

# FireEye solutions secure the future of quantum computing for D-Wave Systems

CUSTOMER STORY

## KEY COMPONENTS

- FireEye Network Threat Prevention Platform
- FireEye Platinum Support program

Combining quantum physics and modern-day computing, D-Wave Systems manufactures the world's first commercially available quantum computing system. The high-performance D-Wave Two™ quantum computer targets hugely complex industrial problems encountered by Fortune 500 companies, government, and academia. A recent benchmark indicated that a complex problem could be completed

on a quantum computing system as much as 3,600 times faster<sup>1</sup> than on conventional desktop computers.

The revolutionary technology is deployed by some very high-profile organizations, which has caught the eye of would-be attackers. "After the release of our first product we had a lot more exposure with the public and we knew we would attract

COMPANY	D-Wave Systems Inc.
INDUSTRY	Technology
DESCRIPTION	D-Wave Systems' mission is integrating new discoveries in physics and computer science to create breakthrough approaches to computation. The company harnesses an innovative type of superconducting processor that uses quantum mechanics to massively accelerate computer system performance.
CHALLENGES	<ul style="list-style-type: none"> <li>• Identify a solution to ensure the integrity of intellectual property against cyber attacks</li> <li>• Provide an additional layer of protection to supplement existing security measures</li> <li>• Minimize management overhead</li> <li>• Obtain expedient access to trained support personnel for high-severity issues</li> </ul>
SOLUTION	<ul style="list-style-type: none"> <li>• FireEye Network Threat Prevention Platform</li> <li>• FireEye Platinum Support program</li> </ul>
BENEFITS	<ul style="list-style-type: none"> <li>• Proven enhancement over existing detection and blocking capabilities</li> <li>• Nominal incremental management impact</li> <li>• Protection against zero-day web exploits and multi-protocol callbacks</li> <li>• Critical issues immediately escalated to level-two advanced support engineering for resolution</li> </ul>

“The FireEye appliance caught numerous events which could have been detrimental to our business. **The added threat protection, and the fact that after just a few events were caught it paid for itself, reconfirms our decision to implement the FireEye Network Threat Prevention Platform.**” – **IT security manager**, D-Wave Systems Inc.

some unwanted attention,” D-Wave’s IT security manager said. “We started looking at solutions for network hardening and intrusion protection.”

### **FIREEYE NETWORK IMMEDIATELY PROVES ITS VALUE**

D-Wave engaged The Herjavec Group (THG) to perform a network penetration test. THG offers a comprehensive suite of security and network services to organizations around the world, supported by Canada’s largest group of certified security professionals. Although the initial findings from the test showed the existing network to be robust, through practical experience with other similar clients, THG recommended implementing the FireEye® Network Threat Prevention Platform.

“We felt comfortable after seeing the early results of the penetration test but decided to do an in-house demo of the FireEye Network Threat Prevention Platform to see how it would add to the protection of our internal systems and R&D network. It immediately lit up indicating vulnerabilities!” the IT security manager recalled.

As part of the overall research into similar technologies, along with THG’s recommendation to evaluate FireEye, D-Wave also looked at several other competitive offerings. “Once we had a chance to do our own due diligence, it was clear that there is really nothing else that compares with the FireEye platform,” the manager stated. “It’s definitely a unique solution. After the proof of concept, I really didn’t have to do much to

justify the investment. We immediately purchased the FireEye Network Threat Prevention Platform.”

### **EASY-TO-USE, LEADING-EDGE PROTECTION, AND TOP-NOTCH SUPPORT**

With any new solution the deployment effort and ongoing management overhead is always a consideration and the IT security manager attested, “We’ve been really pleased with how straightforward the FireEye solution is to manage. Installation was very simple, and the Platform requires little-to-no ongoing maintenance.”

Because threat protection is a mission-critical function for D-Wave, the company opted for the FireEye® Platinum Support program. This level of support provides a target response time of one minute for both hardware and software issues—and immediate escalation to level-two advanced support engineering for any high-severity issues encountered.

“Our board of directors are very conscious about the value of the intellectual property that we are constantly creating and very sensitive to security concerns—especially cyber-based threats,” the IT security manager reflected. “You can’t put a price on an attack, especially when it’s your company’s underlying IP at risk. FireEye gives us leading-edge protection; other companies just can’t do what FireEye does.”

**To learn more about FireEye, visit:**  
[www.fireeye.com](http://www.fireeye.com)

<sup>1</sup> New Scientist, “Commercial quantum computer leaves PC in the dust”, May 2013