



HP WOLF SECURITY

RESILIENT SECURITY

INFLUENCED BY ZERO
TRUST.

HARDENED IN EVERY PC.





HP WOLF SECURITY

MOST SECURE AND MANAGEABLE PCs



Sure Start



Sure Run



Sure Admin



Sure Recover



Tamper
Lock



Sure Click



Sure Sense



Sure View
(optional)

EVERY ORGANIZATION SHOULD HAVE A PLAN FOR RESILIENCE

PROTECT



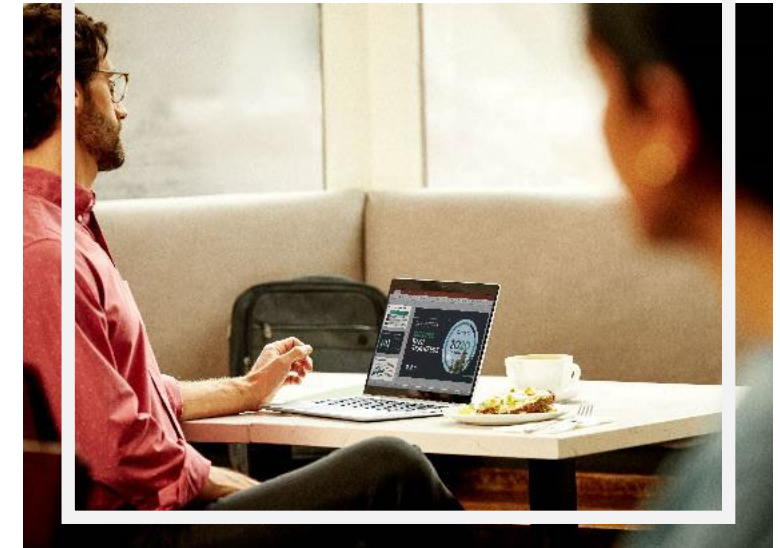
HOW LONG
would it take to recover
1,000 PCs?

DETECT



HOW DO YOU PROTECT
against malware
you've never seen before?

RECOVER



HOW DO YOU KNOW
when your fleet is
under attack?

HP WOLF SECURITY

IS BUILT USING

ZERO TRUST PRINCIPLES



HARDWARE-ENFORCED RESILIENCY

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



ADVANCED LEVELS OF SECURITY

Advanced security with application isolation and AI Deep Learning technology



“Zero Trust is a core set of principles in the design and operation of systems and their security.”



HP WOLF SECURITY

HP WOLF SECURITY FOR BUSINESS

HP CLIENT SECURITY MANAGEMENT
HP MIK or HP CONNECT FOR MEM

DEVICE

IDENTITY/PRIVACY

DATA

ABOVE
THE OS

HP SURE VIEW

Built-in Privacy Screen

HP PRIVACY CAMERA / HP SURE SHUTTER

Built-in Webcam Privacy Shutter

IN
THE OS

MICROSOFT SECURED-CORE PC

Best In Class OS Security

HP PRESENCE AWARE

Auto Login/Logoff

HP SURE CLICK

Hardware-enforce secure browsing/viewing solution

HP SURE SENSE

Protect from never-before-seen malware

BELOW
THE OS

HP BIOSPHERE

Comprehensive BIOS Management

HP SURE START

Self-Healing Endpoint Security Controller Protection

Update

HP SURE RUN

Protect Applications with Persistence & Kill Prevention

Update

HP SURE RECOVER

Embedded Image Recovery

New for 2021

HP SURE ADMIN

Cryptographically Secure BIOS Management

New for 2021

HP TAMPERLOCK

Tamper Protection

HP SECURE ERASE

Permanent Data Removal on HDD/SSD

CERTIFIED SELF-ENCRYPTING DRIVES

HW Data Encryption

HP ENDPOINT SECURITY CONTROLLER

HARDWARE-ENFORCED PROTECTION



HP ENDPOINT SECURITY CONTROLLER

UNIQUE HARDWARE ENABLES
RESILIENT DEVICES

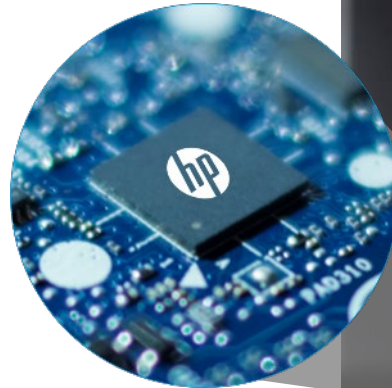
PROTECT WHERE ANTIVIRUS DOESN'T !!!

