THE WORLD'S MOST SECURE PCS[1]

A complete guide to HP security

Choosing a PC is a security decision

A new malware specimen will emerge on the internet about every four seconds, reveals independent antivirus reviewer AV-TEST.[2] Yet this this is just the tip of the iceberg – as threats to information security continue to grow, not just in frequency, but also in variety and scope.

Hardware-enforced security in every PC is critical to the overall security of your business. Luckily, at HP we engineer our PCs with security at the forefront. Security measures designed to protect your device, identity and data are embedded at every level of the operating system. Hardware-based security is your strongest defense against the serious dangers that threaten your business.

Every 4 seconds
A new malware specimen emerges[2]

$13 million
Average cost of a data breach[3]

12%
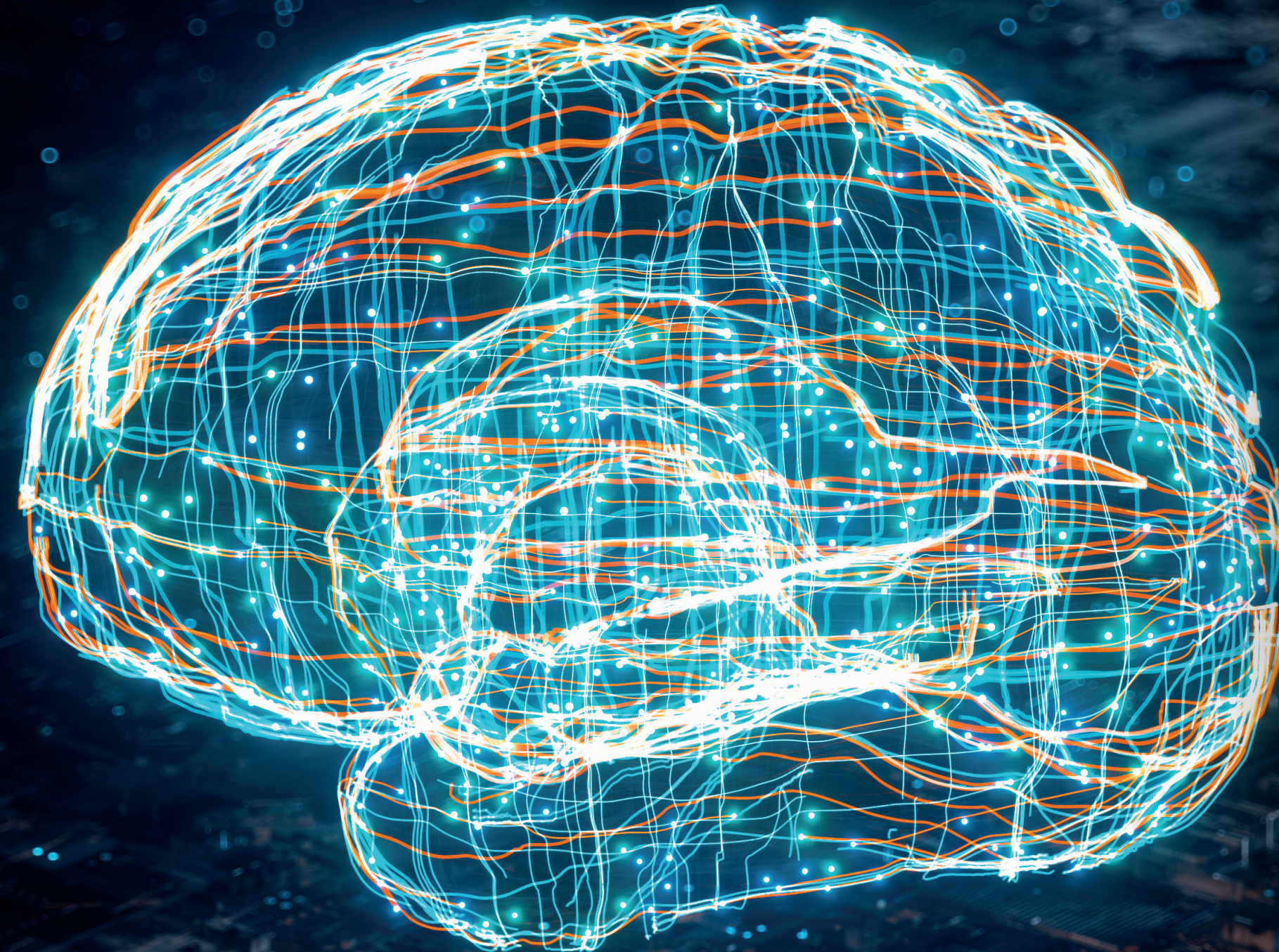Year-on-year rise in breach cost[3]

