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# THE WORLD'S MOST SECURE AND MANAGEABLE PCs<sup>1 2</sup>

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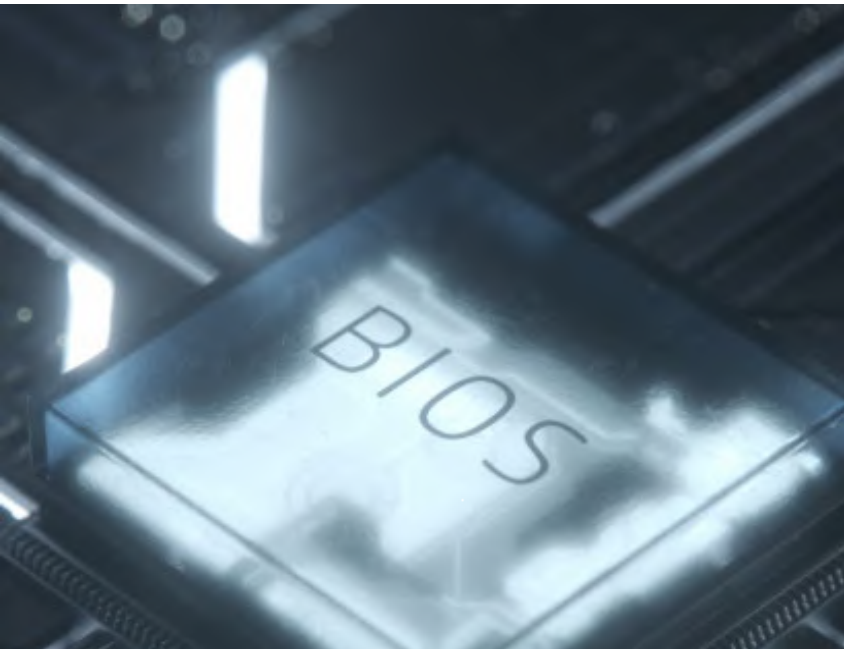
HP SECURITY – 2019

Jason Coppa  
HP Partner Business Manager



IN 2019, ITDMs FACE A

# RISING TIDE OF SECURITY THREATS



INCREASE IN  
**FIRMWARE**  
ATTACKS



RISE OF  
**DESTRUCTIVE**  
ATTACKS



RAPID  
**EVOLUTION**  
OF MALWARE

# A NEW TREND TOWARDS DESTRUCTIVE ATTACKS



# DOWNTIME FROM ATTACKS CAN DESTROY YOUR BOTTOM LINE

## NotPetya attacks of 2017:

- ▶ \$800M | Total cost of impacts from the attacks on 4 large companies
- ▶ 4-7% | % of pre-tax income lost to Petya/Not-Petya by some major companies

How long would you need to

RECOVER  
1,000 MACHINES?

\*Based on financial statements from 4 major corporations

# WE ARE WITNESSING A RAPID EVOLUTION OF MALWARE

Over  
**350,000**  
New pieces of machine  
generated malware  
every day<sup>\*</sup>

Attackers invest in  
**MACHINE  
LEARNING**  
and increase attack  
SOPHISTICATION

# WORLD'S MOST SECURE AND MANAGEABLE PCs<sup>12</sup>

2017



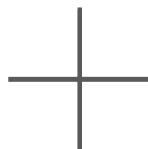
## PROTECTION BELOW, IN, AND ABOVE THE OS

HP SURE VIEW<sup>6</sup>

HP SURE START WITH RUNTIME  
INTRUSTION DETECTION<sup>1</sup>

HP MULTI-FACTOR AUTHENTICATE<sup>10</sup>

HP SURE CLICK<sup>5</sup>



2018

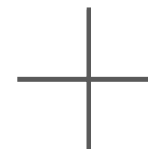


## + HARDWARE-ENFORCED SECURITY

HP ENDPOINT SECURITY  
CONTROLLER

HP SURE RUN<sup>2</sup>

HP SURE RECOVER<sup>3</sup>



2019

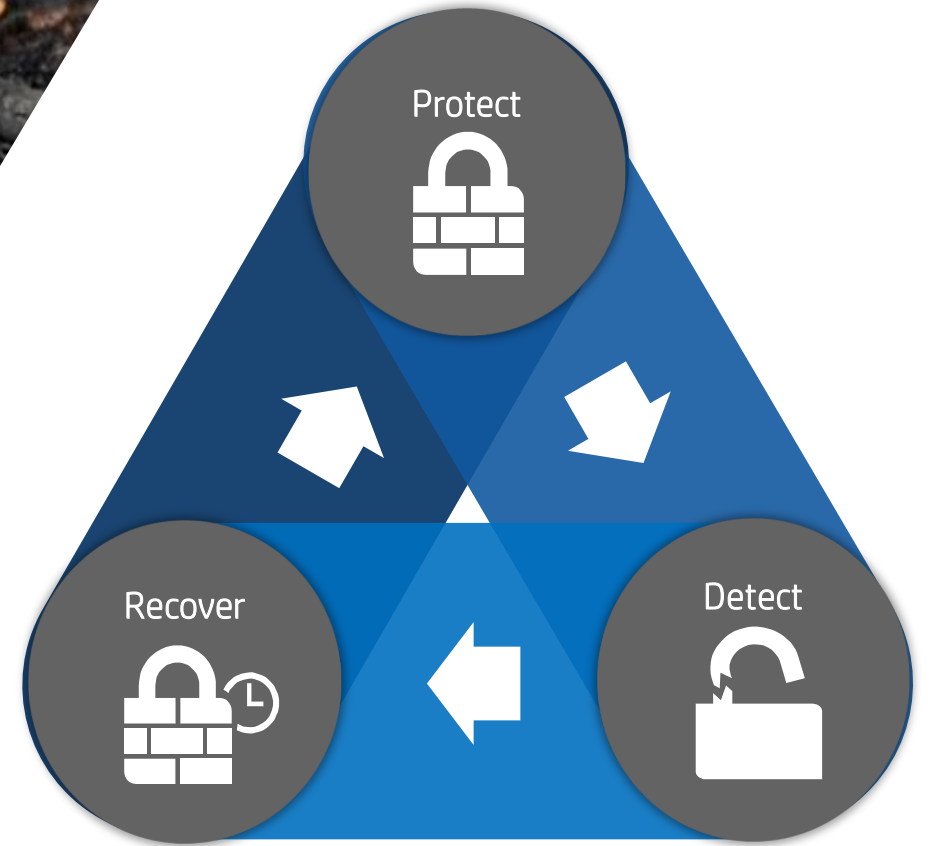


## + RESILIENCE AGAINST THE ATTACKS OF TOMORROW

EXPANDED HARDWARE ENFORCED SECURITY

HP SURE SENSE<sup>7</sup>

HP DaaS PROACTIVE SECURITY<sup>24</sup>



# RESILIENCE:

PROTECT + DETECT + RECOVER

# EVERY ORGANIZATION SHOULD HAVE A PLAN FOR RESILIENCE

1

HOW LONG  
WOULD IT TAKE TO  
RECOVER  
1,000 PCs?

2

HOW DO YOU  
PROTECT AGAINST  
NEVER-BEFORE-SEEN  
MALWARE ?

3

HOW DO YOU  
PROACTIVELY  
KNOW WHEN YOUR  
FLEET IS UNDER  
ATTACK?



## PROACTIVE MANAGEMENT

Enforce security policies and actively monitor and respond to malicious activity



## RESILIENT HARDWARE

Hardware that can self monitor  
and self heal if an attack gets in



## LAYERS OF PROTECTION

Proactively prevent threats –  
below, in, and above the OS



# HOW HP CREATES THE WORLD'S MOST SECURE AND MANAGEABLE PCs<sup>12</sup>

# HP ENDPOINT SECURITY STACK 2019

NEW

UPDATED

NO UPDATE NEEDED

## DEVICE

## IDENTITY

## DATA

ABOVE  
THE OS

HP MIK Gen3 <sup>11</sup>  
Centralized security management

HP Proactive Security (DaaS)  
Enforcement, Monitoring and Analytics

NEW

HP Sure View Gen3<sup>6</sup>  
Built-in privacy screen

HP Sure Click<sup>5</sup>  
Secure web browsing and file viewing

HP Sure Sense<sup>7</sup>  
Malware protection driven by deep learning

NEW

HP Secure Erase<sup>8</sup>  
Permanent data removal on HDD/SSD

Certified Self-Encrypting Drives  
HW data encryption

IN  
THE OS

HP Sure Recover Gen2<sup>3, 4</sup>  
Automated network-based image recovery

HP Sure Run Gen2<sup>2</sup>  
Protection for critical applications

HP Sure Start Gen5<sup>1</sup>  
Self-healing BIOS with Protection of the Intel CSME

HP BIOSphere Gen5<sup>9</sup>  
Comprehensive BIOS management

HP Client Security Manager Gen5

- HP Multi-Factor Authenticate Gen3<sup>10</sup>  
MFA with hardened policies, 3-factor, face log-in
- HP SpareKey  
Self-service password recovery

BELOW  
THE OS

HP Endpoint Security Controller





## RESILIENT HARDWARE

Hardware that can self monitor  
and self heal if an attack gets in

- HP Sure Start<sup>1</sup>
- HP Sure Run<sup>2</sup>
- HP Sure Recover<sup>3</sup>



# HOW HP CREATES THE WORLD'S MOST SECURE AND MANAGEABLE PCs<sup>12</sup>

# HP ENDPOINT SECURITY CONTROLLER

UNIQUE HARDWARE ENABLES RESILIENT DEVICES

- ✓ Physically isolated
- ✓ Cryptographically secured



3<sup>RD</sup> PARTY CERTIFIED

by an accredited independent test lab  
(Overseen by ANSSI)



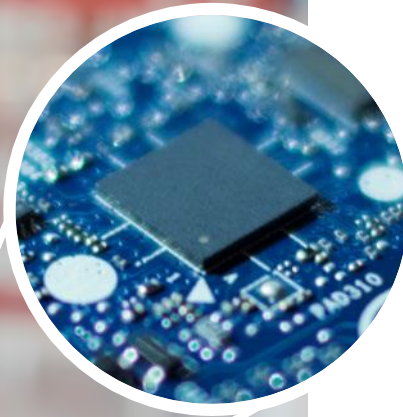
HP Sure Start<sup>1</sup>



HP Sure Run<sup>2</sup>



HP Sure Recover<sup>3</sup>



# PROTECT WHERE ANTIVIRUS DOESN'T

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The BIOS is the first million lines of code that run below the OS when you turn on your PC— your antivirus cannot detect an infected BIOS

Once the BIOS is corrupted, the attackers “own” your PC: all other protection is useless

Protecting your BIOS with HP Sure Start Gen5<sup>1</sup> - creates a **HARDENED ROOT OF TRUST**