Protection starts at the lowest level of the PC

- ✓ Hardware-enforced technology only on HP PCs
- ✓ ESC always running, even when the system is powered off
- ✓ Hardware Root of Trust: protection, detection & recovery
- ✓ Physically isolated

Protection continues during runtime

- ✓ Ongoing monitoring for health of HP's security system
- ✓ HP Wolf Security cryptographic functions secured by hardware



3RD PARTY
CERTIFIED

by an accredited
independent test lab
(Overseen by ANSSI)



HP Sure Start



HP Sure Run



HP Sure Recover



HP SURE START⁶

BEHIND THE TECHNOLOGY



Always-on and
run-time
persistence



Resilience:
Protects,
detects, and
recovers



Independent Hardware
Enforced protection tied to
the HP Endpoint Security
Controller. Not dependent
on OS or CPU.



Protects
the BIOS
settings



Protection for
pre-boot DMA
attacks



HP SURE RUN

PROTECTS AGAINST ATTACKERS TURNING OFF CRITICAL CUSTOM APPS



HP Sure Run leverages the HP Endpoint Security Controller to:

- **MONITOR** key processes.
- **ALERT** of any changes.
- Dynamic **PERSISTENCE**.

TRUST IS
PART OF
OUR DNA

PERSISTENCE TO PROTECT
YOUR PC'S KEY SECURITY
PROCESSES



HARDWARE-ENFORCED HEARTBEAT



HP Endpoint
Security Controller



HP Sure Run¹¹ Agent
(Running in the OS)

PROTECTED
APPLICATIONS

PROTECTED
PROCESSES

APPLICATION
PERSISTENCE

HP SURE RECOVER^{12,13}

REMOVE THE RISK OF A TIME-CONSUMING BUSINESS DISRUPTION FROM A DESTRUCTIVE MALWARE ATTACK

HOW LONG WOULD YOU NEED TO RECOVER 1,000 MACHINES?