Over 350,000

New malware variants every day[4]

4x
more deadly

Zero-day attacks more likely to compromise organizations[5]

AI design

Increasingly used by hackers[6]

Catch zero-day attacks

Over 350,000[4] new malware variants are created every day, and if you want to keep up, you better fight fire with fire. Traditional antivirus can't always recognize new attacks. To ensure you stay ahead HP has developed proprietary deep learning algorithms and advanced neural network technology to instinctively recognize malware and protect against never-before seen attacks.

HP Sure Sense

HP Sure Sense harnesses the power of deep learning AI to provide real-time detection and prevention of zero-day threats coupled with behavioural detection of ransomware activity, all with minimal impact to system performance.[7]

HP Sure View

HP Privacy Camera

Protect your data and IP

Each year the cost of a data breach rises, and in a never-ending security arms race, security spending rises in tandem. Yet the value of security goes far beyond a price tag to include your name, your reputation and perhaps most importantly of all – your IP. HP offers a suite of solutions to protect all your assets from web threats, prying eyes and malicious intruders on the brink of capturing your most sensitive data.

HP Sure Click

Web browsers are a primary attack vector for malware and other online threats. HP Sure Click is a hardware-enforced secure browsing solution that isolates web content in a CPU-isolated virtual machine, where malware cannot affect other tabs, applications, or the operating system.[9]

HP Sure View

Even the best security software can't prevent visual hacking—unauthorized users viewing confidential information on an unguarded display. At the touch of a button, HP Sure View activates an integrated privacy screen that makes data visible only to the user sitting directly in front of it.[10]

HP Privacy Camera

Work confidently knowing you're not being spied upon, with the HP Privacy Camera, a physical shutter to protect from malicious surveillance.[11]
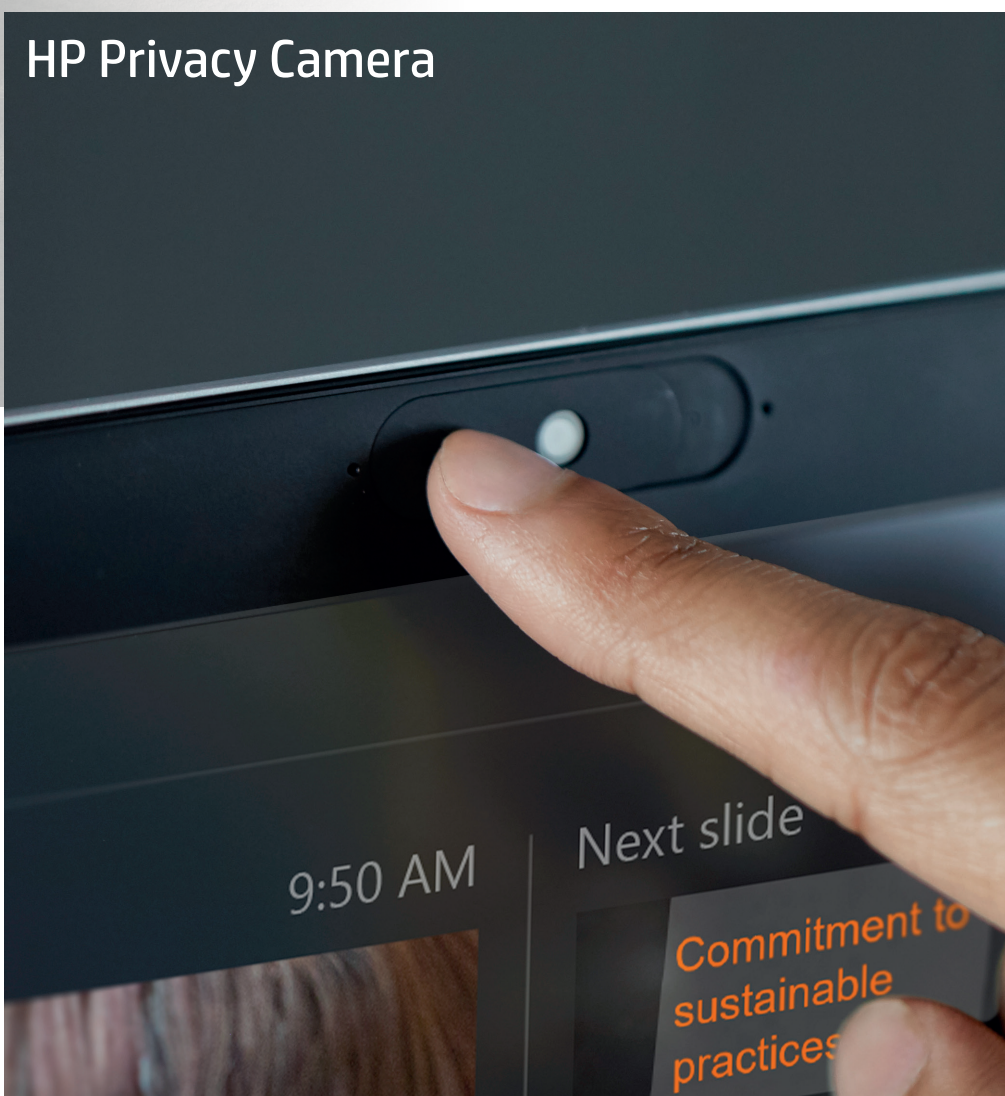
HP Secure Erase

