

There's more to Intel vPro® than you know

The hybrid workforce has become a reality for nearly every organization. Other technology advances and trends—from the rise of software as a service (SaaS) to the internet of things (IoT)—have also contributed to the eradication of the idea of the network perimeter being a walled garden.

With an ever-expanding surface to protect against rampant cybersecurity threats and the inability to address technology issues with hands-on, in-person approaches, it can be challenging for today's IT teams to deliver and manage a secure, stable, and high-performing PC fleet that keeps workers productive and data safe.

Intel vPro® has evolved alongside the corporate network to solve these challenges. Now network-independent to meet modern business and IT needs, Intel vPro offers a combined hardware and software solution that improves productivity through enhanced performance, helps strengthen data and device security, and offers greater fleet management control and stability.

In fact, there are so many out-of-the-box benefits of Intel vPro, it can be easy to overlook some of them. To help you get the most out of this comprehensive solution, we asked four remote admin and security pros for their top Intel vPro tips. In the following pages, we'll look at four ways that Intel vPro shines and reveal tips from our pros on how to make it work even better for your business.

MEET OUR PROS



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Director at ABI Research



Carl S., a Spiceworks Intel vPro advocate and Chief Information Security Officer at Compass Healthcare



Jonathan M., a Spiceworks Intel vPro advocate and computer engineer for a managed service provider (MSP)



Dan Brunton, Intel Endpoint

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Out-of-the-box security benefits for peace of mind

Security has been a part of Intel's DNA since its early days as a silicon manufacturer. Intel introduces new security features in each platform release to address the evolving cybersecurity landscape. "It would be an understatement to say that Intel excels at hardware security," Michela says. "They're not just a chipset maker, but a security leader as well, going back decades. It's something really to take advantage of."

Michela notes that IT teams often consider security "a separate software add-on" down the line, taking a backseat to remote admin capabilities. However, with Intel vPro, no such distinction needs to be made as both are included out of the box.

Intel® Hardware Shield is included with every device on the Intel vPro platform. From the first system poweron, it reduces attack surfaces with integrated hardwarebased PC safeguards, including:

- Below-the-OS security: "Hackers don't stop at the OS, but have begun targeting firmware, where OS-based security software can't see them," Michela says. "They can then use a compromised device to steal access identities encryption keys and passwords in addition to sensitive data." Intel vPro provides a suite of below-the-OS technologies, including the ability to lock down memory in the BIOS against firmware attacks and enforce a secure boot at the hardware level. These security features are set up by the PC manufacturer, so IT departments and users can take advantage of them immediately.
- Application and data protections: Imagine multiple machines running completely independent of one another. That's the concept behind Intel Hardware Shield's virtualization-based security for applications and the operating system. "Virtualization can help protect against OS kernel-level malware and browser-based attacks without reducing performance, which is great for users," Michela says, noting that Intel Hardware Shield also protects data with hardware-based encryption.
- Advanced threat protections: Intel® Threat Detection Technology
 (TDT) supercharges compatible security software with hardwarepowered, AI-enabled threat detection without slowing down
 performance. "I like the fact that Intel TDT works with third-party
 software to protect against hard-to-detect threats, like ransomware
 and cryptojacking," Michela says. Using CPU telemetry, Intel TDT can
 identify hundreds of events and even improve its performance using
 machine learning (ML) algorithms. Once the security software receives
 these high-fidelity signals, it can start the remediation process.



Pro tips for improving fleet security

1. Sit back and let it work.

"Intel TDT is a highly capable solution that's unique on the market, and Intel has worked out all the mechanics behind that from both a technology and integration perspective," Michela says. "An IT manager doesn't actually have to go and add anything on top of it. It works right out of the box."

2. Get to know Intel Hardware Shield.

Intel Hardware Shield provides comprehensive protection against modern cyberthreats at multiple layers of the system, including hardware, BIOS/firmware, hypervisor, virtual machines (VMs), operating systems (OS), and applications. "I'd encourage anyone just to go look up Intel Hardware Shield and see the litany of awesome security stuff that exists under that brand name," Dan says. "It's really our secret sauce in this space."

