Manage Intel vPro platform-based devices through a single pane of glass

Simplify Intel vPro platform-based device configuration and management tasks

Configure and manage Intel vPro platform-based devices more easily with VMware Workspace ONE

With an Intel vPro integration, the endpoint management solution could allow admins to onboard devices, adjust device power consumption, and connect to devices more quickly and easily compared to using Microsoft Intune with MECM or just MECM

The deployment and management challenges of remote and hybrid work build a strong case for using endpoint management solutions. For some administrators, the complex management tools that sufficed for a less remote workforce may not pass muster today. The unified endpoint management solution VMware Workspace ONE® now offers an integration for business-class Intel vPro platform-based devices that could save time and effort for admins.

We set up and configured three endpoint management solutions to use Intel Endpoint Management Assistant (EMA) for Intel vPro platform-based devices: Workspace ONE with an Intel EMA integration, Microsoft Intune with Microsoft Endpoint Configuration Manager (MECM), and MECM by itself. All three solutions could use Intel EMA, but only Workspace ONE offered a direct Intel EMA integration that could simplify Intel vPro platform-based device deployment and management. Simpler onboarding, deployment, and management means saving time for IT staff and end users, which can benefit the workloads and productivity of both groups. End users can get to work sooner once their devices arrive, and admins can spend more time working on more critical IT matters.

How we tested

We looked at the deployment and management capabilities of three solutions as they relate to Intel vPro platform-based devices:

- VMware Workspace ONE for Intel vPro via integration with Intel EMA

- Hybrid management using Microsoft Intune and MECM

- MECM only

On each platform, we investigated how each solution interacts with Intel EMA, including initial system enrollment and ongoing management functions. We conducted hands-on testing for onboarding, hardware-based power management, and keyboard, video, and mouse (KVM) connectivity. For the hands-on testing, we managed 15 Intel vPro platform-based laptops (5 for each approach).

For more information on our testing and our test environment, see the **science behind the report**.

About Workspace ONE

VMware Workspace ONE is "an intelligence-driven digital workspace platform that enables you to simply and securely deliver and manage any app on any device, anywhere."[1] The solution lets admins centrally manage and monitor users' endpoints (laptops, workstations, and mobile devices), cloud-hosted virtual desktops, and applications from the cloud or from an on-premises deployment. Although VMware provides Workspace ONE as SaaS, administrators can also choose to deploy an organization's Workspace ONE environment on premises.

For more information, visit **https://www.vmware.com/products/workspace-one.html**.

About Intel vPro, Intel AMT, and Intel EMA

Intel vPro is a business-class PC platform that claims to offer hardware-based features ranging from remote management capabilities to long battery life.[2] In terms of system manageability, critical parts of the Intel vPro platform are Intel Active Management Technology (AMT) and Intel Endpoint Management Assistant (EMA).

Intel AMT "provides manageability of Intel vPro platform-based devices."[3] Intel AMT aims to give access and control of unattended devices to administrators, regardless of the devices' states or locations, which could help improve incident management. According to Intel, admins can connect any Intel vPro platform-based client system with a power source on a known network.[4] For example, administrators can access blue-screened devices on a remote network.

Intel EMA enables Intel AMT manageability for the cloud and helps organizations support mobile employees working inside and outside firewalls. Using Intel EMA, admins can "initiate and monitor the progress of a system rebuild, collect hardware asset data, or initiate a power-on for the patching of a system."[5]

To learn more about Intel vPro, Intel AMT, and Intel EMA, visit **https://www.intel.com/content/www/us/en/architecture-and-technology/intel-active-management-technology/remote-manageability-for-workforce.html**.

What we found

Out of the three solutions we tested, only Workspace ONE offered an integration with Intel EMA. The integration for Workspace ONE provided a single pane of glass that helped make it easier for us to onboard new devices, perform hardware-based power management, and connect to systems via KVM. Using Intune with MECM or MECM alone, we used Intel EMA to complete those tasks, but we found the tasks more complex because neither of those solutions offered a direct integration.

Note: In addition to the advantages that the Intel EMA integration for Workspace ONE provides, organizations could also see licensing cost advantages over Windows Configuration Manager-based solutions. Configuration Manager requires licenses for Windows Server, Windows SQL Server, and Configuration Manager itself. In comparison, Workspace ONE is Software-as-a-Service (SaaS) and allows administrators to manage environments without infrastructure, including licenses for the previously mentioned software.

Easier device onboarding

The Intel EMA integration for Workspace ONE communicates directly with the Intel EMA server and detects Intel EMA-managed devices. Workspace ONE labels them with a unique tag, which enables IT administrators to identify Intel EMA-managed systems easily. This can make deployment and upgrades simpler, helping get ready-to-work devices in users' hands sooner while potentially saving valuable admin time.