HP SURE START is  
the **WORLD'S ONLY** self-healing BIOS

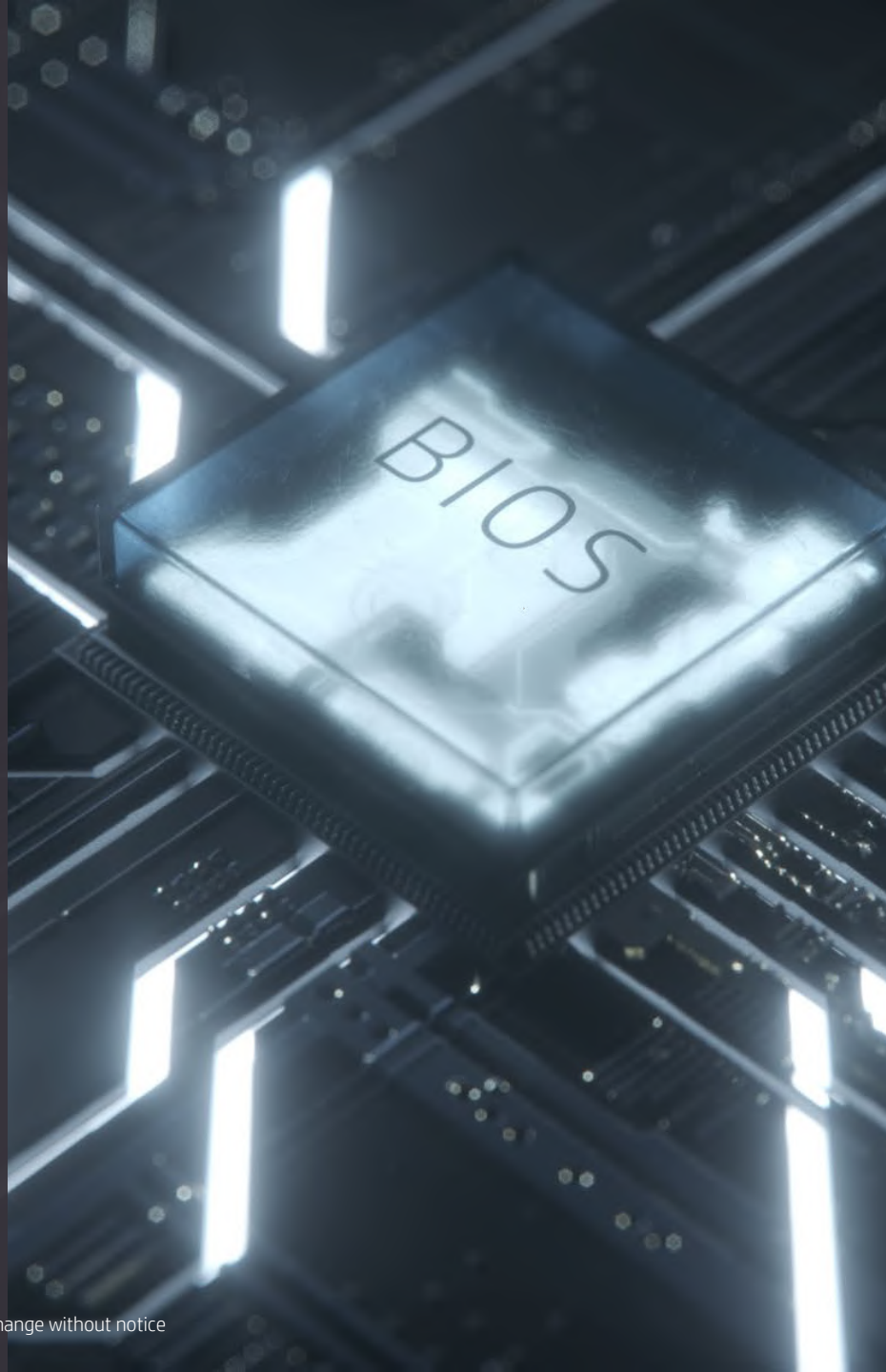


# THE MALWARE OF THE FUTURE IS HERE

LoJax attacks of 2018 prove hackers are targeting the BIOS in real-world attacks.

BIOS rootkit attacks have long been a concern:

- Difficult to Detect
- Persistent
- Powerful



OTHERS MAY  
PROTECT OR EVEN  
**DETECT**  
ATTACKS.

ONLY HP SURE  
START CAN  
**RECOVER**  
FROM THEM.

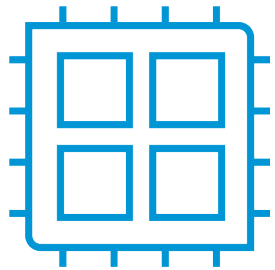


3<sup>RD</sup> PARTY CERTIFIED  
by an accredited  
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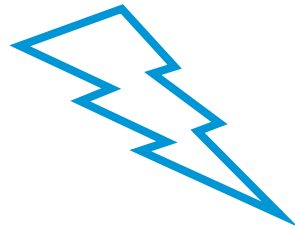
WHAT'S NEW:

# HP SURE START GEN5<sup>1</sup>

Expanding the self-healing protection of HP Sure Start to protect critical non-HP firmware from corruption or attacks



Full self-healing  
protection of the Intel  
CSME from corruption



Protects Thunderbolt  
ports from pre-boot  
DMA attacks

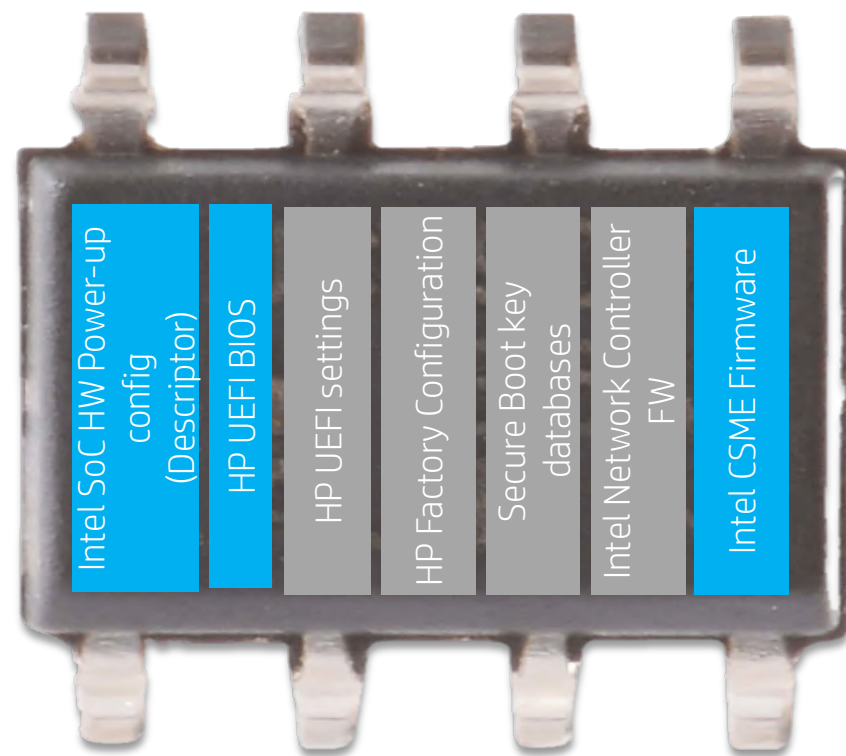
- 2005 – HP introduces cryptographically secure BIOS updates
- 2014 – HP Sure Start Gen 1 protects the BIOS
- 2015 – Gen 2 adds dynamic protection
- 2017 – Gen 3 adds protection of the SMM
- 2018 – Gen 4 adds enhanced resilience
- ▶ 2019 – **HP Sure Start Gen5**  
PROVIDES RESILIENCE FOR  
ALL CORE EMBEDDED  
PLATFORM FIRMWARE


# HP'S FLASH PROTECTION GOES BEYOND THE BIOS

*A PC's System Flash includes several components required to boot a PC - not just the BIOS*

*Modern attacks can erase the entire flash – rendering most PCs bricked*

## HP SURE START GEN5<sup>1</sup> CAN RECOVER THE ENTIRE FLASH



 Critical to booting system



# N.I.S.T.

NUMBERS YOU  
SHOULD KNOW



2011:  
BIOS PROTECTIONS  
*NIST SP 800-147*  
(2015: ISO 19678 creates an international standard)



2019:  
FIRMWARE RESILIENCE  
*NIST SP 800-193*

HP SURE START GEN5<sup>1</sup>  
**MEETS AND  
EXCEEDS**  
NIST SP 800-193  
FOR ALL CORE EMBEDDED  
PLATFORM FIRMWARE



LEARN MORE:  
Details in the HP Sure  
Start Whitepaper



# FIGHT BACK AGAINST ATTACKERS TURNING OFF YOUR SECURITY PROTECTIONS

Malware often tries to take down your PC's security protections

HP Sure Run keeps your security posture strong by:

- **Monitoring** key processes
- **Alerting** you of any changes
- **Restarting** them automatically if they're stopped

WHAT MAKES IT DIFFERENT:

# A HARDWARE-ENFORCED “HEARTBEAT”



HP Endpoint  
Security Controller



HP Sure Run Agent  
(Running in the OS)

Protected Applications

Protected Processes

Prevention of changes

HP Sure Run provides  
**hardware-enforced runtime persistence**  
to protect your PC's key security processes