3. Integrate with your favorite endpoint detection and response (EDR) solutions.

"Intel has a lot of partnerships with other EDR vendors to make sure that they can easily be leveraged. Check out the partnership ecosystem and leverage it to the max," advises Michela. "The integration is already done—you just have to switch it on."





of IT teams using Intel vPro as an endpoint standard stated that it resulted in fewer security incidents and breaches as well as reduced risk of personal data being stolen, according to a 2024 Forrester survey.¹



Making IT easier with Intel vPro remote management

When the walls of the traditional corporate network came tumbling down, IT administrators suddenly had to deal with a far-flung network of disparate devices. The software tools they had no longer lived up to the challenge—especially when the problem lay beneath the OS. Traveling to remote outposts for service was prohibitively expensive, and hiring local technicians added complexity and uncertainty.

Thanks to Intel vPro out-of-band management capabilities, IT teams can now reach any device with access to a network connection and power source—even if they're powered off. This reduces the time, stress, and energy that IT admins need to ensure that everyone's PC is up and running. "I love being able to get to a pre-Windows desktop for remote machines and mount remote media," Carl says. "That saved us from driving six hours to manage a basic 'update failed' situation. We were able to do it completely remotely. Those out-of-the-box capabilities have saved me and my team a lot of stress and time."

Here are a few things that our experts love about Intel vPro remote manageability and how it makes their lives easier:

- Remote monitoring and management (RMM): Intel® Endpoint
 Management Assistant (EMA) can serve as a standalone RMM tool by
 offering centralized device management, remote power management,
 hardware inventory, software updates, security configuration, and
 the ability to work with multiple tenants. At the same time, Intel EMA
 integrates with RMM solutions such as Ivanti Neurons, VMWare WS1, and
 ServiceNow to provide IT teams the choice to use favored tools.
- Proactive maintenance: Regarding the convenience of powering a
 system on to perform maintenance without disturbing the user, Dan
 notes, "If you can patch it before it happens, you're going to be in a much
 better place than you are if you need to be reactive. I love the ability to
 power a system on so that whatever software management tools I use
 in conjunction with Intel® Active Management Technology (AMT), my
 patches are getting out there and I don't have to bother my users."
- Streamlined device deployment: "Our deployment time for new machines has gone down significantly. Integrating those new machines is now three clicks," says Carl. "It used to be quite a process a number of years ago."
- Desktop sharing: "When issues do crop up that you need to respond
 to, KVM [keyboard, video, and mouse] over IP is 100% reliable thanks
 to the hardware component," Dan says. "You can see what's happening
 before Windows loads, saving you hours of having the user read
 out increasingly longer and longer strings of letters and numbers to
 somebody who needs to, for instance, unlock BitLocker on their device."

Pro tips for making remote admin easier

1. Start with Client Control Mode.

Dan recommends setting devices up with Client Control Mode rather than the full-flight Admin Control, at least to start. "Admins are enamored of Admin Control because it offers the full range of Intel AMT functionality," he says. "However, Client Control Mode supports most Intel AMT functionality without the additional provisioning challenges that could deter you from giving the technology a shot."

2. Plug and provision.

Streamline the device provisioning process by creating a provision key on a USB drive, which can then be easily used for local device setup and configuration. Jonathan notes, "I love being able to plug in a USB drive into the device, configure all my settings, and provision everything quickly and easily so that the client talks back to the central server."

3. Leverage ISO images.

Integrate a few useful ISO images into your MS server for use for remote booting. "That has alleviated a lot of my techs' time and energy by being able to boot up ISO image remotely for a machine to be able to check things out," Carl says. "Having those built into Intel EMA to be able to remotely boot, especially the smaller ones, is a huge benefit."





