RED BALLOON SECURITY PROVIDES A HOST-BASED DEFENSE TECHNOLOGY THAT IS FOUNDATIONAL TO THE WORLD'S MOST SECURE ENTERPRISE PRINTERS.
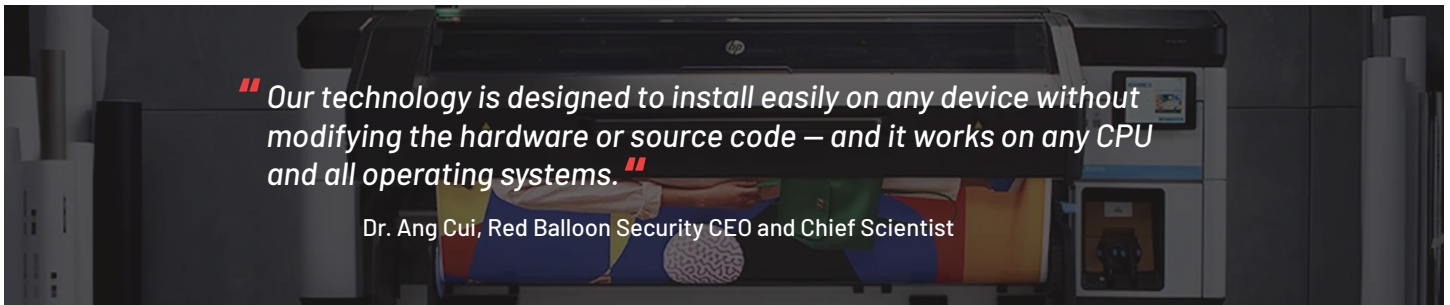
RESULTS:

• MORE THAN 80 BILLION HOURS OF CONTINUOUS RUNTIME WITHOUT A SINGLE SECURITY FAILURE.
• MORE THAN 4 MILLION TOTAL DEVICES PROTECTED.
• PROTECTION PROVIDED WITHOUT ANY DISRUPTION OF NORMAL ENDPOINT OPERATION.

APPLICATION:

LASERJET ENTERPRISE AND MULTI-FUNCTION PRINTERS

CHALLENGE:

PROVIDE THE STRONGEST, HOST-BASED SECURITY TO ENTERPRISE-LEVEL OFFICE EQUIPMENT AT THE FIRMWARE IMAGE LEVEL.

> *" Our technology is designed to install easily on any device without modifying the hardware or source code — and it works on any CPU and all operating systems. "*
>
> Dr. Ang Cui, Red Balloon Security CEO and Chief Scientist

SOLUTION:

In 2015, HP noted that printers were not part of endpoint security strategies at most enterprises [1]. Intent on establishing a new standard for its industry, HP worked with Red Balloon Security to build in security to three new LaserJet Enterprise and multi-function printers (MFP), and announced the new security features would become the standard for selected HP printers.

Red Balloon Security's contribution to HP's printer security was its signature Symbiote technology, which provides continuous runtime intrusion detection, in-device memory monitoring and situational awareness, which can identify anomalous or malicious behavior at the firmware level. It scans firmware and system memory operations and provides regular signals that validate normal operation. In the event of an intrusion, the printer responds within 60 seconds by canceling pending print jobs and restarting automatically.

Additionally, HP outfitted the printer models with HP Sure Start, which enables detection of and self-healing recovery from malicious BIOS attacks and a whitelisting feature that ensures only HP firmware is loaded to the printer.

"Protecting against security breaches is one of the biggest challenges our customers face," said Tuan Tran, vice president and general manager, LaserJet and Enterprise Solutions business, HP. "HP is helping customers secure their devices, documents and data by defending our enterprise printers with the strongest protection in the industry."

Red Balloon Security's Symbiote technology is broadly compatible with printers, routers, automobiles, telephony, peripherals, point of sale, industrial control, aviation, medical equipment and more. Red Balloon Security's researchers developed Symbiote through decade-long relationships with Department of Homeland Security Science and Technology (S&T) Directorate and DARPA.

[1] See Ponemon Institute, "Annual Global IT Security Benchmark Tracking Study", March 2015.