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Deploying and managing a fleet of systems with AMD Ryzen™ PRO processors helps IT speed and streamline what can be a complex, labor-intensive process. Every PRO processor from AMD is designed to enable a robust manageability feature set that simplifies deployment, imaging, and management at scale. And, since it's compatible with your current infrastructure, IT doesn't need to learn yet another tool to be effective and efficient.

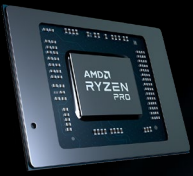## The Challenge: Doing More with Less

In current enterprise and productive environments, the need for an efficient PC management solution is clear. IT teams are expected to build, manage, and secure networks that must keep up with increased corporate headcount and device usage. Unfortunately, the ongoing focus on cost control means that even as their workloads get larger and more complex, IT teams aren't being given the additional resources they need.

This means that IT must find new ways to manage the entire hardware lifecycle. Systems must be imaged, provisioned, and deployed. Then it's on to ensuring systems stay up to date with the latest updates, from firmware and applications to virus patches and other security fixes. While all these devices are working and in motion, IT must also make sure they're able to track asset inventory and system health. This is all hard enough to do with a single location. Multiple sites and remote workers can quickly multiply the severity of the challenge, and everybody wants issues resolved ASAP.

The Solution: Client Management at Scale

Client management solutions enable IT organizations to scale their ability to control, monitor, and secure the devices they deploy. Whether they're managing PCs, laptops, tablets, thin clients, or even smartphones, IT needs solutions that offload some of this work with automated, integrated tools that are easy to use and scale. This is how technology teams can help their organizations increase device productivity without driving up costs, and it enables IT to spend their precious time on higher-value strategic tasks.
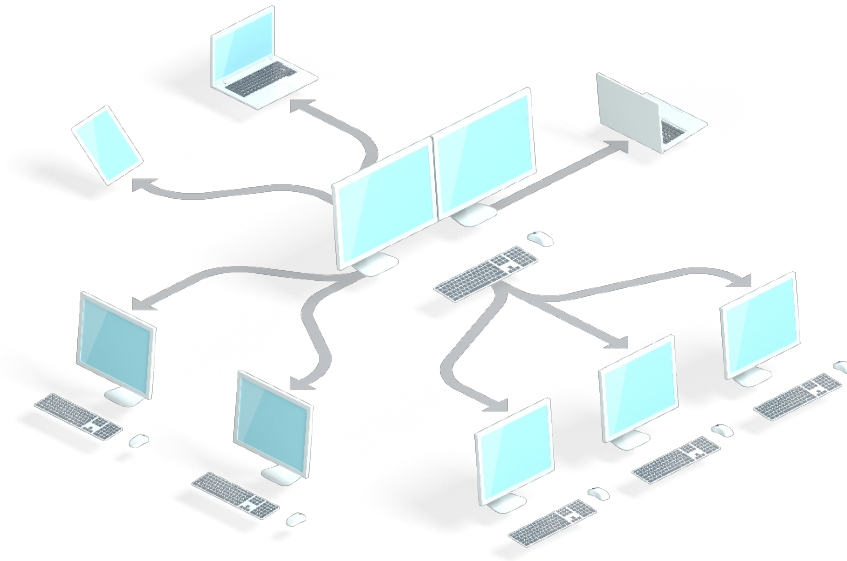
Understanding Manageability Basics

At their core, manageability solutions consist of:

- A management console that an IT administrator uses to monitor and manage client devices
- One or more agent processes running on managed client systems
- A central repository to store information (and enable reporting) about the managed clients

In-Band or Out-of-Band?

These solutions are divided into two categories: In-Band (IB) and Out-of-Band (OOB).

In-band manageability solutions require the PC client to be powered on, with a fully functioning operating system (OS) and a connection to the corporate network.

Out-of-band manageability solutions do not require a working OS, nor the system to be powered on, but the PC must still be accessible via the corporate network. This means basic manageability tasks can still be performed, even if the OS is not booting properly, or the system is powered off or in a sleep or hibernation state.