Performance and connectivity gains for productivity

A secure platform provides peace of mind, but it's performance that gets the heart pumping faster—and Intel® Core™ Ultra processors are at the heart of the Intel vPro platform. These powerhouses, now powered by 3D hybrid architecture, are designed to deliver the responsive performance and reliable connectivity business users need to stay in the flow and be productive all day long. "Intel is known for delivering faster processors generation after generation, but we also know that businesses need more than just speed," says Dan.

That's why reliability, connectivity, and stability are just as key, as demonstrated by the following features:

- Enhanced, AI-ready architecture: "I could go on and on about the
 number of P-cores or E-cores on a given processor, clock frequencies,
 and thread direction, but at the end of the day, all you really need to
 know is that Intel Core processors never stop getting faster and more
 efficient, and our Core Ultra lineup is no different," Dan says.
- Multiple form factors: Intel vPro is available in a variety of form factors
 from top manufacturers, so it's easy to find the right machine for every
 one of your users, from ultra-thin notebooks for road warriors to
 powerhouse workstations for graphics-intensive tasks.
- Advanced connectivity: "These days, if you can't connect to the
 network, you really can't work, so improved connectivity is a musthave," Dan says. "At the same time, dense Wi-Fi environments can
 wreak havoc on connectivity." Intel Wi-Fi 6E (Gig+), integrated into Intel
 Core Ultra processors, is ideal for dense environments as well as for
 optimizing wireless networks for cloud computing. In addition, you can
 optimize a device's wireless performance based on traffic type, such as
 prioritizing video conferencing and collaboration applications while on
 a busy wireless network.



Pro tips for evaluating Intel vPro for your fleet

1. Find the devices that fit your needs.

One of the many benefits Intel vPro offers is choice. "We give you options in all shapes and sizes, desktop and mobile," Dan says. "We have Intel® Evo™ designs with Intel vPro, offering one of the best experiences you can have on a thin-and-light mobile device. Workforces aren't one-size-fits-all—different roles have different needs. Your fleet can reflect those needs."

2. Consider total cost of ownership (TCO).

Jonathan suggests taking a longer view when calculating fleet device return on investment (ROI). "Compare Intel vPro to other solutions based on which features you're going to use over the course of five to seven years," he says. "I think you'll find that devices on Intel vPro are a solid investment."

Our other pros agree. Carl points out that the more Intel EMA-enrolled machines his team deployed, the less the team spent on remote monitoring and management. And Dan notes that the stable and performant hardware of Intel vPro can extend refresh cycles.

we're likely saving money by using vPro machines due to their premium specs and performance. We started out with a three-to-four year replacement schedule, and now we're thinking that we will get five or more years out of our laptops.

CARL



of survey respondents reported that their company experienced "improved employee performance and productivity" by using Intel vPro as a standard. In addition, 86% said Intel vPro improved collaboration as well as reduced downtime.²



Platform stability for minimal disruptions

Upgrading end-user systems in your enterprise can be daunting. It can introduce unexpected driver variations from previously qualified platforms, adding image management complexity while increasing hardware support costs. Intel vPro Windows OS-based PCs undergo rigorous testing to help ensure a stable foundation for smooth fleet management. Plus, the Intel® Stable IT Platform Program (SIPP) provides platform validation that aims for zero hardware changes for at least 15 months or until the next generational release.

These features are designed to give you the confidence to transition to new technologies at your own pace with assured quality and performance. Here are three reasons our Intel vPro pros trust the stability of the platform:



