licensing, Professional Services, and Managed Services. Acrodex’s Hardware offerings include desktops, servers, storage, cost-per-page printing solutions, and video conferencing for enhanced business collaboration. Software Licensing represents a wide variety of solutions, and specializes in Microsoft enterprise license management. Acrodex’s Professional Services unit provides high quality project delivery that implements and optimizes these hardware and software solutions, and adds consulting and supplemental staffing in core practices areas such as business intelligence, networking, and web applications. Finally, Acrodex’s Managed Services focuses on long term support of these solutions through its Service Desk, desktop hardware and software support, managed print, and server and storage management competencies.

At the end of 2007, at an HP partner conference, Acrodex was recognized by HP for its 2007 performance as an HP reseller. In addition, Avnet, an HP and Acrodex distributor partner, acknowledged Acrodex as its top HP enterprise storage partner in Canada, and one of Avnet’s Top 25 HP enterprise partners in North America.