Simply deleting files from a hard drive doesn't make them unrecoverable. HP Secure Erase is a BIOS-level feature that permanently destroys sensitive information from hard drives and solid-state drives, so it can never be recovered or compromised.[12]

Certified Self-Encrypting Drives

Self-encrypting hard drives and solid-state drives employ hardware-based encryption to protect their contents even after the drive is removed from the PC. And because the data encryption process is hardware-based, there's little or no discernible impact on performance.[13]

$150
Average cost of a lost or stolen record[7]

Rapidly recover compromised devices

There were over 3,800 data breaches in the first half of 2019 alone, this was up 54%[14] compared to the same time the year before. The truth is, it's hard to stop attacks entirely, which means the smartest IT teams recover the quickest.

HP's suite of security of products can recover devices without the manual work. When it comes to advanced defense-targeting malware, like H1N1, Sure Run provides network isolation to stop the attack from spreading beyond the first victim. For firmware attacks, like LoJax, Sure Start protects the BIOS. While in the case of wiper and ransomware attacks, like Satana, Sure Recover provides fast, effective recovery.

54%
Annual increase in data breaches 2019[14]

HP Sure Start
HP Sure Start perpetually inspects the system BIOS and automatically self-heals if the BIOS is damaged by malware, rootkits, or corruption. By ensuring that only trusted BIOS code is executed, HP Sure Start protects your PC at its most fundamental level.[15] It is the world's only self-healing BIOS.

HP Sure Run
HP Sure Run uses hardware-enforced protection to keep critical processes running, even if malware tries to shut them down. Backed by the HP Endpoint Security Controller, HP Sure Run monitors key processes, alerts users and IT of any changes, and restarts them automatically if they are stopped.[16]

HP Sure Recover
Built into system hardware and firmware, HP Sure Recover enables users to restore their machines quickly and securely to the latest image using only a network connection. It can even enable IT to schedule reimaging for the entire fleet.[17]

HP BIOSphere
Building on over a decade of BIOS security leadership, HP BIOSphere offers an ecosystem of protections to help defend your PC, including automated protections, customizable safeguards, and easy manageability to protect against attacks without interrupting employee productivity.[18]

Easily manage all your IT security

At HP, we design security into our devices to provide a complete, easy-to-manage ecosystem. This includes the HP Endpoint Security Controller, which sits at the heart of security infrastructure, plus a range of bespoke identity and manageability tools to make everyday operations seamless.

HP Endpoint Security Controller

HP Endpoint Security Controller is the hardware component at the foundation of the security architecture of HP's PCs.[19] Its physically isolated and cryptographically protected hardware creates the root of trust that enables hardware-enforced, self-healing, manageable security solutions like HP Sure Start, HP Sure Run and HP Sure Recover.

IDENTITY:

HP Client Security Manager

HP Client Security Manager helps users and IT professionals configure and control a variety of security features embedded in HP PCs, including HP Sure Run, SpareKey and more.