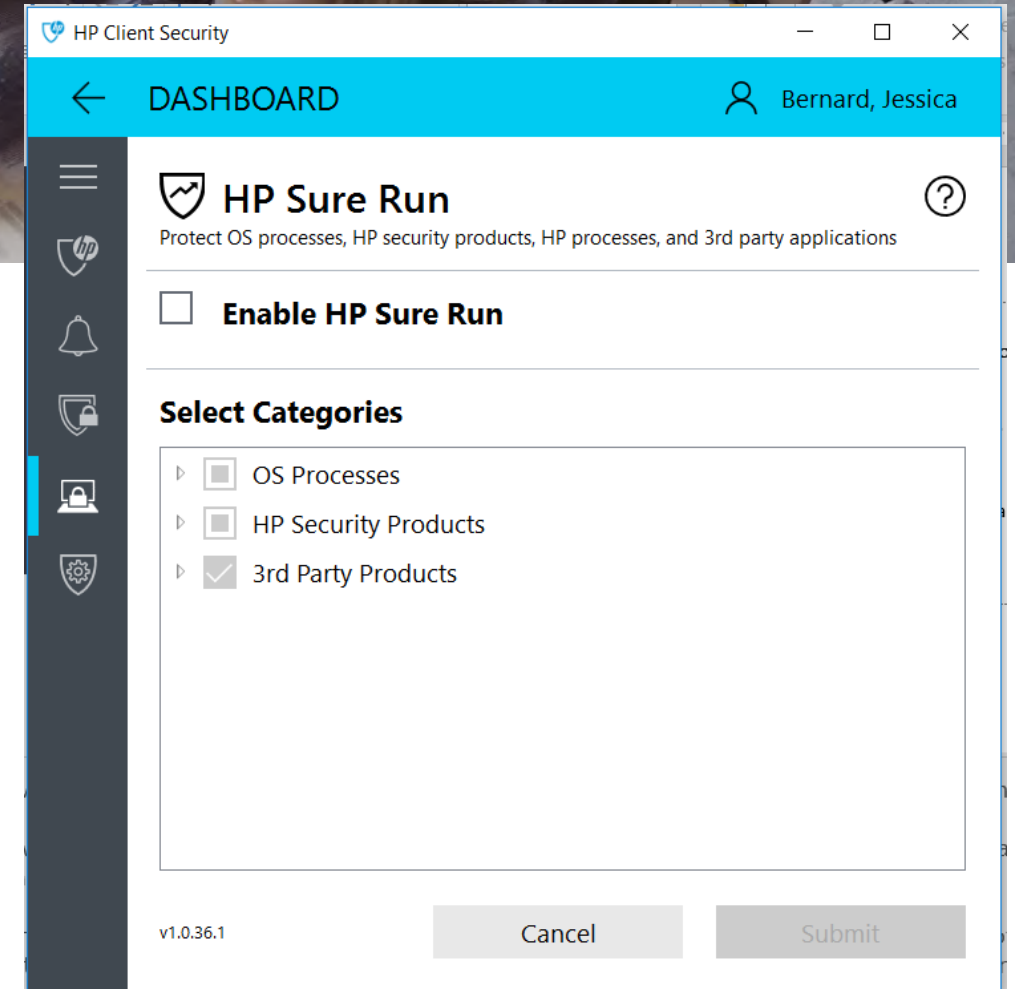


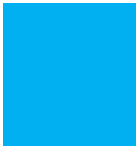
# PERSISTENCE FOR ANY SIZE BUSINESS

Advanced security isn't just for the big guys.

HP Sure Run<sup>2</sup>:

- Can be locally enabled
- No additional charge
- Easy to set up in Client Security Manager

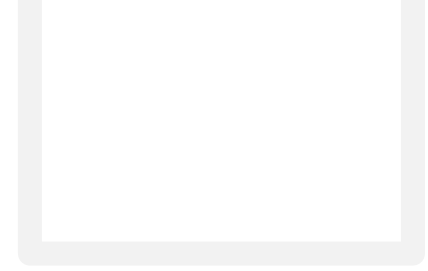




WHAT'S NEW:

# HP SURE RUN GEN2

Prevent malware from spreading: guard against settings changes and quarantine noncompliant machines.



## SOFTWARE NETWORK ISOLATION: HOW IT WORKS



PC out of compliance



All network connections  
blocked. Red border  
indicates quarantine



Connections manually  
restored with password.  
PC still out of compliance.



PC returns to compliance,  
network connections  
automatically restored.

AUTOMATIC  
RECOVERY  
IF NO OS IS FOUND

SCHEDULED  
REIMAGING  
TO THE CORPORATE IMAGE

USER  
EMPOWERMENT  
REIMAGE WITHOUT IT

RECOVER QUICKLY  
AND MINIMIZE  
DOWNTIME

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RESILIENCE is all about bouncing back after an attack.

HP Sure Recover<sup>3</sup> offers secure, automated, network-based software image recovery with only an internet connection.

Using the HP Endpoint Security Controller, HP Sure Recover can reimage a PC even if your whole hard drive has been wiped.



## HP SURE RECOVER<sup>3</sup>

Secure, automated, network-based software image recovery with only an internet connection.

PERFECT FOR  
▶ SCHEDULED REIMAGING  
OF THE ENTIRE FLEET



## HP SURE RECOVER WITH EMBEDDED REIMAGING<sup>4</sup>

No need for a network connection or IT (optional)

RECOVER YOUR OS IN AS LITTLE AS

5 MINUTES

ANYTIME, ANYWHERE<sup>14</sup> ◀



# THE \*\*\*\*\* P@\$\$WORD \*\*\*\*\* IS DEAD

Use of stolen  
credentials is the

# #1

action in data breaches<sup>1</sup>

“...you’ll usually crack  
80-90% [of  
passwords] in  
<24 HRS”<sup>2</sup>

Your data has probably  
already been

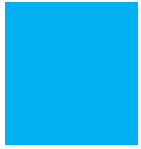
# BREACHED

[HavelBeenPwned.com](http://HavelBeenPwned.com)



1. Verizon 2018 Data Breach Investigation Report, 11<sup>th</sup> edition

2. Brian Contos, "How hackers crack passwords and why you can't stop them", Nov 2017



# HARDENED FINGERPRINT SENSORS

Fast and easy authentication,  
hardened for ultimate security

- Hardened “Match-on-Chip” Technology
- Available on NB, DT, and AiO
- FIPS 201 Certified Sensors  
*(optional accessory)*



## HP Sure View Gen3<sup>2</sup>

# 3 GENERATIONS OF PRIVACY INNOVATION

### HP Sure View Gen1

- ✓ World's First integrated privacy screen<sup>3</sup>

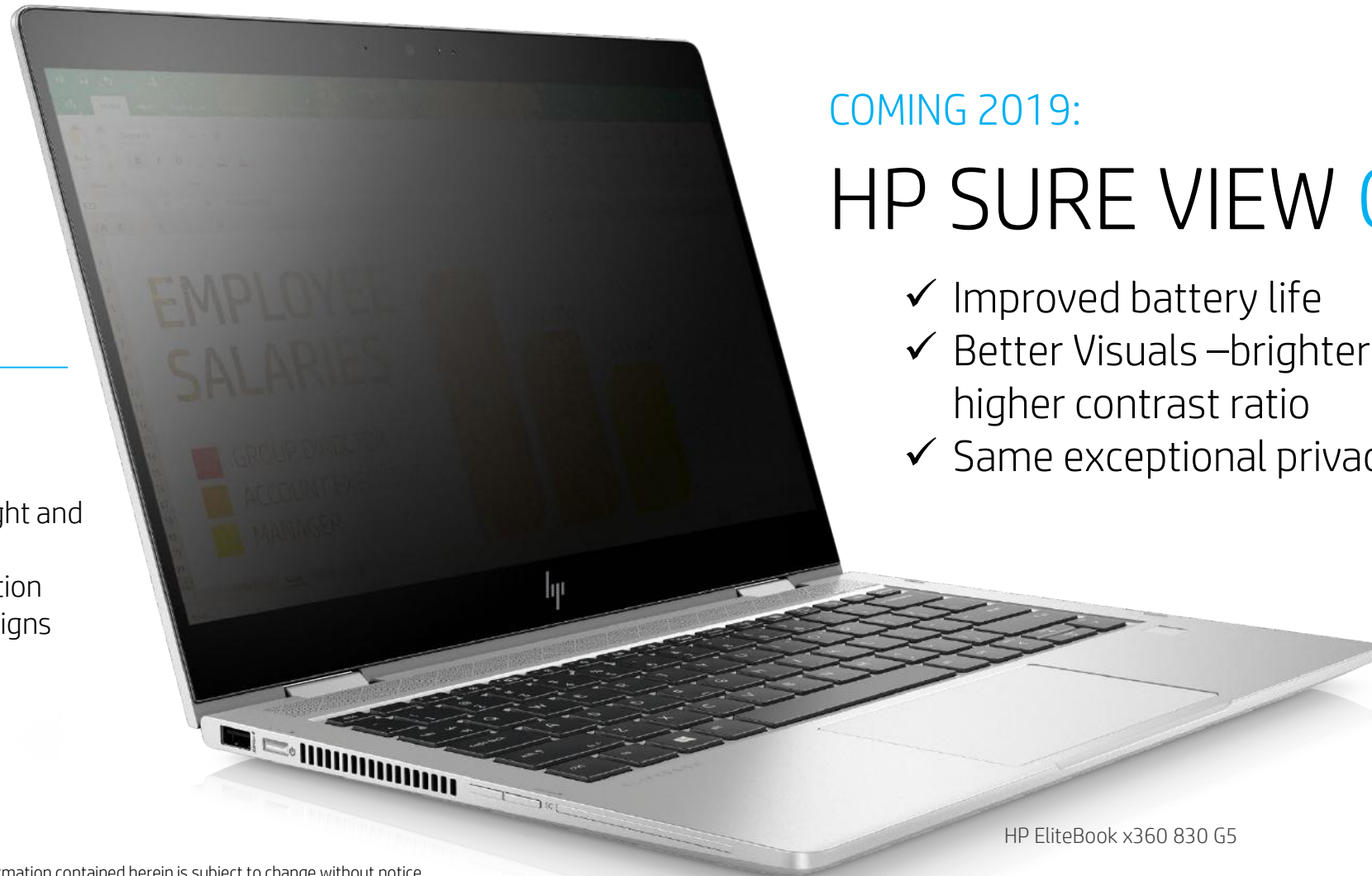
### HP Sure View Gen2

- ✓ Better performance in light and dark environments
- ✓ Improved privacy protection
- ✓ Flexibility for thinner designs
- ✓ One button on and off

COMING 2019:

## HP SURE VIEW GEN 3

- ✓ Improved battery life
- ✓ Better Visuals –brighter display and higher contrast ratio
- ✓ Same exceptional privacy as Gen2



