

INTEL vPro® vs. AMD® PRO* OUT-OF-BAND MANAGEMENT

2020 WHITE PAPER EXECUTIVE SUMMARY

Research Commissioned by Intel

1. THE CHALLENGE: ENDPOINTS EVERYWHERE...

One of the biggest challenges facing IT administrators today is how to cost-effectively see and control all the computers on their networks.

They need to reach all the endpoints all the time, regardless of where those endpoints are, or how they're connected—even when an operating system is crashing, or when a device is turned off. But what solution does that securely and robustly?



The power of insight.

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Intel vPro w/AMT	DASH Compliance	Hardware Inventory	Robust Power State Management	Robust Endpoint Redirection	Robust Extensibility	Robust OOB KVM to BIOS or Desktop	Robust Security	Beyond Firewall Secure Cloud Connectivity	Configurable User Consent	OOB Wi-Fi Capability	
AMD PRO w/DASH	DASH Compliance	Hardware Inventory	Some Power State Management	Some Endpoint Redirection	Some Extensibility	Some OOB KVM to BIOS	Some Security				
DASH Standard	DMTF Defines DASH Standard										

2. THE CONTEST: INTEL vPRO PLATFORM & AMD PRO

In the game of managing endpoints there are really just two big platform options: the **Intel vPro platform** and **AMD PRO**. Both platforms combine the hardware, firmware, and management console software required to manage all the computers you want to connect to your network. In our white paper we looked closely at endpoint management, including when the endpoints are working properly on a known network (in-band) as well as when endpoints are off or not working (out-of-band). We'll explain it in a way everyone can understand, and explore how these platforms deliver it, because despite being so relevant today, nearly all of the IT admins we talked to were at least a bit unclear on how in-band and out-of-band worked.

Both platforms are designed to meet **Desktop Mobile Architecture for System Hardware (DASH)** protocols, the standards that define how hardware and software talk to each other for endpoint management. DASH is built into both chipsets. AMD suggests their platform is better than Intel's, because Intel vPro is "proprietary" and "locks you in," while AMD PRO is said to be open, asserting this somehow makes their technology more widely compatible. We'll investigate how true that is, given that Intel has open APIs and SDKs that allow integration—and they're also DASH-compliant.

Intel commissioned us, **Concrete**, to conduct third-party research to educate IT about the benefits of out-of-band management, and to put both platforms into the hands of real IT professionals. At Concrete, this sort of third-party testing is exactly what we do best.

This white paper compares the Intel vPro platform and AMD PRO and their respective capabilities for endpoint management—backed by the results of our testing.

3. THE TEST: SETUP & PARTICIPANTS

Our 12 IT admin participants took each solution for a test drive and asked:

- + WHICH PLATFORM IS EASIEST TO USE?
- + WHICH DOES WELL OVER WI-FI?
- + WHICH HAS THE BEST VISIBILITY EVEN WHEN THINGS AREN'T WORKING RIGHT?

To do this, we set up a lab environment where our platform-agnostic IT professionals could run through a series of tasks. We supplied an HP EliteDesk 800, DASH-enabled computer running Windows 10 Pro, as a management PC. Both the AMD Management Console and Intel® Endpoint Management Assistant (Intel® EMA) were set up on this PC. We connected a few AMD PRO and Intel vPro endpoints, both laptops and desktops, each running Windows 10 Pro, with DASH enabled in the BIOS and running an Intel EMA agent.

PARTICIPANTS: Our participants spent two hours each interacting with the systems and talking about their experiences. Participants were IT professionals with experience managing networks with 40 to 40,000 endpoints. Each had varying professional experience, education, and certification levels. Participants included typical IT admins and a team of expert reviewers that included a security expert, a human factors engineer, and a Fortune 500 IT admin.

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4. THE RESULTS: MYTH & FACT

The results of our testing showed that Intel vPro technology and AMD PRO are not equivalent, even if they're both built on DASH. In the areas that matter most to IT admins, Intel vPro technology had distinct advantages:

- + **REACHABILITY:** Detecting and monitoring operational status, device health, administering security patches and the like, even when a device was powered down. Intel vPro technology could manage over Wi-Fi, as you'd expect. Disappointingly, AMD PRO does not support out-of-band management of devices over Wi-Fi. It's rare for laptops to use wired connections most of the time or—for most laptops at most companies—any of the time.
- + **SECURITY:** Only Intel had Client Initiated Remote Access (CIRA), with which endpoints establish a direct, secure line of communication. By contrast, AMD PRO clients had to leave incoming management ports open, which our experts saw as a vulnerability. No product or component is absolutely secure, but a robust architecture reduces risk.¹
- + **COMPATIBILITY:** Testers discovered that AMD PRO management could not reliably reach devices other than AMD's own, while Intel vPro technology could reach not only Intel devices but AMD devices as well.

5. CONCLUSION

Managing today's workforce devices requires a robust, secure, and cost-effective technology designed to manage all the devices and connections running on a company's network. What you don't know will hurt you in time, expense, and security. IT admins demand technology that will best enable them to manage a wide variety of devices and connections, easily, reliably, and efficiently. Our testing proved that the preferred technology was Intel's vPro platform.

➔ For more information about these platforms and our testing, read the full white paper: www.concreteux.com/services/impact-measurement/#impact-measurement-projects

BUT DON'T LET US TELL YOU... HERE'S WHAT OUR IT PROFESSIONALS SAID:

"Intel worked for both; AMD worked for AMD."

"AMD needs better security—anyone who has access to the console can open the app and do whatever they want!"

"I was surprised that the AMD console couldn't even show the power status of their own devices over Wi-Fi."

¹ You should consult other information and performance tests to assist you in fully evaluating your contemplated purchases, including the performance of that product when combined with other products.