CASE STUDY

Canon Partners with McAfee to Help Protect Office Printers from Advanced and Unknown Threats

Canon is world-renowned for its personal, professional, and industrial imaging and printing products. Since its inception in 1934, Canon has held itself to the highest standards. The organization’s corporate DNA is informed by the notion of “Kyosei,” which encompasses a respect for humanity, an emphasis on technology, and an enterprising spirit. Dedicated to achieving excellence in all its endeavors, Canon continually strives to be admired and respected all over the world. The company is headquartered in Ōta, Tokyo, Japan.
The primary goal of Canon’s office business unit is to enable businesses of all sizes to work more efficiently by getting the most out of its line of advanced multifunction printing devices, which are known for their reliability, ease of use, and consistency. To stay competitive and allow users to safely access a rich array of capabilities, it’s important for Canon to offer even more security features for these network-connected office products.

**Priority One: Making Office Printers Even More Secure**

With the rapidly increasing number of connected Internet of Things (IoT) devices, Canon is well aware of the security risks associated with today’s office printers. Canon’s devices have evolved from the office printers of the past and now offer not only premium quality but also high-speed scanning, cloud-based function enhancement, and networking. All of these features are very helpful to users, but, at the same, pose further risks than in the past. With confidential data moving from desktops to mobile devices to multifunction printers, Canon understands the need to take extra measures to help provide its customers with a secure experience.

Canon was seeking an effective way to ensure that its printers were secured at a level that was comparable to the security implemented on enterprise computing systems. In addition to securing users and networks from malware and potential cyberattacks, the organization was also focused on helping customers meet compliance mandates for data protection explicitly legislated by regulations like the EU General Data Protection Regulation (GDPR).

Canon’s product team delineated multiple requirements with the goal of implementing the broadest possible security for its multifunction printers. The ideal solution would safeguard sensitive documents against breaches, defend against unknown threats, monitor and prevent unauthorized access, and prevent unauthorized program execution and changes to printer firmware. Proven reliability and manageability were also must-haves.

“The office of the future is evolving and so are our products. Our devices aren’t just printers anymore, but connected hubs supporting numerous cloud applications to streamline workflows and enhance productivity. Our partnership with McAfee gives our customers the most up-to-date security to help protect their connected devices against the threats that we can predict today as well as the unknown threats of tomorrow.”

—Takanobu Nakamasu, Executive Vice President, Document Solutions, Canon Europe

**Challenges**

- Protect Canon internet-connected multifunction printers from zero-day and advanced threats
- Help Canon customers avoid breaches and secure confidential data
- Guard against malware introduced through unapproved applications
- Prevent unauthorized changes to printer firmware
- Help meet stringent compliance requirements

**Solution**

McAfee® Embedded Control

**Results**

- Provides Canon customers with a more secure and flexible user experience
- Helps protect against zero-day and advanced persistent threats (APTs) through intelligent, real-time application whitelisting
- Helps prevent data loss by blocking unauthorized or potentially malicious applications
- Helps protect the integrity of the printer firmware
- Helps address regional and global compliance mandates
Comprehensive, Intelligent Application Whitelisting from McAfee

In its quest for a solution that would fulfill all of these requirements and meet its high standards, Canon made the decision to partner with McAfee. The decision was based on an exhaustive assessment of many different solutions and included a comprehensive design review. Canon selected McAfee because of the strength of its brand, its broad-based market experience, its proven reliability in embedded security, and its high levels of user satisfaction.

Canon now bundles McAfee Embedded Control with its third-generation imageRUNNER ADVANCE third edition models. This advanced solution provides Canon customers with signatureless protection against zero-day and advanced persistent threat (APT) attacks by blocking execution of unauthorized applications through intelligent whitelisting.

McAfee whitelisting technology also helps Canon maintain the integrity of printer firmware. Today’s multifunction printers are typically connected to the corporate network, which is, in turn, connected to the internet. As a result, it’s possible for printer firmware to be targeted by hackers attempting to gain access to the network and corporate data. McAfee Embedded Control is designed to prevent program tampering by only allowing authorized code to run and only authorized changes to be made.

With McAfee as its security partner, Canon can help its customers feel more confident that the office products they use every day are safe and free from malicious threats. With full-featured dynamic whitelisting to help avoid data breaches, protect users, and meet compliance obligations, McAfee Embedded Control supports Canon’s commitment to excellence.

“The typical office document workflow continues to change and, in many ways, become more convoluted, as confidential information now has the potential to migrate from desktops to multifunction printers to the cloud and beyond. We felt it imperative to align with a company with a proven track record in the information security industry to provide our customers with enhanced security features that help eliminate some concern and open up more room for what should be top of mind in an office—productivity.”

—Shinichi Yoshida, executive vice president and general manager, Canon U.S.A. Inc.