HP EliteBook x360 830 G5



# PRIVACY

— for the —

# OPEN OFFICE



HP EliteBook x360 830 G5

WORLD'S BRIGHTEST  
BUSINESS  
CONVERTIBLE<sup>17</sup>



HP EliteDisplay E243p

WORLD'S FIRST 23.8-  
INCH DISPLAY WITH AN  
INTEGRATED PRIVACY  
SCREEN<sup>18</sup>



HP EliteOne 800 G5 AiO

WORLD'S FIRST AiO  
WITH AN INTEGRATED  
PRIVACY SCREEN<sup>19</sup>



HP EliteDisplay E243d  
23.8-inch Docking Monitor

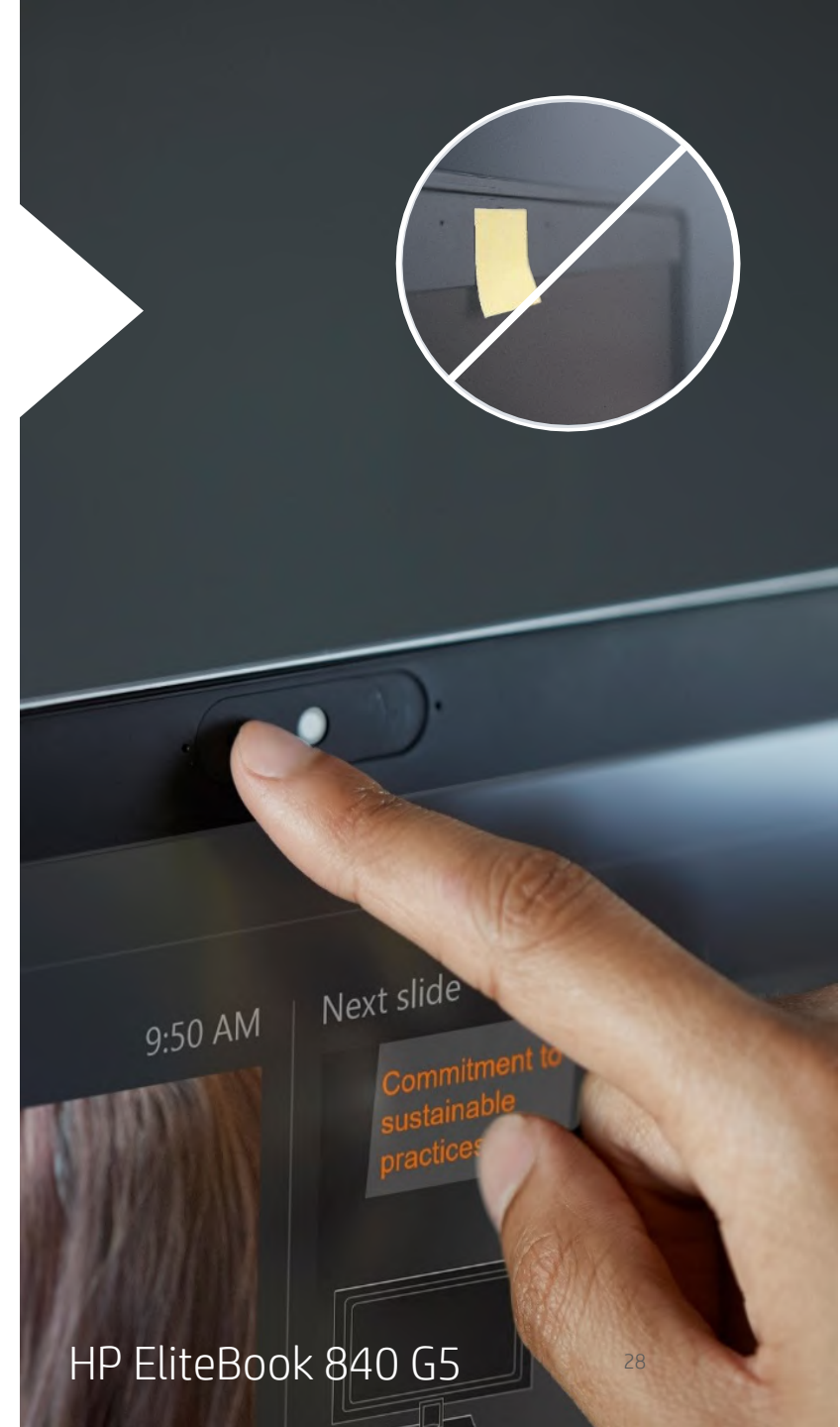
# SAY GOODBYE TO STICKY NOTES

HP PRIVACY CAMERA ON SELECT NOTEBOOKS  
PROTECTS FROM MALICIOUS SURVEILLANCE.



# POP-UP PRIVACY

HP PRIVACY CAMERA FOR AIOs AND  
DISPLAYS PROVIDES A CLEAN LOOK AND  
ADDED PROTECTION



HP EliteBook 840 G5

ATTACKER'S EASIEST WAYS IN TO YOUR ORGANIZATION:

# INSECURE BROWSERS AND MALICIOUS OFFICE FILES



1 IN 13  
WEB REQUESTS LEAD TO  
TO MALWARE<sup>21</sup>



USERS RECEIVE AN AVERAGE OF  
16  
MALEVOLENT EMAILS  
PER MONTH<sup>22</sup>



# HP SURE CLICK: CLICK WITH CONFIDENCE

Open attachments and work online with HP Sure Click<sup>5</sup>



## PROTECT AGAINST MALICIOUS WEBSITES

- ✓ Isolates each tab in a secure virtual container
- ✓ Just close the tab, and the malware is gone
- ✓ Easy to use: integrates with IE and Chrome



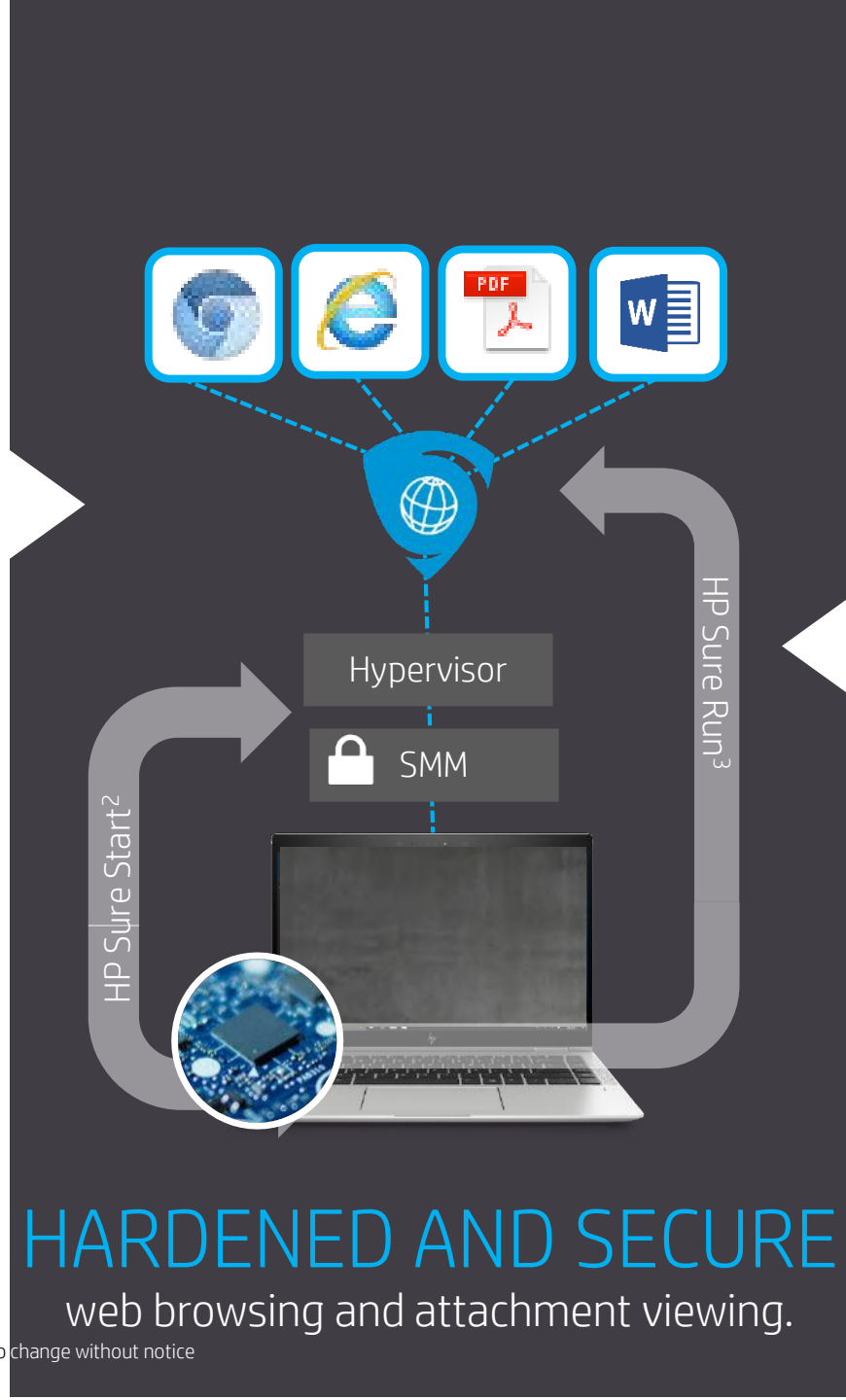
## PROTECT AGAINST BAD ATTACHMENTS

- ✓ Infected files are a common attack vector
- ✓ Protection for Word, Office, Excel and PDF files viewed in read only mode

# ISOLATION THAT CAN TRAP UNKNOWN MALWARE

HP Sure Click<sup>5</sup> ISOLATES  
browsers and files in  
SECURE VIRTUAL  
CONTAINERS.

Because it doesn't rely on  
recognizing malware, it can  
protect against  
ZERO DAY ATTACKS



HARDENED AND SECURE  
web browsing and attachment viewing.

# HARDWARE- REINFORCED

BY HP's ENDPOINT  
SECURITY CONTROLLER

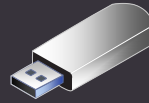
HP Sure Run<sup>2</sup> ensures HP  
Sure Click<sup>5</sup> is always up and  
running.

HP Sure Start<sup>1</sup> protects the  
SMM, which is the heart of  
all virtualization technology

# MALWARE THREATS ENTER IN 3 WAYS



BROWSER



USB



NETWORK/ OTHER

Office Files

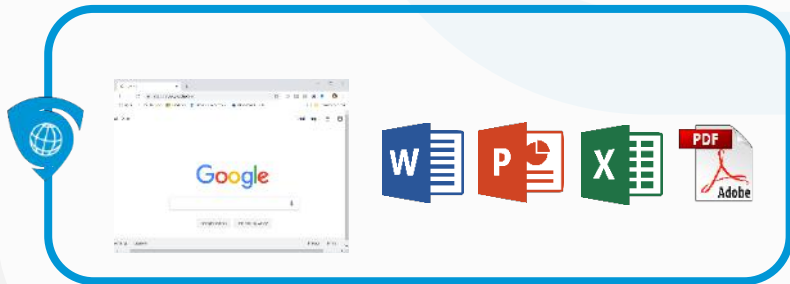
Other Files



## HP SURE CLICK<sup>5</sup>

Protects via **AUTOMATIC ISOLATION**

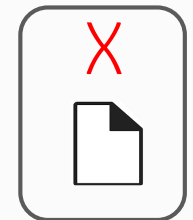
Malware attempting to enter the PC via browser or office documents (introduced via browser or USB) are **automatically isolated** inside Sure Click Micro-VM



## HP SURE SENSE<sup>7</sup>

Protects via **INTELLIGENT SCANNING**

Malware entering the host PC in other ways, including non-office files or the corporate network, are **automatically scanned** and malicious files are quarantined



QUARANTINED



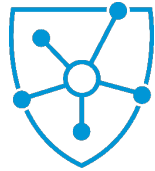
OVER  
**350,000**  
NEW PIECES OF MACHINE  
GENERATED MALWARE  
EVERY DAY<sup>8</sup>