SECURE REIMAGING
For trusted systems



RECOVER QUICKLY
In minutes instead of hours



SUPPORT BUSINESS CONTINUITY
with user-enabled reimaging

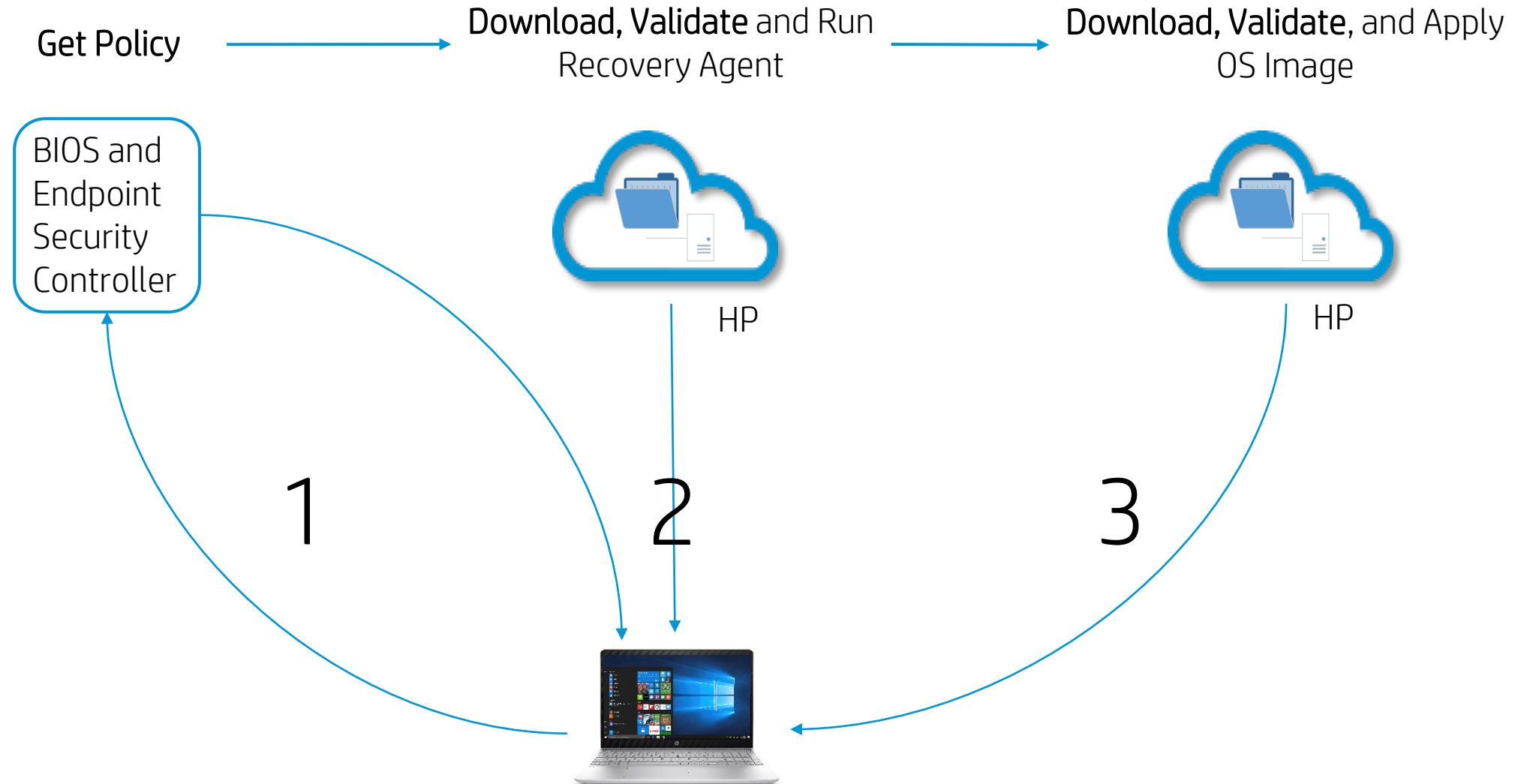


“Continual trend of destructive attacks, wipers, malware, and new threats are coming out regularly”



HP Sure Recover is as Easy as 1-2-3 HP's Out of Box setup

Apply Policy, Automate, and Enhance Security





HP TAMPERLOCK

PEACE-OF-MIND FROM PHYSICAL INTRUSION THREATS



SENSORS DETECTION

For case intrusion, and configurable rich policy controls



PHYSICAL ATTACK PROTECTIONS

Against DMA attacks, flash replacement attacks, side channel attacks, TPM probing attacks
+ HP Endpoint Controller storage protection