Effective in-band management solutions, which work through software running in the OS, are perhaps your most important tools for managing desktop and mobile client systems. Many organizations already rely on in-band client management solutions such as Microsoft System Center Configuration Manager (SCCM), Microsoft Endpoint Manager (MEM), or another similar solution. These solutions are hardware agnostic, enabling you to fully manage both AMD and Intel powered systems with a single unified solution.
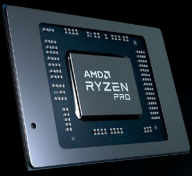
Building a Best Practice: Start with In-Band

To reduce both cost and time requirements, IT organizations should first focus on effective in-band client system management. Leveraging existing in-band management tools and applying best practices while the client is on, with the operating system up and running, can result in operational savings.

Once an organization has a solid in-band manageability foundation in place, IT can then begin to realize additional benefits by enabling clients that support essential out-of-band management capabilities. While in-band management solutions meet the bulk of daily predictable IT needs, there are times when you need to manage a system that is powered off or in a state where the operating system is unavailable.

Moving Up to Out-of-Band

This is where out-of-band manageability is essential. Out-of-band client management technology allows you to monitor and manage client systems remotely, relying on a hardware-based out-of-band communication channel that is independent of the OS, that enables these key features:

- Remote power control
- Accelerated, automated security updates and virus patches
- Remote diagnostics
- Asset inventory

This is how IT manages to do more with less, helping manage a growing network of devices without the need for additional tools or headcount.

Putting It All Together: The AMD PRO Manageability Advantage:
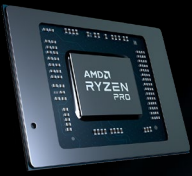
AMD PRO manageability brings both in-band and out-of-band manageability together in a single solution that IT organizations can use to manage their PC fleet.

AMD Ryzen PRO processors with AMD PRO manageability support the Desktop and mobile Architecture for System Hardware (DASH) standard. DASH is an open, interoperable web-based management standard for desktop and mobile client systems, enabling secure out-of-band and remote management in multi-vendor, distributed enterprise environments.

AMD PRO manageability, integrated with popular in-band management consoles SCCM and MEM, allows IT organizations to use one console for both in- and out-of-band management, simplifying the support infrastructure and tool requirements needed to manage DASH-compliant systems.

Combining the power of in-band management with industry-standard, vendor-neutral, platform-independent DASH out-of-band manageability greatly eases IT management headaches. No longer do you have to worry about systems being on for after-hours patch management. With DASH you can accelerate patch saturation by powering on all systems before pushing a critical patch. Then, once all patches have been deployed, you can power systems off to help conserve energy. And it all happens inside one console across all DASH-compliant systems.

Another common IT headache is end-user support that can often lead to desk-side visits. DASH gives you the capability to remotely diagnose and troubleshoot systems for hardware component failure, BIOS configuration problems, or OS-level issues. If required, you can even re-image a system by redirecting it to boot from a different image, such as a network share, bootable CD-ROM or DVD, remediation drive, or another boot device, without any local user interaction.

A Smarter Path to Simpler Client Manageability

Open standards-based manageability tools and technologies lower overall management costs by simplifying management tasks. Instead of needing to learn a complex, often redundant set of management tools for each manufacturer, IT administrators can use a unified set of tools to manage systems across multiple vendors. This enables organizations to reduce the cost and complexity of managing heterogeneous environments without reducing IT readiness or security. It also means IT teams can then focus their expertise on meeting critical business needs rather than juggling specialized tools to manage specific systems.

AMD Ryzen PRO processors make this freedom possible with AMD PRO Manageability to deliver industry-backed out-of-band manageability solutions. With an open standards design that not only works within your existing environment but also enables true freedom of choice. Combined with other AMD PRO technologies, this means IT and end-users both get modern performance, security features, and seamless management, inside the most demanding business and technology environments.

Learn More

For more information on AMD Ryzen PRO processors, please visit https://www.amd.com/en/ryzen-pro