HACKERS USE  
**ARTIFICIAL  
INTELLIGENCE**  
TO DESIGN MORE  
SOPHISTICATED ATTACKS

ZERO-DAY ATTACKS ARE  
**4X**  
MORE LIKELY TO  
COMPROMISE  
ORGANIZATIONS<sup>9</sup>

LEGACY PROTECTION OFTEN  
**WILL NOT CATCH ZERO-DAY ATTACKS**





# HP SURE SENSE<sup>5</sup>

HARNESSING  
**DEEP LEARNING**  
FOR BUILT-IN PROTECTION AGAINST  
**NEVER BEFORE SEEN**  
ATTACKS





## LEGACY ANTIVIRUS: SIGNATURE-BASED

Antivirus checks new files  
against a known list of malware



KNOWN  
ATTACKS  
ONLY



TIME  
INTENSIVE



FREQUENT  
UPDATES



## AI: MACHINE LEARNING

AI trained to recognize  
common features of malware



SOME NEW  
ATTACKS



FEATURE  
ENGINEERING



FREQUENT  
UPDATES



## AI: DEEP LEARNING

AI trained on raw data so it can  
recognize malware instinctively



KNOWN AND  
UNKNOWN  
ATTACKS



WORKS IN  
MILLISECONDS

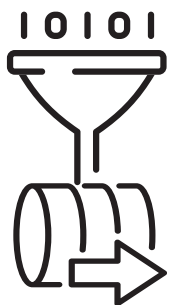


MINIMAL  
UPDATES



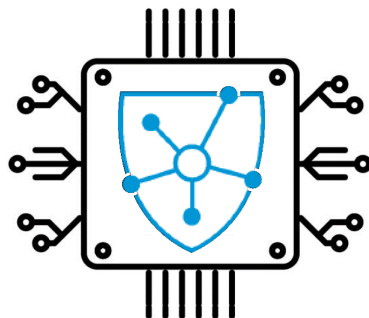
# CREATING HP SURE SENSE<sup>5</sup>

FROM TERABYTES OF INSIGHTS TO MEGABYTES OF INSTINCT



## TRAIN THE BRAIN

Patented deep learning neural network trained to recognize attacks using HUNDREDS OF MILLIONS of malware samples.



## CREATE THE AGENT

Brain distilled into the lightweight HP Sure Sense agent, turning TeraBytes of learning into MegaBytes of instinct.



## PROTECT THE ENDPOINT

HP Sure Sense agent scans files and quarantines likely malware – with minimal performance impact or need for updates.

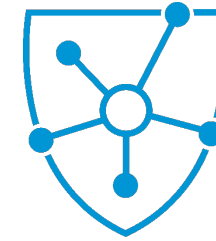


# LAYERS OF DEFENSE FOR COMPLETE PROTECTION

EVERY COMPANY NEEDS:

HP DELIVERS:





# HP SURE SENSE<sup>5</sup>

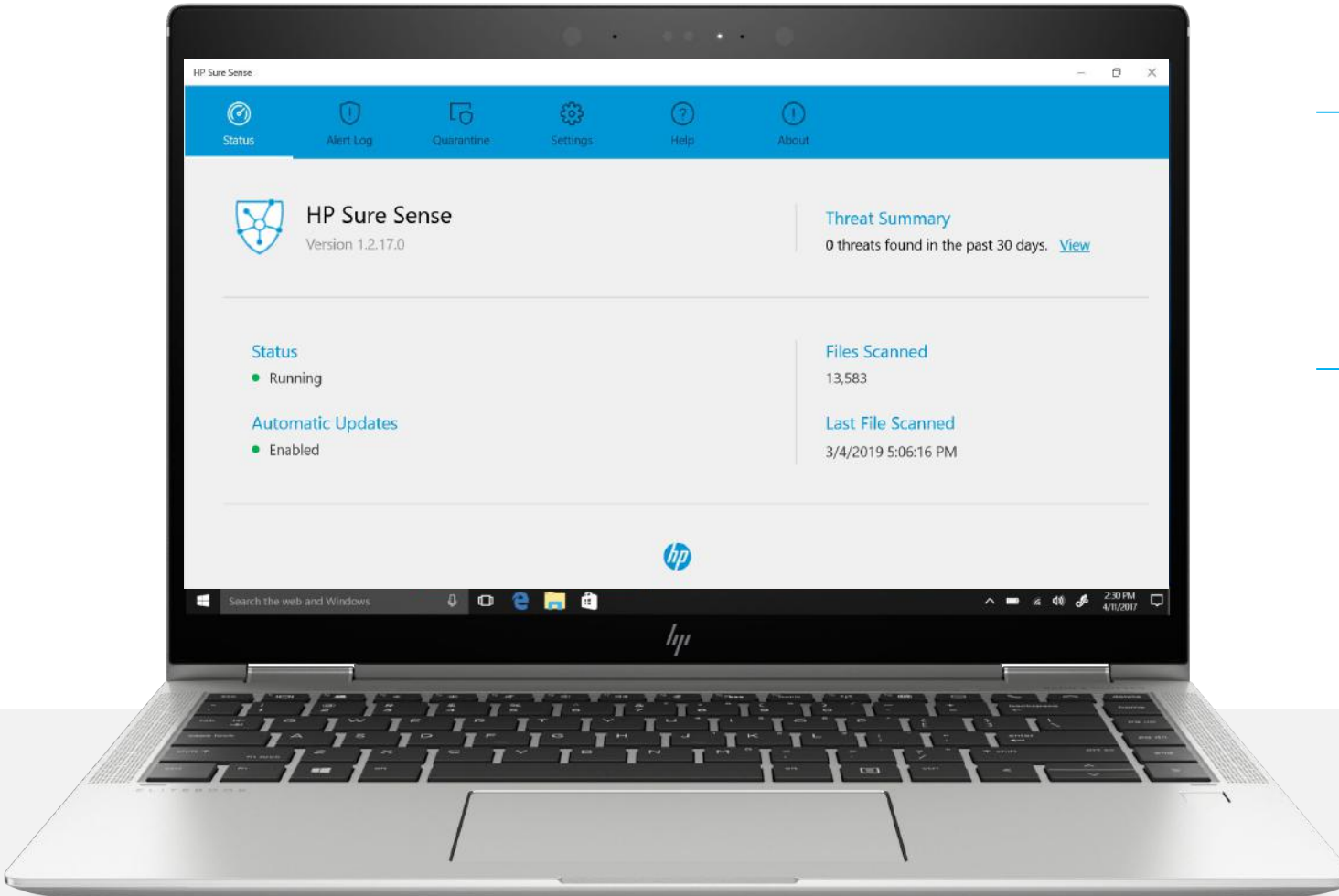
HARNESS THE POWER OF DEEP LEARNING

Protect against **never before seen** attacks before they happen

Works **online or offline**, with minimal updates

**Minimal performance impact**

BUILT IN PROTECTION AGAINST  
**NEVER BEFORE SEEN**  
ATTACKS



MODERN THREATS DEMAND RESILIENCE.

HP MAKES THE WORLD'S MOST RESILIENT PCs<sup>12</sup>

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HP's **UNIQUE HARDWARE** ENABLES OUR PCs TO SELF-HEAL FROM THE FIRMWARE UP.

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MALWARE IS CHANGING RAPIDLY.


HP SURE SENSE AI USES DEEP NEURAL NETS TO CATCH ZERO DAY ATTACKS.

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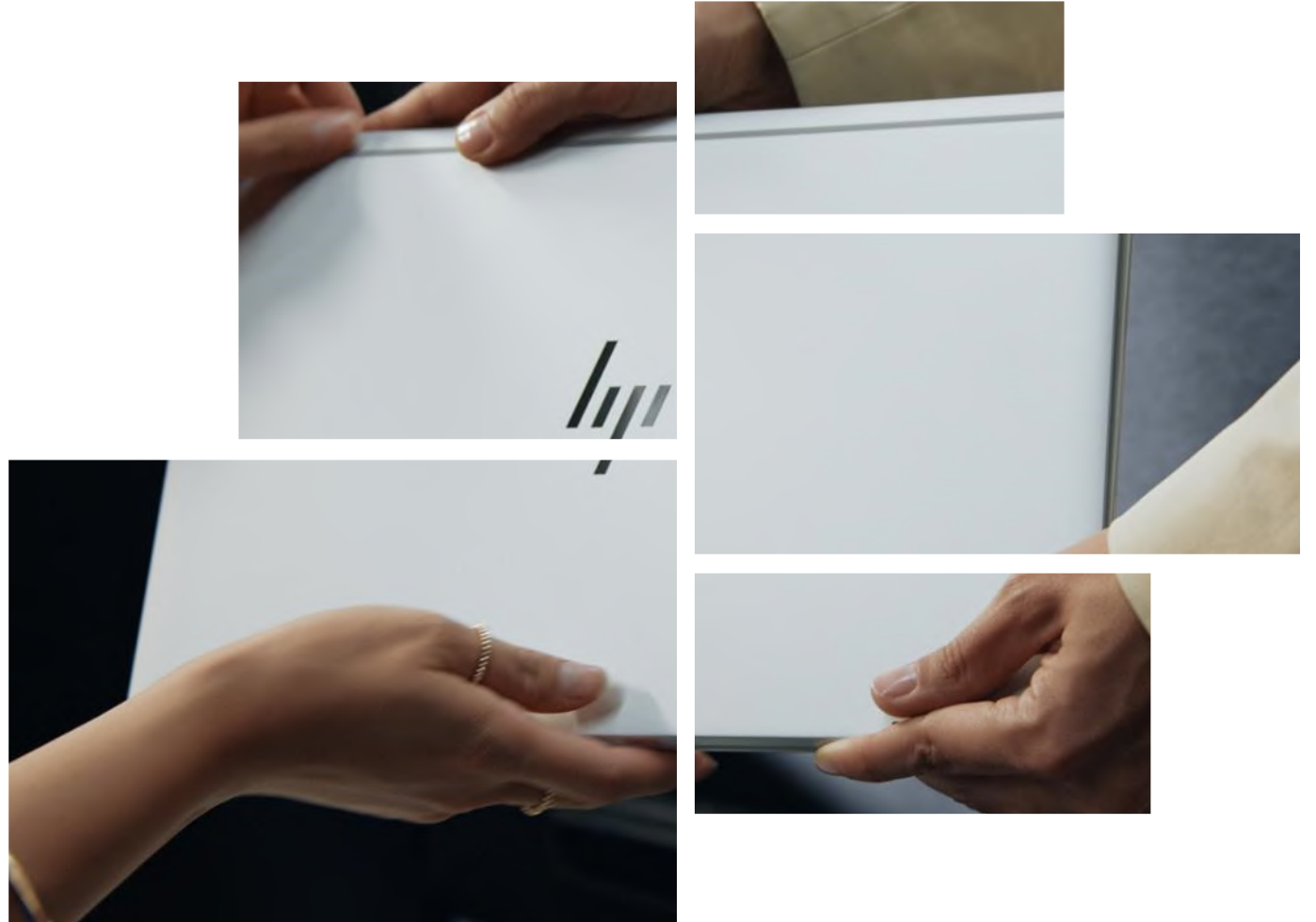
ENFORCEMENT AND FEEDBACK ARE CRITICAL FOR PROTECTION.

HP DaaS PROACTIVE SECURITY<sup>24</sup> PROVIDES ENFORCEMENT, ANALYSIS, AND MONITORING FOR YOUR ENTIRE FLEET.