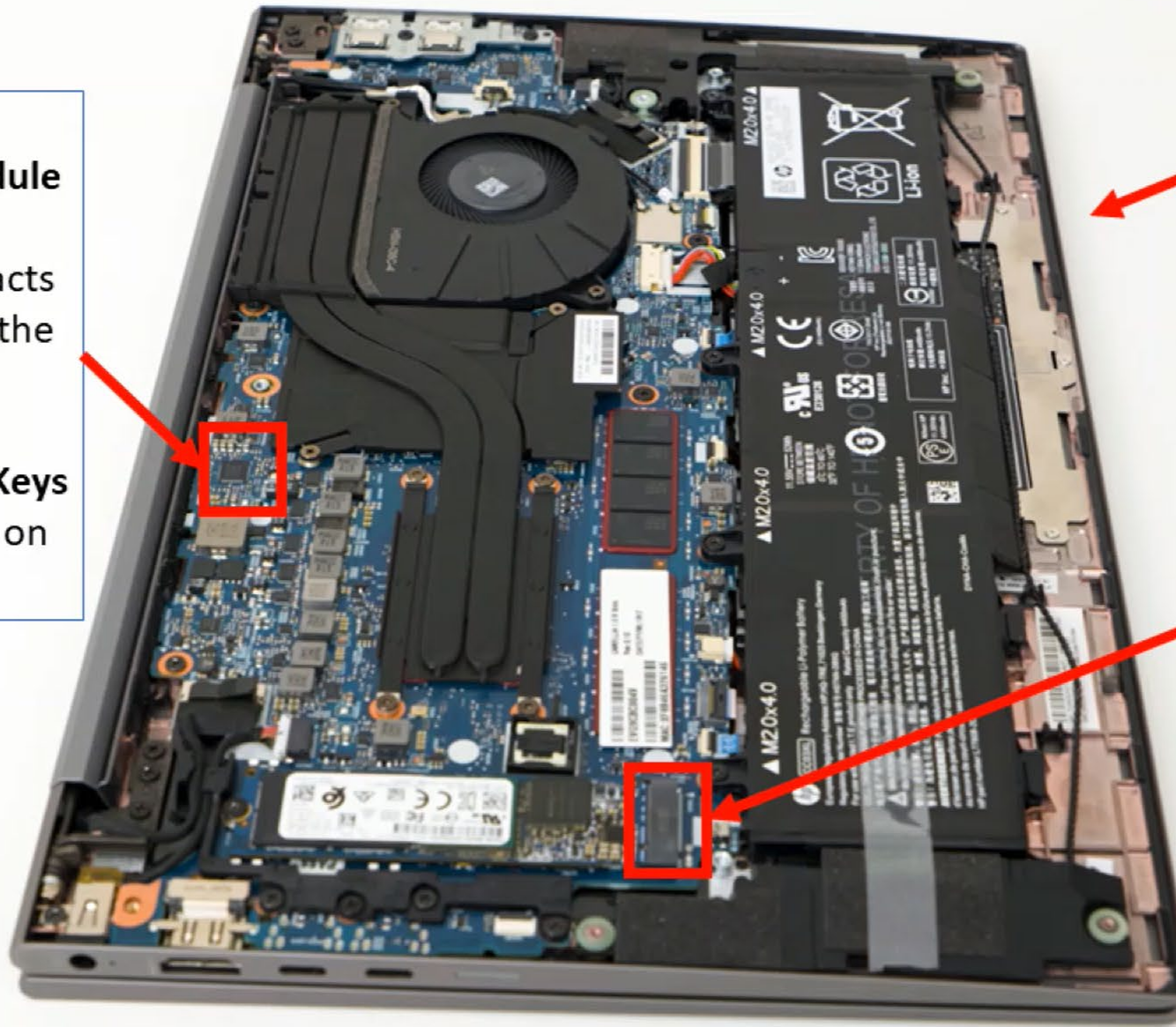
2021 EliteBook 800/1000 G8 and Zbooks Launch HP Tamper Lock



TPM
Trusted Platform Module

Securely storing artifacts used to authenticate the platform

Probing for Bitlocker Keys that protect the data on the Drive (SSD)



Flash Memory

Replacing flash memory to install malware, remote access and control applications.

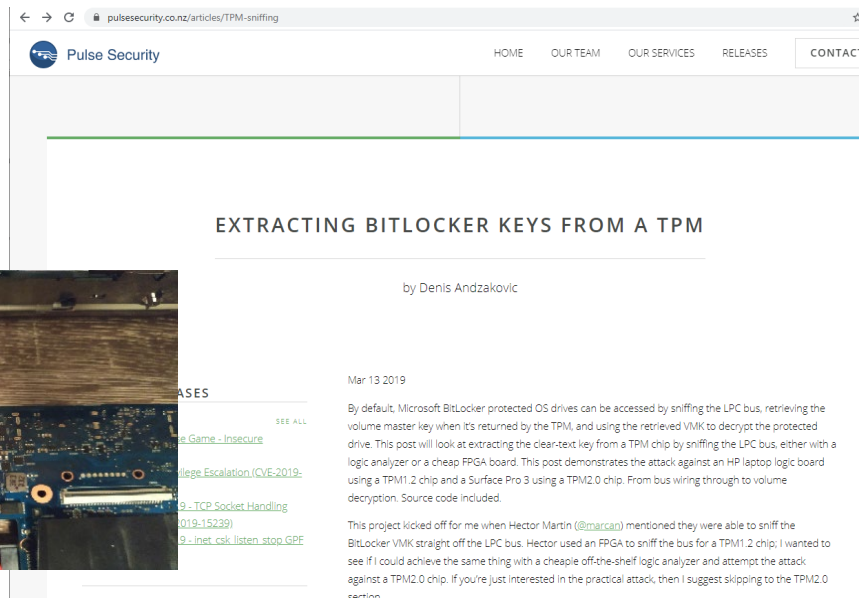
Internal Ports

M.2 slot, WWAN card module slots
Connecting to internal port to access Memory for passwords and other critical information

HP TAMPER LOCK

Providing protection from physical attacks, which involve disassembly of the system to modify the hardware or implant attacker hardware.