- A single integrated and validated platform: When you refresh to
 devices powered by Intel vPro, the quality of their design, long-term
 reliability, and compatibility are already assured by one of the most
 rigorous validation processes across the industry. Intel works hand in
 hand with OEMs for a full year, every year, to conduct thousands of tests
 and feedback loops to certify that devices will give IT and end users the
 stability and reliability expected of a true business-class device.
- Business continuity: "One big challenge for fleet management is
 rolling out updates, so you want to get it right the first time," says
 Jonathan. "I like the fact that firmware and BIOS issues get worked out
 before updates are enabled on vPro. It provides an additional sense of
 security." Intel SIPP helps ensure that things run smoothly for your fleet,
 and fewer hardware changes mean fewer hassles and interruptions for
 users, resulting in a more seamless overall experience—especially for
 PC setup and configuration and PC image deployment.
- A trustworthy track record: Intel SIPP has delivered and defined high-quality components on an annual cadence for more than a decade.
 "Managing a diverse fleet is a matter of constantly battling complexity,"
 Jonathan says. "It's also a balance between stability and innovation.
 Intel is addressing this balance beyond core systems by extending
 Intel SIPP to a growing set of technologies including Ethernet, wireless connectivity, and Thunderbolt™ 4."

Pro tips for maintaining fleet continuity

1. Look for value and cost savings beyond hardware.

With Intel vPro, you can use devices for longer and confidently transition to new technologies at your own pace. 90% of IT decision-makers surveyed said that Intel support and add-on solutions enabled by the Intel vPro® platform have been a significant part of the overall value they had gained.³

2. Look beyond device manufacturers.

Choosing a single device manufacturer can streamline procurement, but it's no guarantee of fleet continuity or stability. Intel SIPP enforces uniform platform stability requirements across device manufacturers so you can have the broadest choice of device vendors possible.

A 2024 survey of IT decision-makers across the globe found that organizations can deploy Intel vPro-based devices 30% faster than non-Intel devices.⁴

You will not find an Intel vPro machine that is subpar. Every single one of them is above standards and above expectations. I know that anyone on my team who is going to use one is going to be happy.

CARL



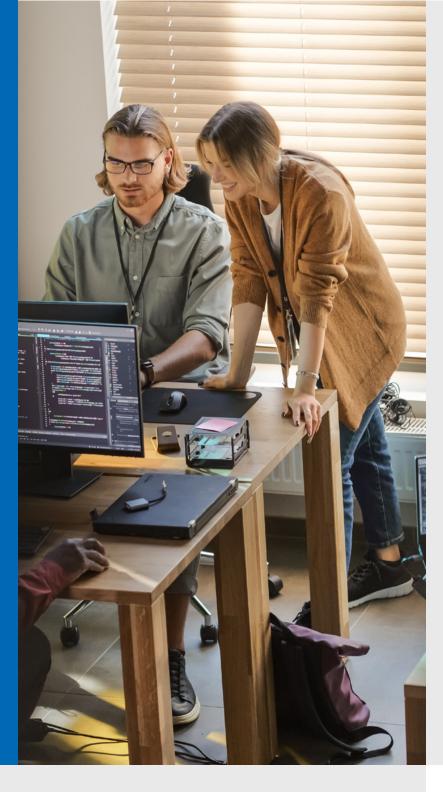
of surveyed IT decision-makers said that using Intel vPro as their endpoint standard allows for improved patching efficiency. They also reported that it takes 65% less time to manage Intel vPro-based devices than non-Intel vPro devices.⁵

Give your fleet a boost the moment you open the box

Right out of the gate, Intel vPro simplifies and enhances how you manage your PC fleet, improving performance and connectivity for users, security for the enterprise, and efficiency and costs for your IT team.

For IT managers, it not only improves your work life, but that of your users as well—no matter where they're located. In addition to providing advanced manageability, Intel vPro delivers enhanced performance, hardware-based security, and platform stability with validated hardware to ensure smoother fleet management and business continuity.

"The best advice I can offer is to experiment," says Jonathan. "Play around to see what Intel AMT, Intel EMA, and all the other components of the Intel vPro platform can do. It puts so many tools in your pocket."







Intel vPro is the unrivaled business computing foundation for organizations of all sizes. Learn more.

¹ Forrester Consulting, "The Total Economic Impact" of the Intel vPro* Platform," 2024. This Intel-commissioned study surveyed 500 IT decision-makers using Intel vPro* at enterprises across the world, including US, Canada, France, Germany, UK, Australia, China, India, and Japan. Results may vary.

2-5 Ibid

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