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# EVERY PC PURCHASE IS A SECURITY DECISION



# Are you concerned about printer security? You should be.

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Diane Stilwell  
HP Print Specialist  
October 2019



# Risks and costs of unprotected printing environments

Cybercrime, internal breaches, compliance infringement, and more can hurt your business

94%

of financial firms say copier/printer security is important or very important\*

43%

of companies ignore printers in their endpoint security practices\*

61%

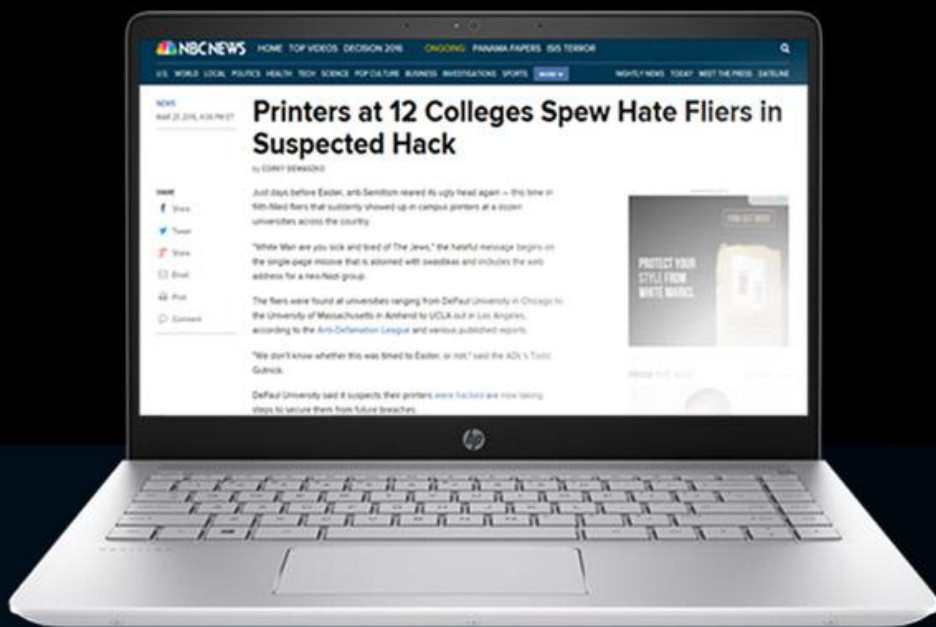
of organizations reported a print-related data breach in the past year\*

\$11.7M

average annualized cost of cybercrime\*

# The risk is real

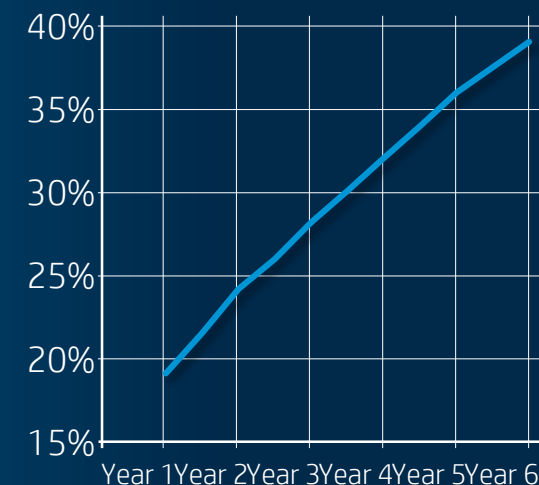
Real-world events reveal an alarming trend



Hacker claims to have within minutes identified roughly

## 29,000 printers

that were connected to the Internet and could be exploited.\*



Percent of breaches over time

The percentage of breaches involving a compromised end point device has more than doubled in the last 6 years\*

# Today's printers act a whole lot like PCs

Yet only 16% of companies think printers are a high security risk.\*



Hardware



Email



Network  
access



Firmware  
and software

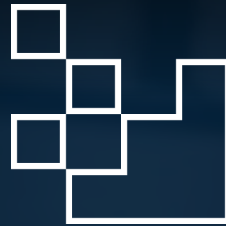


Internet

# Printing security requires an end-to-end approach



Device



Data



Document



Fleet security monitoring and compliance



Security services

# Secure the Document

IP\_USER  
IP\_USER  
IP\_USER  
IP\_USER  
Data arch  
IP\_USER  
IP\_USER  
IP\_USER



**Workplace privacy**  
Maintain your print  
security defenses



**Compliance**  
Secure document  
workflows



**Anti-counterfeit**  
Deter document  
tampering and fraud

# Secure the Data

A terminal window with a green monospace font on a dark background. The title bar reads "[--terminal]". The content shows a list of transactions with columns for ID, a four-character alphanumeric code, and a monetary value.

TRANSACTION, ID	:	CODE	VALUE
TRANSACTION, ID	:	QVNJWKR	\$5285.2
TRANSACTION, ID	:	JRYXN5T	\$594
TRANSACTION, ID	:	BSH38U	\$516
TRANSACTION, ID	:	JEBTCH	\$3532
TRANSACTION, ID	:	ZMRPEML	\$78
TRANSACTION, ID	:	9JF5NHF	\$
TRANSACTION, ID	:	DQUDTSM	\$34
TRANSACTION, ID	:	BLHRCF	\$5
TRANSACTION, ID	:	SM8TAFJ	
TRANSACTION, ID	:	...	



Authenticate users  
Prevent unauthorized access



Encrypt the data  
Prevent data theft and alteration



Monitor for threats  
Identify issues and self-heal

# Secure the Device

## HP Sure Start

Keeps the BIOS safe  
and self-heals

## Whitelisting

Keeps the  
firmware safe

## Run-time intrusion detection

Monitors run-time  
operations and self-  
heals

## HP Connection Inspector

Monitors network  
connections  
and self-heals

---

## HP Security Manager

Checks and remediates printer settings

# Secure printing competitive comparison

## Enterprise-class printers and MFPs



### Device security



### Data protection

	HP	Xerox	Lexmark	Ricoh	Konica Minolta	Kyocera	Canon	Brother
Sure Start (BIOS protection with self-healing)	•		*Partial	*Partial	*Partial			
Whitelisting	•	•	•	•	•			
Run-time intrusion detection (Self Healing)	•							
Network Anomaly Intrusion Detection (Self Healing)	•							
Security policy deployment and remediation	•							
Integration with Microsoft SCCM (System Center Configuration Manager)	•							
Access control	•	•	•	•	•	•	•	•
Encrypted communications	•	•	•	•	•	•	•	•
TPM availability	•			•	•		•	
Embedded encrypted hard drives w/ secured storage erase	•	•	•	Optional	•	•	•	

\*Partial – BIOS Protection but lacks Self Healing

Based on HP review of 2017 published security features of competitive in-class printers. Only HP offers a combination of security features that can monitor to detect and automatically stop an attack then self-validate software integrity in a reboot. For a list of printers, visit: [hp.com/go/PrintersThatProtect](https://www.hp.com/go/PrintersThatProtect). For more information: [hp.com/go/printersecurityclaims](https://www.hp.com/go/printersecurityclaims).

# Don't just take our word for it...

## Third-party security software certification

Security Innovation is a leader in software security, and conducts an in-depth security assessment for solutions. Below are the HP compatible solutions that are certified or mid-certification.

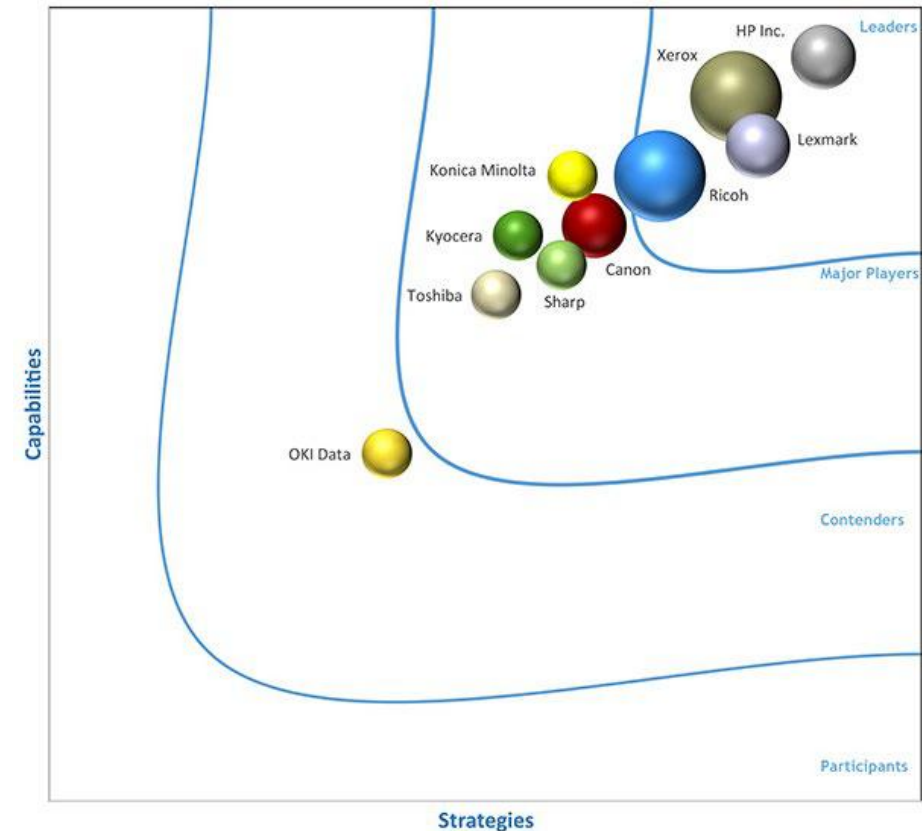
### Certified

- HP FutureSmart Firmware
- HP JetAdvantage Security Manager
- HP Access Control
- HP JetAdvantage Secure Print
- HP JetAdvantage Insights
- PaperCut

### Mid-certification

- HP Roam
- HP Capture & Route
- UDOX

## Leading security solutions and services



HP named a Leader in IDC MarketScape WW Security Solutions and Services Hardcopy 2017 Vendor assessment

IDC MarketScape vendor analysis model is designed to provide an overview of the competitive fitness of ICT (information and communications technology) suppliers in a given market. The research methodology utilizes a rigorous scoring methodology based on both qualitative and quantitative criteria that results in a single graphical illustration of each vendor's position within a given market. The Capabilities score measures vendor product, go-to-market, and business execution in the short-term. The Strategy score measures alignment of vendor strategies with customer requirements in a 3- to 5-year timeframe. Vendor market share is represented by the size of the circles.