- **Sensors** to detect if the case has been opened, associated to **rich policy controls**
Other physical attack protections, such as



CAPABILITIES

MWKS/ELITE G8

Intrusion Detection



Lock on intrusion detection



BIOS password based unlock



Sure Admin Based Unlock (OTP based/No Password)



Shutdown System on Intrusion Detection



Clear TPM on Intrusion Detection Event



Intrusion Detection Event Logging



Protection against Policy/Log attack via SPI programmer



Protection against lock defeat via DMA attack





HP SURE ADMIN

COMPATIBLE
WITH 2018
AND NEWER
HP PCs

CENTRALIZED PROTECTION OF PRIVATE KEYS USED TO AUTHORIZE REMOTE MANAGEMENT AND LOCAL ACCESS



LOCAL ACCESS AUTHENTICATOR

Gain local access to firmware setup using One-Time-Passcodes provided by the HP Sure Admin app



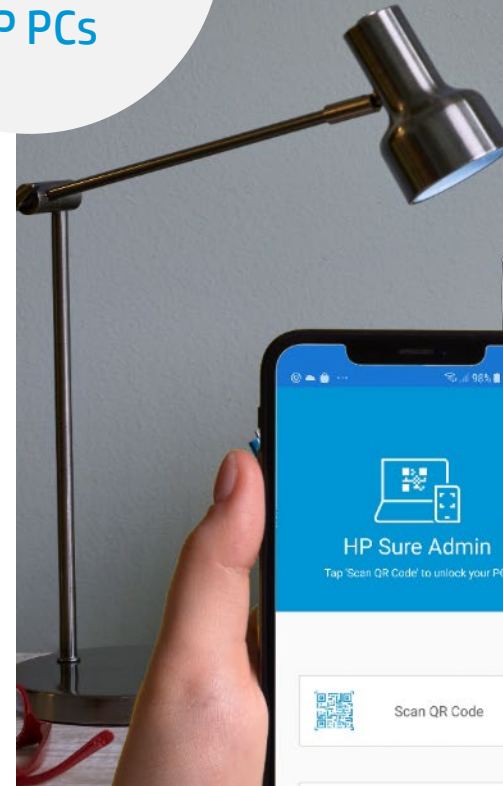
REMOTE MANAGEMENT TOOLS

Remotely Manage firmware settings securely without passwords



FACTORY PROVISIONING

Optional custom service to pre-install customer keys for zero-touch management of firmware settings





HP SURE ADMIN

REMOTE MANAGEMENT



SECURELY MANAGE FIRMWARE SETTINGS REMOTELY

- Uses certificate based strong public key cryptography
- Authorization secret never revealed
- No password required



SUPPORTED BY FAMILAR HP BIOS MANAGEMENT TOOLS

- HP Management Integration Kit plugin for Microsoft SCCM
- HP BIOS Configuration Utility
- HP Client Management Script Library support



FACTORY PROVISIONING FOR SIMPLIFIED DEPLOYMENT

- Optional service to provision customer public keys
- Enables Zero-touch management of BIOS settings

DEVICE SECURITY | BELOW THE OS



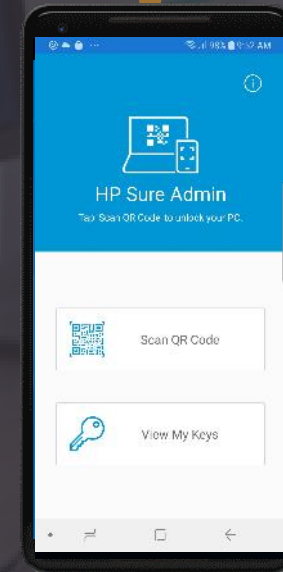


HP SURE ADMIN LOCAL BIOS SETUP ACCESS

- ✔ **GAIN ACCESS TO BIOS SETUP W/O PASSWORDS**
 - Via HP Sure Admin Local Access Authenticator
 - Decrypts QR-code challenges to obtain one-time-PIN for access to BIOS setup

- ✔ **SEPARATE TRUST DOMAIN FOR LOCAL ACCESS**
 - Compromise of Local Access key does not compromise remote management key

- ✔ **SECURE FIRMWARE SETTINGS FROM THE FACTORY**
 - Optional service to provision customer public keys
 - BIOS setting protected from point of leaving HP factory.



Video

HOW HP BUILDS THE WORLD'S MOST SECURE AND MANAGEABLE PCs

