

Intel vPro®: Built for Business as Usual (in Unusual Times)

Tips for supporting your colleagues working remotely

Overwhelmed by the surge of employees working from home? With Intel, you get the technology you need today built right into the PCs employees want to use. Intel vPro® is better for business because it's built for your business¹ and you can easily and securely manage your entire PC fleet from anywhere.

The changing nature of work and an increasing move toward remote working has created challenges for business. With these challenges in mind, we've enhanced Intel vPro® with many of the technologies you need to support workers while protecting against increasingly sophisticated threats. With Intel vPro® for Enterprise for Windows, you'll have everything you need to keep your remote PCs performing optimally.

With Intel vPro®, you can solve real problems right now. We've put together some resources to help you make the most of your PC fleet and IT investments.

Enable Remote Manageability with Intel® Active Management Technology (Intel® AMT)

The No. 1 action you can take with Intel vPro® Enterprise is to enable remote manageability by activating **Intel® Active Management Technology (AMT)**. With a lack of in-person tech support for highly dispersed workforces, remote capabilities are more important than ever.

Intel® AMT is a direct tunnel from IT to the end user. With Intel® AMT, you can connect remotely to PCs even when the PC is off or the operating system is down. Intel® Active Management Technology for Intel vPro® Enterprise systems is the only commercial remote remediation solution to return a PC to a known good state, no matter where your employees are working — even when the OS is down² and it's the only commercial solution for remote out-of-band manageability over Wi-Fi.²

Hardware-based Intel® AMT provides persistent out-of-band connectivity that operates independently of the OS, allowing fixes to a wider range of system issues. Repair corrupted drivers, application software, or the OS on non-responsive systems that won't run or boot.

Because this unique hardware-based technology operates below the OS, technicians can repair and upgrade the OS and drivers, even if your teams can't log in to the VPN.

Helpdesk can still support teams remotely, which saves IT time and simplifies management. In today's world of work, you can rely on Intel® AMT to help employees stay up and running.



1. As measured by each Intel vPro platform's tailored combination of performance, security, manageability, and stability solutions designed, integrated, and fine-tuned for particular business needs. All Intel vPro versions feature an eligible high performing Intel® Core™ processor, supported operating system, Intel LAN and/or WLAN silicon, firmware enhancements, and other hardware and software necessary to deliver the manageability use cases, security features, system performance and stability that define the platform. By validating business PCs against a rigorous specification defined for each product version, Intel vPro delivers tangible advantages for any business user. See www.intel.com/PerformanceIndex (platforms) for details.

2. Based on unique in-band software-based remote management functions; out-of-band hardware-based remote management functions; and cloud-based support in Windows-based PCs. Intel AMT requires a network connection; must be a known network for Wi-Fi out-of-band management. See www.intel.com/PerformanceIndex (platforms) for details. Results may vary.

What Intel® AMT helps your IT teams do:

Improve control of your fleet

Exclusive to Intel vPro® Enterprise for Windows, **Hardware KVM** allows you to securely connect to and manage remote PCs with keyboard, video, and mouse redirection. Because this KVM is hardware-based, not software-based, it works even when the OS is not running—even maintaining the KVM session during reboots and inside the BIOS.

Reboot remote PCs

Boot redirection allows you to reboot a remote PC into a temporary environment. This could be any of the ISO images support technicians keep on a USB key, from diagnostic tools and virus scanning to OS installation images. Suppose that the hard drive on a desktop PC has failed and it will take a few hours for a technician to arrive with a new hard disk. With boot redirection, IT can allow employees to be productive, even when there is a hardware failure. Boot redirection to remote reboot puts an otherwise inoperable PC into a temporary work environment so the employee can continue to access web-based email and internet services. And when the new drive arrives, boot redirection enables a technician to remotely start the recovery/reinstallation process.

Haven't set up Intel® Active Management Technology?

We created a YouTube playlist with several helpful how-to videos to help you support your people working remotely: <https://bit.ly/2UKCObl>

Intel® AMT allows managed IT services providers to remotely control a PC as if they were there in person, reducing support costs and downtime.



Other benefits of Intel® AMT:

- Manage your entire PC fleet with remote power on.
- Power on a single system—or multiple systems across every worksite—for remediation or patching.
- Set wake-up times and schedule updates. Help ensure maintenance happens even when users aren't in front of devices.
- Remotely manage unattended systems, including digital signage, Intel Unite® systems, and retail point-of-sale systems.
- Discover, access, and manage existing Intel vPro® devices in your fleet to maximize your technology investment.
- Assist with OS upgrades. Monitor the boot steps of OS upgrades, such as Windows 11.

Have more control with Intel® Endpoint Management Assistant

With **Intel® Endpoint Management Assistant (Intel® EMA)**, IT teams have the same set of controls for remote PCs as they do for on-site devices—even outside your firewall. Once an employee's home network is verified, IT can come to the rescue 24/7.

Intel® EMA is designed to modernize Intel® AMT via the cloud and enables both in-band (OS/agent-based) and out-of-band (below OS) connectivity to PCs in range of a known network. IT can remotely help people identify and resolve technical issues, even when the PC's OS has crashed or hung.

