

Enabling security to work harder

Arkoon enhances its core network security appliance with Intel® technology for performance and reliability



“We certainly made the right choice to embed Intel® technology into our solutions. Not only has it delivered performance, security, reliability and throughput advantages that we’re proud to pass on to our customers now, but the support and consultancy that the Intel specialists are ready to share will be invaluable in future product development too.”

Laurent Hausermann,
 Chief Technology Officer,
 Arkoon Network Security

CHALLENGES

- **Improve components.** Replace underperforming network processor and CPU in existing product line with stronger, more reliable alternatives
- **Move to x86.** Redesign solution platform as a customer-friendly, x86-based architecture, suitable for commodity hardware

SOLUTIONS

- **Strong connections.** Intel® Ethernet Controller 10 Gigabit 82580EB and 82599EB built into all versions of Arkoon’s Fast360* appliance
- **Performance boost.** Product line is equipped with Intel® Atom™ processors or the Intel® Xeon® processor E3 and E5 families for a high-performance, x86-based platform

IMPACT

- **Customer experience.** Users were impressed by the performance, reliability and throughput of the revamped solution
- **Ongoing innovation.** Arkoon plans to use its relationship with Intel and its ecosystem to drive further improvements and customization
- **Superior security.** Optimized for x86, the platform supports Arkoon’s strategy to continue providing the highest quality network security

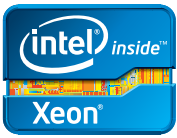
In search of a solution

For organizations like government departments and industrial research facilities, data security is a constant concern. The consequences of wrong people having access to sensitive files and information over an improperly secured network could be disastrous. These organizations rely on network security specialists such as Arkoon Network Security to help them ensure that their corporate networks remain impervious to unauthorized access attempts. Arkoon’s mission is to provide organizations with long-term protection against constantly-changing threats via flexible, proven, quality security products while providing the highest levels of professional service.

Arkoon, a Cassidian CyberSecurity company, prides itself on delivering high-quality network security appliances to its customers. To do this, it works with a variety of component providers to create a bundled offering that includes hardware, software and network connectivity. “To stay competitive with the larger players, we need to make sure that we’re using top-notch technologies and delivering the most compelling solutions,” explains Laurent Hausermann, chief technology officer at Arkoon.

Unfortunately, some external components of one of Arkoon’s core product lines, the Fast360 network security appliance, were thwarting the solution’s effectiveness. The appliance combines a number of intuitive security services including application control, IP security, VPN, VLAN, anti-virus, anti-spam, URL filtering, and identity-aware policies. The network processor in the appliance was not based on the x86 architecture, making it hard for some customers to make full use of the solution within their IT environments. This lack of compatibility, along with the processor’s limited features and performance, had begun to have a detrimental effect on Arkoon’s bottom line. Hausermann and his team, therefore, decided to redesign the architecture on which the appliance was built.

“We wanted to create an appliance that would work within an x86 environment so that our customers could benefit from the affordability of commodity hardware,” explains Hausermann. “We believe that the more tailored a hardware solution becomes, the more complex it gets, and complexity can lead to lower quality. Using mainstream general purpose hardware keeps it simple for our users, but



Network security specialist enhances core product offering with embedded Intel® technologies

we still needed a strong level of computing and network performance behind our software so that we could keep up with the high standards our customers expect.”

A fast move to x86

Arkoon investigated a number of x86 processor options, wanting to make sure it kept to its commitment to only using the best technology components in its solutions. “We chose Intel technology in the end, for a number of reasons,” Hausermann says. “We were impressed with the performance it offers, for example, enabling our software to benefit from parallel processing. We also liked the high throughput capabilities, which help remove system bottlenecks. And, of course, as a security specialist, we also considered the security features of Intel technology important.”

The team chose to integrate Intel Ethernet Controller 10 Gigabit 82580EB and 82599EB into all versions of the Fast360 appliance. The entry-level version of the appliance was also equipped with the Intel Atom processor, while an alternative version designed for larger, more complex networks was powered by the Intel Xeon processor E3 and E5 families. “Having the network controller and the CPU from the same provider adds a new benefit to our solution,” says Hausermann. “It means that we can offer much tighter inte-

gration between the software and hardware in our appliance bundle. Our software can also leverage multicore design and pipeline packets into our parallel advanced security inspection engine. All these advantages helped us make our offering compelling and keep us in a competitive position.”

The revamped product was ready to go on sale just six months after Arkoon chose Intel technology for its new architecture. A key success factor was the coherency of the design as all the appliances use the same software stack.

A toolkit for innovation

“Our customers have been very impressed with the new appliance,” comments Hausermann. “They like the great performance it delivers for all levels of network traffic, whether it’s small data packets or very large ones. The reliability of the solution is also important for them.” Arkoon has been able to deliver an improved quality product without a corresponding increase in cost for the customer, making the solution a highly cost-effective option.

Arkoon feels that its closer collaboration with Intel will help it stay ahead of customer demand and become more agile and innovative. Hausermann explains: “We need to be able to respond quickly to changing industry demands. Having access to Intel’s extensive experience and expertise, as well as the opportunity to work with other members of the Intel ecosystem, will help us to create innovative solutions more quickly.” He and his team look forward to offering customers more customizable solutions through Arkoon’s contacts with leading technology and component providers and its relationship with Intel.

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Lessons learned

When competing with the leading names in your industry, staying ahead is essential. Arkoon took action to make sure its core product delivered the superior quality and performance that would position it competitively and enhance its customers’ experience. By embedding Intel Ethernet Controller 10 Gigabit 82580EB and 82599EB, Intel Atom processors and the Intel Xeon processor E3 and E5 families into its Fast360 appliance, Arkoon created an industry-leading solution that is designed to support continued innovation in line with technological advances.

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Arkoon is always looking to the future, ensuring it continues to ride the wave of technology innovation to meet its customers’ needs. Hausermann concludes: “The most important thing for us is that our customers’ data stays safe. With Intel, we feel confident that we can continue to meet users’ security expectations while leading the way in performance and innovation.”

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