# Common imaging and printing vulnerability points

**BIOS and firmware**  
Compromised firmware can open a device and network to attack



**Storage media**  
Printers store sensitive information that can be at risk

**Management**  
Undetected security gaps put data at risk



**Capture**  
Unsecured MFPs can be used to send scans anywhere

**Network**  
Jobs can be intercepted as they travel to/from a device



**Input tray**  
Special media can be tampered with or stolen

**Control panel**  
Users can exploit device settings and functions



**Output tray**  
Abandoned documents can fall into the wrong hands

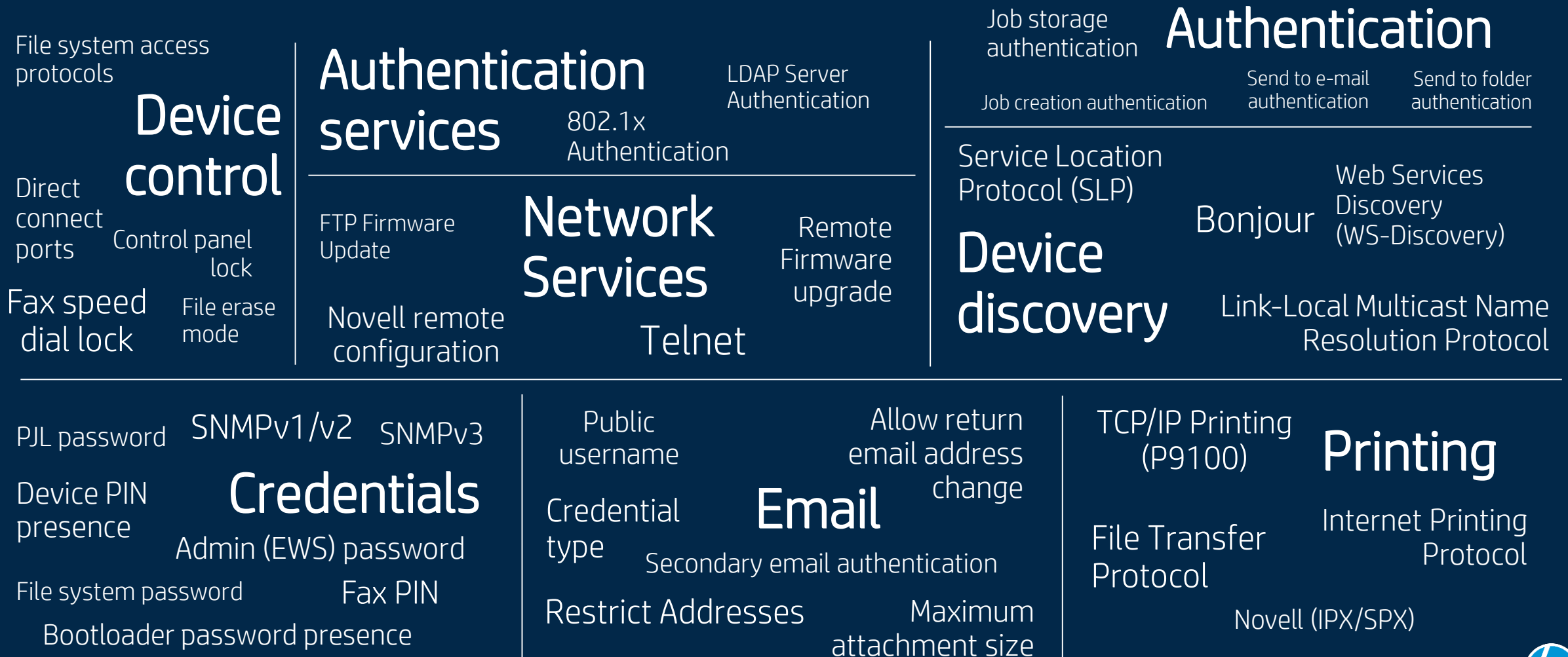
**Ports and protocols**  
Unsecured ports (USB or network) or protocols (FTP or Telnet) put device at risk



**Mobile printing**  
On-the-go employees may expose data

# Types of policy settings

250+ security settings in HP enterprise MFPs



# HP JetAdvantage Security Solutions

Video: [click screen to play](#)



# Getting started



Engage an HP Security Consultant

Bring in the experts



Run an assessment

Know your risks



Develop a plan

Secure your print fleet

# HP brings the PageWide Web Press to the office

**Over 170 billion pages printed**



HP PageWide  
the affordable, fast color printing technology

# THE PAGEWIDE DIFFERENCE

**AFFORDABLE  
COLOR**

Step Up From Mono

**SIMPLE DESIGN**

Fewer Moving Parts

**FASTEST**

Up to 2X Faster

**ENVIRONMENTAL**

Less Energy  
Consumption



# PageWide print modes

## BIG cost per page savings vs. Color Laser

### Professional Color

Laser-like quality on most office papers



Up to **20%** lower cost per page

### General Office Color

Low cost color for internal documents  
~20% less ink consumption



Up to **40%** lower cost per page

### Accent Color

0.5% color coverage at mono prices



Up to **90%** lower cost per page

# The PageWide technology advantage

Laser technology requires more parts (core technology and LLCs):

- Laser unit (incl. mirror, motor, etc.)
- Fuser unit
- Transfer belt
- Developer units
- Imaging drums
- Doctor blades
- Pressure rollers
- etc.













The PageWide advantage: 70% fewer parts / costs



➔ *More parts drive complexity... And costs!*

# HP PageWide Portfolio

[Return to Menu](#)

PageWide Pro		PageWide Enterprise	
Up to 10 people		Up to 15 people	
Color SF	 <p>HP PageWide Pro 452dw – <b>972A/X</b></p>	 <p>HP PageWide Pro 552dw – <b>972A/X</b></p>	 <p>HP PageWide Pro 755dn – <b>990A/X</b></p>
			 <p>HP PageWide Enterprise Color 556dn – <b>981A/X/Y</b></p>
RMPV 750 to 4.5K		2K to 7.5K	
Color MFP	 <p>HP PageWide Pro MFP 477dn, dw – <b>972A/X</b></p>	 <p>HP PageWide Pro MFP 577dw – <b>972A/X</b></p>	 <p>HP PageWide Pro MFP 774dn, dns – <b>990A/X</b></p>
		 <p>HP PageWide Pro MFP 777z – <b>990A/X</b></p>	 <p>HP PageWide Pro MFP 779dn, dns – <b>990A/X</b></p>
RMPV 750 to 4.5K		2.5K to 25K	
		 <p>HP PageWide Ent Color MFP 586dn, f, z – <b>981A/X/Y</b></p>	 <p>HP PageWide Ent Color MFP 780dn, dns – <b>982A/X</b></p>
		 <p>HP PageWide Enterprise Color Flow MFP 785f, zs – <b>982A/X</b></p>	

Numbers in blue (e.g. 85A) are cartridge selectability numbers

# PageWide Money-Back Guarantee

Love it, or your money back!

- Buy any qualifying HP PageWide printer and test it within your business. If you're not 100% convinced of the benefits, return the product to HP - within 120 days - for a full refund
- Registration of the new HP PageWide printer is required in order to participate and must be done within (21) days of the purchase
- If you are not completely satisfied, refer to your registration email and click on the link inside for a no hassle return. Apply to return the product within 120 calendar days after purchase date (not registration date)
- Must ship the product back in the original packaging
- Reseller does not need to play a role in the process. HP will provide the free shipping label and will issue the refund of the purchase price directly to the customer. Reseller would maintain all financial benefits of the sale
- Effective May 1<sup>st</sup> through October 31<sup>st</sup> 2019

Program URL ➡ [www.hp.com/go/buyandtry](http://www.hp.com/go/buyandtry)















SKU	Product Description	Series
D3Q16A	HP PageWide Pro 452dw Printer	HP PageWide Pro
D3Q20A	HP PageWide Pro MFP 477dw	HP PageWide Pro
D3Q19A	HP PageWide Pro MFP 477dn	HP PageWide Pro
D3Q17A	HP PageWide Pro 552dw Printer	HP PageWide Pro
D3Q21A	HP PageWide Pro MFP 577dw	HP PageWide Pro
J9V82A	HP PageWide Managed P57750dw MFP	HP PageWide Pro
4PZ43A	HP PageWide Pro 774dn MFP	HP PageWide Pro
4PZ44A	HP PageWide Pro 774dns MFP	HP PageWide Pro
4PZ45A	HP PageWide Pro 779dn MFP	HP PageWide Pro
4PZ46A	HP PageWide Pro 779dns MFP	HP PageWide Pro
4PZ47A	HP PageWide Pro 755dn	HP PageWide Pro
G1W39A	HP PageWide Enterprise MFP 586dn	HP PageWide Enterprise
G1W40A	HP PageWide Enterprise MFP 586f	HP PageWide Enterprise
G1W41A	HP PageWide Enterprise Flow MFP 586z	HP PageWide Enterprise
G1W46A	HP PageWide Enterprise 556dn Printer	HP PageWide Enterprise
L3U42A	HP PageWide Managed MFP E58650dn	HP PageWide Enterprise
L3U43A	HP PageWide Managed Flow MFP E58650z	HP PageWide Enterprise
L3U44A	HP PageWide Managed E55650dn	HP PageWide Enterprise
J7Z04A	HP PageWide Enterprise 765dn printer	HP PageWide Enterprise
J7Z09A	HP PageWide Enterprise 780dn MFP	HP PageWide Enterprise
J7Z10A	HP PageWide Enterprise 780dns MFP	HP PageWide Enterprise
J7Z11A	HP PageWide Enterprise 785f MFP	HP PageWide Enterprise
J7Z12A	HP PageWide Enterprise 785zs MFP	HP PageWide Enterprise
Z5G75A	HP PageWide Enterprise Flow 785z+ MFP	HP PageWide Enterprise



# HP LaserJet and Samsung Portfolio

[Return to Menu](#)














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1-5 users3-105-15 users10-30 users25+											
Mono SF	 HP LJ Pro M102w 17A			 HP LJ Pro M203dw 30A/X			 SL-M3820DW D203S/L/E			 HP LJ Pro M404n, dne, dw 26A/X	
	 SL-M4020ND D203S/L/E/U			 HP LJ Pro 501dn 87A/X			 HP LJ Ent M507n, dn, x 87A/X			 SL-M4530ND D304S/L/E	
Mono MFP	 HP LJ Ent M607n, dn 37A			 HP LJ Ent M608n, dn, x 37A/X/Y			 HP LJ Ent M609dn, x 37A/X/Y			 HP LJ Ent M712n, dn, xh 14A/X	
	 HP LJ Ent M806dn, x+ 25X			 HP LJ Ent MFP M631h, z 37A/X/Y			 HP LJ Ent MFP M632h, fht, z 37A/X/Y			 HP LJ Ent MFP M633fh, z 37A/X/Y	
Color SF	 HP LJ Pro M254dw 202A/X			 SL-C3010DW K503S/CMY503S			 HP LJ Pro M454nw, dn, dw 410A/X			 HP LJ Ent CP5225n, dn 307A	
	 HP LJ Ent M553n, dn, x 508A/X			 HP LJ Ent M652n, dn 655A/656X			 HP LJ Ent M653dn, x, dh 655A/656X			 HP LJ Ent M751, dn, xh 650A	
Color MFP	 HP LJ Ent M855dn, xh 826A/828A			 HP LJ Ent MFP M681dh, f, f flow, z 655A/657X			 HP LJ Ent MFP M682z 655A/657X			 HP LJ Ent MFP M775dn, f, z, z+ 651A	
	 HP LJ Ent Flow M880z, z+ 827A/828A			 HP LJ Pro MFP M180nw 204A/M205A			 HP LJ Pro MFP M281fdw 202A/X			 SL-C3060FW K503S/CMY503S	
RMPV150 – 1.5K250 – 2.5K1.5K – 3.5K750 – 4K1.5K – 3.5K2K – 6K2K – 7.5K2K – 15K5K – 20K5K – 25K5K – 30K5K – 20K10K – 50K150 – 1.5K250 – 2.5K1.5K – 3.5K750 – 4K1.5K – 3.5K2K – 6K2K – 7.5K2K – 15K5K – 30K5K – 30K5K – 30K5K – 20K15K – 50K150 – 2.5K1K – 7K750 – 4K1.5K – 5K2K – 6K2K – 14K2K – 17K2.5K – 13K4K – 25K150 – 1.5K150 – 2.5K1K – 7K750 – 4K1.5K – 4K2K – 7.5K2K – 14K2K – 17K2.5K – 7.5K5K – 25K											

Numbers in blue (e.g. 85A) are cartridge selection numbers.