HP Multi-Factor Authenticate

HP Multi-Factor Authenticate helps keep your network and VPN safe from unauthorized access by requiring up to three factors of authentication for login—including optional fingerprint reader and IR camera facial recognition—with policies hardened at the silicon level.[20]

HP SpareKey

If you've forgotten your Windows password, HP SpareKey can reset passwords and restore access to locked PCs without intervention from IT personnel by taking the user through a series of predetermined security questions.

MANAGEABILITY:

HP Image Assistant

HP Image Assistant helps you develop and maintain a robust software image, ensure that it remains up to date with the latest patches and upgrades, and implement it consistently on PCs throughout your business.

HP Manageability Integration Kit

The HP Manageability Integration Kit (MIK) is designed to integrate with Microsoft System Center Configuration Manager (SCCM) to help IT administrators update and maintain software and security settings across your fleet of PCs.[21]

Experts at the front line of the cyberwars

The cyber security landscape rests on shifting ground. As users integrate new connected products and services into their lives, HP's Security lab is looking holistically at emerging security concerns.

The lab exists to help HP build the most secure PCs in the world. Among its members are researchers, engineers, white hat hackers and leading security experts providing insights from the front lines of the cyberwars.

By pursuing original systems security research, HP Security lab ensures that HP delivers safe and assured products, services, and experiences and leads the industry in raising the bar in cybersecurity.

Sources:

1. Based on HP's unique and comprehensive security capabilities at no additional cost among vendors with 1M annual unit sales on HP Elite PCs and Workstations with Windows and 8thGen and higher Intel® processors and higher or AMD Ryzen™ 4000 processors and higher.

2. AV-TEST, Security Report 2018/2019, https://www.av-test.org/fileadmin/pdf/security_report/AV-TEST_Security_Report_2018-2019.pdf

3. Ponemon, 2019, The cost of cybercrime, https://www.accenture.com/_acnmedia/pdf-96/accenture-2019-cost-of-cybercrime-study-final.pdf

4. AV-TEST Institute

5. Ponemon, 2018, Endpoint Security Risk Report, https://www.ponemon.org/news-2/82

6. DataCenter Knowledge, June 2019, Why It's Time to Prepare for AI Wielding Hackers, https://www.datacenterknowledge.com/machine-learning/why-its-time-prepare-ai-wielding-hackers

7. HP Sure Sense is available on the new HP EliteBook 800 G6 series, as well as the HP ZBook 14u and HP ZBook 15u.

8. IBM, 2019 Cost of a Data Breach Report, https://www.ibm.com/security/data-breach?cm_mc_uid=21400672026815717196148&cm_mc_sid_50200000=99136091571719614838

9. HP Sure Click is available on select HP platforms and supports Microsoft Internet Explorer and Chromium. Check http://h20195.www2.hp.com/v2/GetDocument.aspx?docname=4AA7-0922ENW for all compatible platforms as they become available.

10. HP Sure View integrated privacy screen is an optional feature that must be configured at purchase.

11. HP Privacy Camera only available PCs equipped with HD or IR camera and must be installed at the factory.

12. HP Secure Erase conforms to the methods outlined in the National Institute of Standards and Technology Special Publication 800-88 "Clear" sanitation method.

13. Self-encrypting drives are available as an option on select HP PCs.

14. TechRepublic, August 2019, Data breaches increased 54% in 2019 so far, https://www.techrepublic.com/article/data-breaches-increased-54-in-2019-so-far/

15. HP Sure Start Gen4 is available on HP Elite and HP Pro 600 products equipped with 8th generation Intel processors.

16. HP Sure Run is available on HP Elite products equipped with 8th generation Intel or AMD processors.

17. HP Sure Recover is available on HP Elite PCs with 8th generation Intel or AMD processors and requires an open, wired network connection. Not available on platforms with multiple internal storage drives or Intel Optane™. You must back up important files, data, photos, videos, etc. before use to avoid loss of data.

18. HP BIOSphere Gen4 requires 8th generation Intel® or AMD processors. Features may vary depending on the platform and configurations.

19. Across the Elite the range of PCs

20. HP Multi-Factor Authenticate Gen2 requires Windows, a 7th or 8th generation Intel Core™ processor, Intel integrated graphics, and Intel WLAN. Microsoft System Center Configuration Manager is required for deployment. Three-factor authentication requires Intel vPro™.

21. HP Manageability Integration Kit can be downloaded from hp.com/go/clientmanagement.

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