- **Connect to devices outside the firewall.** Software tools built for the Intel vPro® platform allow IT to remotely and more securely connect to devices over the cloud, on devices both inside and outside the corporate firewall.
- **Manage devices from the cloud.** With Intel® Endpoint Management Assistant, IT users can integrate the Intel® AMT access into custom or third-party consoles. These managed devices can reside in the cloud, whether on a public or private network. The console can reside in a private network, at the edge, or in the public cloud.

Protect PCs with built-in hardware security

Security is in Intel's DNA, and now we've built it into your PC hardware. With **Intel® Hardware Shield**, available on some of the latest PCs, you can protect your workstation against advanced threats—without bogging down performance.

As sophisticated security threats are moving “down the stack” and traversing from hardware to software, a security approach that operates above the OS leaves devices at risk. Intel® Hardware Shield is a collection of hardware-assisted security capabilities that offer full-stack device protection against threats without burdening IT.

Intel® Hardware Shield requires zero activation. If your manufacturer has enabled this technology on your PCs, sit back and relax because you're already better protected.



Help remote teams stay productive with enhanced performance

Videoconferencing, having too many tabs open, and cloud-based collaboration can put a strain on PC performance. That's why we built the 12th Gen Intel® Core™ processors, which intelligently allocate workloads based on how PCs are actually used for better performance.

Thanks to the new performance hybrid architecture³ and **Intel® Thread Director**⁴, users get fast performance with fewer interruptions from complex apps while multitasking so employees can work better.

Create a better user experience

Adding peripherals such as docking stations and multiple monitors can be easier too—everyone can set up their home office with the same configs they use at work. Another score for remote productivity.

Improve collaboration with better connectivity

The latest PCs built with Intel vPro® Enterprise for Windows have Wi-Fi 6 built in. Intel® Wi-Fi 6/6E (Gig+) offers the best-in-class Wi-Fi and wired connectivity.⁵ So when home routers with Wi-Fi 6 become more prevalent, your PC fleets will be ready, with this standard built into the latest Intel vPro® platform.

Summary

Keeping your people productive is good for continuing with business as usual. Help your employees work better without being encumbered by technology challenges with the Intel vPro® platform.

Resources:

Visit intel.com/amt for more information on Intel's technologies for modern manageability.

For tools for getting started with Intel Active Management Technology, including step-by-step videos, guides, and expert assistance, visit <https://intel.ly/2JmUu7J>

To learn more about the Intel vPro platform, visit intel.com/vPro



3. Not available on certain 12th Gen Intel Core processors. See www.intel.com/PerformanceIndex for more details.

4. On select SKUs only; requires OS enablement. See www.intel.com/PerformanceIndex for more details.

5. All Intel® Evo™ designs have integrated Intel® Wi-Fi 6/6E (Gig+) and Thunderbolt™ 4 technology. See www.intel.com/PerformanceIndex (connectivity) for details.

1. Intel develops Intel vPro® by combining four key pillars that are critical to business success (performance, security, manageability, and stability) through product design, broad open ecosystem enablement (OEMs, ODMs, OSs, ISVs, etc.), performance optimizations, and validation against strict product specifications unlike any other commercial client platform. Unique features in each version of Intel vPro are tailored to address the needs of corresponding business segments such as large enterprise, medium business, small business (managed and unmanaged), education, and public sector - all regardless of size, maturity, or trajectory. Please see the feature chart on this page for additional details on certain specific features available on the different Intel vPro platforms. All versions of the Intel vPro® platform require an eligible Intel® Core™ processor, a supported operating system, Intel LAN and/or WLAN silicon, firmware enhancements, and other hardware and software necessary to deliver the system performance, security features, manageability use cases, and lifecycle stability that define the platform. Visit www.intel.com/vPro to learn more about these capabilities.

2. Based on unique in-band software-based remote management functions; out-of-band hardware-based remote management functions; and cloud-based support in Windows-based PCs. Intel AMT requires a network connection; must be a known network for Wi-Fi out-of-band management. See www.intel.com/PerformanceIndex (platforms) for details. Results may vary.

3. Performance hybrid architecture combines two new core microarchitectures, Performance-cores (P-cores) and Efficient-cores (E-cores), on a single processor die. Select 12th Gen Intel® Core™ processors (certain 12th Gen Intel Core i5 processors and lower) do not support performance hybrid architecture, only P-cores.

4. Built into the hardware, Intel® Thread Director is provided only in performance hybrid architecture configurations of 12th Gen Intel® Core™ processors; OS enablement is required. Available features and functionality vary by OS.

5. Intel® Wi-Fi 6/6E (Gig+) products enable the fastest possible maximum speed for typical laptop Wi-Fi products. Thunderbolt™ 4 is the fastest port available on a laptop, at 40 Gb/s, as compared to other laptop I/O connection technologies including eSATA, USB, and IEEE 1394 Firewire. Performance varies by use, configuration and other factors. See www.intel.com/PerformanceIndex (connectivity) for details.

Performance varies by use, configuration and other factors. Learn more at www.intel.com/PerformanceIndex. Performance results are based on testing as of dates shown in configurations and may not reflect all publicly available updates. See configuration disclosure for additional details.

No product or component can be absolutely secure.

Intel technologies may require enabled hardware, software or service activation.

Your costs and results may vary.

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