# HP OfficeJet Portfolio


 = for home (consumer)


HP OfficeJet Portfolio						
AiO	 HP OfficeJet 3830 HP 63/X	 HP OfficeJet 5255 HP 63/X	 HP OfficeJet Pro 6968 HP 902/X – 906XL	 HP OfficeJet Pro 6978 AiO HP 902/X – 906	 HP OfficeJet Pro 8720 AiO HP 952/X	 HP OfficeJet Pro 9010 AiO HP 962/X – 956X
						 OfficeJet Pro 9020 AiO HP 962/X – 956X
RMPV	1 to 4	1 to 4	2 to 8	2 to 8	250 to 1,5	250 to 2,0
Printer	 HP OfficeJet Pro 6230 HP 934 /X – 935/X	 HP OfficeJet Pro 8210 HP 952/X				
RMPV	2 to 8	250 to 1,250				
Mobile/Wide	 HP OfficeJet 200 Mobile HP 62/X	 HP OfficeJet 250 Mobile AiO HP 62/X	 HP OfficeJet 7510 Wide Format AiO HP 932/X – 933/X	 HP OfficeJet Pro 7720 Wide Format AiO HP 952/X	 HP OfficeJet Pro 7740 Wide Format AiO HP 952/X	
RMPV	1 to 3	1 to 3	2 to 8	250 to 1,5	250 to 1,5	
























Numbers in blue (e.g. 63/X) are cartridge selectability numbers

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# HP ScanJet Award Winning portfolio

 Network Ready out of the box

 Wireless Optional Accessory to scan from a mobile phone or tablet  
Option

Document Management (Department)	<div data-bbox="216 292 293 392">  </div> <div data-bbox="305 307 573 449">  </div> <div data-bbox="318 478 573 564"> <p>Flow 7500 \$1,499 L2725B</p> </div> <div data-bbox="598 257 904 564"> <ul style="list-style-type: none"> <li>• 50 ppm / 100 ipm</li> <li>• Legal scanner bed</li> <li>• 100 sheet ADF</li> <li>• 3000 Daily Duty Cycle</li> <li>• HP EveryPage</li> <li>• HP SDSS software</li> <li>• TWAIN SDK ISIS</li> <li>• Cerner Certified</li> <li>• Mac Support</li> </ul> </div> <div data-bbox="891 278 980 371">  </div> <div data-bbox="904 442 980 492"> <p>Kofax VRS</p> </div> <div data-bbox="1006 192 1108 335">  </div> <div data-bbox="1006 264 1286 492">  </div> <div data-bbox="930 499 1363 585"> <p>Flow 8500 fn2 Digital Sender \$2,999 L2762A</p> </div> <div data-bbox="1414 264 1668 621"> <ul style="list-style-type: none"> <li>• 100 ppm / 200 ipm</li> <li>• 150 sheet ADF</li> <li>• 10,000 Daily DC</li> <li>• FutureSmart</li> <li>• HP EveryPage</li> <li>• Web Jetadmin</li> <li>• HP Scan software</li> <li>• OXP SDK</li> <li>• TAA compliant</li> <li>• Cerner Certified</li> <li>• Mac Support</li> </ul> </div> <div data-bbox="1719 264 1809 406">  </div> <div data-bbox="1719 478 1809 528"> <p>Kofax VRS</p> </div> <div data-bbox="1796 192 1898 335">  </div> <div data-bbox="1809 249 2191 471">  </div> <div data-bbox="1860 478 2140 564"> <p>Flow N9120 fn2 \$3,999 L2763A</p> </div> <div data-bbox="2216 242 2446 592"> <ul style="list-style-type: none"> <li>• 120 ppm / 240 ipm</li> <li>• 200 sheet ADF</li> <li>• 20,000 Daily DC</li> <li>• 11x17 Media</li> <li>• FutureSmart</li> <li>• HP EveryPage</li> <li>• Web Jetadmin</li> <li>• HP Scan software</li> <li>• OXP SDK</li> <li>• TAA Compliant</li> <li>• Cerner Certified</li> <li>• Mac Support</li> </ul> </div>
Document Management (Workgroup)	<div data-bbox="203 763 280 849">  </div> <div data-bbox="305 656 471 821">  </div> <div data-bbox="280 835 522 921"> <p>Flow 5000 s4 \$799 L2755A</p> </div> <div data-bbox="509 642 764 885"> <ul style="list-style-type: none"> <li>• 50 ppm / 100 ipm</li> <li>• 80 sheet ADF</li> <li>• 6,000 Daily DC</li> <li>• HP EveryPage</li> <li>• HP SDSS software</li> <li>• TWAIN SDK ISIS</li> <li>• Cerner Certified</li> </ul> </div> <div data-bbox="853 728 942 878">  </div> <div data-bbox="955 763 1031 813"> <p>Kofax VRS</p> </div> <div data-bbox="968 835 1031 885">  </div> <div data-bbox="942 621 1057 721">  </div> <div data-bbox="1095 656 1261 821">  </div> <div data-bbox="1057 835 1286 921"> <p>Flow 7000 s3 \$999 L2757A</p> </div> <div data-bbox="1286 642 1541 921"> <ul style="list-style-type: none"> <li>• 75 ppm / 150 ipm</li> <li>• 80 sheet ADF</li> <li>• 7,500 Daily DC</li> <li>• HP EveryPage</li> <li>• HP SDSS software</li> <li>• TWAIN SDK ISS</li> <li>• TAA compliant</li> <li>• Cerner Certified</li> </ul> </div> <div data-bbox="1617 621 1707 771">  </div> <div data-bbox="1719 628 1796 685">  </div> <div data-bbox="1719 806 1796 856"> <p>Kofax VRS</p> </div> <div data-bbox="1809 642 2089 806">  </div> <div data-bbox="1834 821 2076 913"> <p>Pro 4500 fn1 \$899 L2749A</p> </div> <div data-bbox="2102 592 2407 935"> <ul style="list-style-type: none"> <li>• 30 ppm / 60 ipm</li> <li>• 50 sheet ADF</li> <li>• 4,000 Daily DC</li> <li>• Network scanner</li> <li>• Wi-Fi and Wi-Fi Direct</li> <li>• HP EveryPage</li> <li>• HP Scan software</li> <li>• TWAIN SDK ISIS</li> <li>• TAA Compliant</li> <li>• Mac Support</li> </ul> </div>
Small Work Team	<div data-bbox="293 1042 471 1156">  </div> <div data-bbox="293 1192 522 1278"> <p>Pro 2000 s1 \$329 L2759A</p> </div> <div data-bbox="509 1021 764 1235"> <ul style="list-style-type: none"> <li>• 30 ppm / 60 ipm</li> <li>• 50 sheet ADF</li> <li>• 2,000 Daily DC</li> <li>• HP Scan Software</li> <li>• TWAIN SDK ISIS</li> <li>• Mac Support</li> </ul> </div> <div data-bbox="802 949 891 1092">  </div> <div data-bbox="815 1113 891 1163">  </div> <div data-bbox="815 1163 891 1199"> <p>Option</p> </div> <div data-bbox="904 1006 1070 1163">  </div> <div data-bbox="891 1192 1121 1278"> <p>Pro 3000 s3 \$479 L2753A</p> </div> <div data-bbox="1121 985 1350 1263"> <ul style="list-style-type: none"> <li>• 35 ppm / 70 ipm</li> <li>• 50 sheet ADF</li> <li>• HP EveryPage</li> <li>• 3,500 Daily DC</li> <li>• TWAIN SDK ISIS</li> <li>• TAA Compliant</li> <li>• Cerner Certified</li> <li>• Mac Support</li> </ul> </div> <div data-bbox="1363 1042 1630 1163">  </div> <div data-bbox="1388 1192 1617 1278"> <p>Pro 2500 f1 \$299 L2747A</p> </div> <div data-bbox="1643 1021 1898 1263"> <ul style="list-style-type: none"> <li>• 20 ppm / 40 ipm</li> <li>• 50 sheet ADF</li> <li>• 1,500 Daily DC</li> <li>• HP Scan software</li> <li>• TWAIN SDK</li> <li>• TAA Compliant</li> <li>• Mac Support</li> </ul> </div> <div data-bbox="1949 1035 2216 1163">  </div> <div data-bbox="1974 1192 2204 1278"> <p>Pro 3500 f1 \$549 L2741A</p> </div> <div data-bbox="2242 1021 2497 1292"> <ul style="list-style-type: none"> <li>• 25 ppm / 50 ipm</li> <li>• 50 sheet ADF</li> <li>• 3,000 Daily DC</li> <li>• HP EveryPage</li> <li>• HP Scan software</li> <li>• TWAIN SDK ISIS</li> <li>• TAA Compliant</li> <li>• Mac Support</li> </ul> </div>

**Note:** ppm = pages scanned per minute ipm = images per minute – all scanners can scan both sides of the page at the same time  
DC = duty cycle or pages per day ADF = auto document feeder HP EveryPage = ultrasonic sensor that detects misfeeds

# Thank You!

# Questions?

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Diane Stilwell  
HP Print Specialist  
[Diane.Stilwell@HP.com](mailto:Diane.Stilwell@HP.com)



# ● MYTH:

The industry is prepared for firmware attacks: everyone has BIOS/firmware security.

# FACT:

While there have been some improvements in industry standards for BIOS protection, **HP Sure Start is STILL the world's only self healing BIOS** – and your best protection against firmware attacks



# WHO NEEDS RESILIENCY? EVERYONE. ON EVERY DEVICE.

HP's security is built in and locally enabled, and also scalable and manageable.



Individuals



Small Businesses



Large Corporations



# THANK YOU