Because Workspace ONE communicated directly with the Intel EMA server, Workspace ONE downloaded all existing Intel EMA profiles and created applications automatically for each Endpoint Group. Endpoint Groups serve as settings profiles that allow administrators to apply different settings as needed. This flexibility helps administrators manage multiple endpoints quickly.

Enrolling systems in an endpoint management tool (e.g., Workspace ONE or Intune) does not enroll them in Intel EMA automatically. The Intel EMA server needs to know which systems it can trust, so we had to apply the Intel EMA enrollment package to each. When we imported the Intel EMA enrollment package, the Intune with MECM and MECM-only solutions required more steps to complete the task. We distributed the Intel EMA configuration package for the Intune and MECM-based solutions and had to create our own applications using their common application management tools. The Intel EMA integration for Workspace ONE saved up to 31 steps compared to the other two solutions.

Number of steps to import the Intel EMA enrollment package

Workspace ONE with Intel EMA Integration: **10 steps**
✓✓✓✓✓✓✓✓✓✓

Intune with MECM: **39 steps**
✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓

MECM: **41 steps**
✓✓✓

Figure 1: The number of steps that each solution needed to import the Intel EMA enrollment package. Lower is better. Source: Principled Technologies.

## Allows hardware-based power management

With Workspace ONE and the Intel vPro integration, we powered on and off systems and restarted them remotely – all without opening a new window. In addition, IT admins can complete those tasks on multiple devices at once, potentially saving more time and effort. In comparison, Intune with MECM and MECM alone solutions required us to browse to the Intel EMA server, find the system on which we were working, and click through menus to browse to the target endpoint.

Connect to a specific system via out-of-band KVM

Workspace ONE provides a link to the Intel EMA site for the specific systems that admins target for management (also without opening a new window). Admins can press the KVM button that links to the relevant object (e.g., a laptop) on the Intel EMA server. This functionality can help admins manage devices faster and more easily than the other two solutions, but it can also allow admins to work quickly in the event of a security threat.

The other two solutions, Intune with MECM and MECM alone, have a more complicated process with many more steps. Administrators using either solution would need to browse to the Intel EMA server, find the specific endpoint they're managing, and initiate the KVM connection.
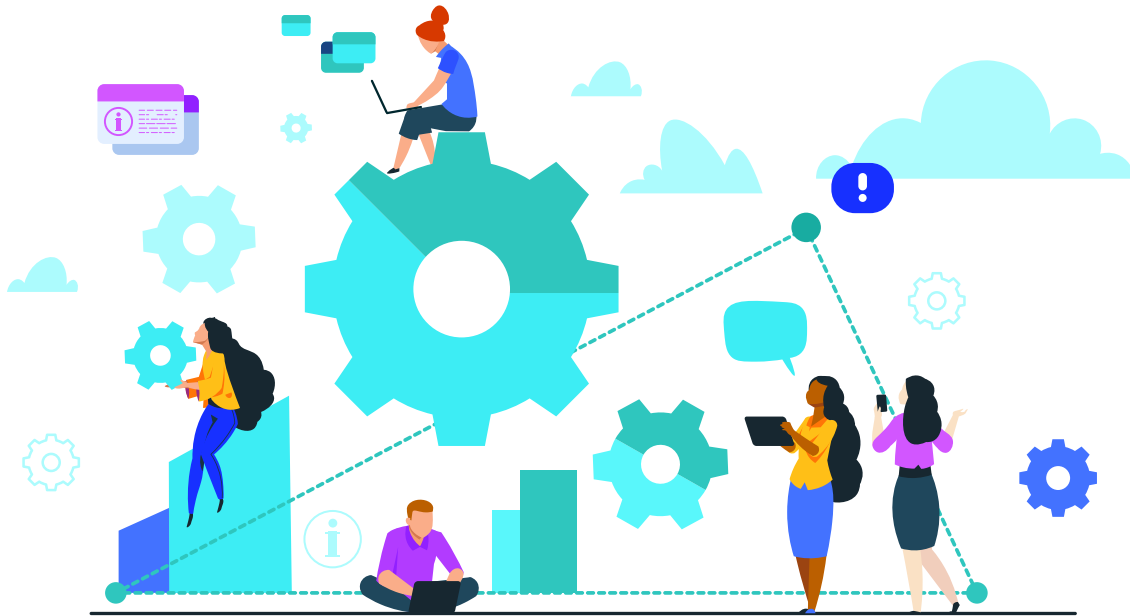
Conclusion

Managing Intel vPro platform-based devices with more complex endpoint management solutions can consume valuable IT administrator time and delay end users from getting ready-to-work devices. We found that out of three endpoint management solutions, only Workspace ONE offers a direct Intel EMA integration that could simplify Intel vPro platform-based device deployment and management. The Intel EMA integration specifically can help with onboarding, hardware-based power management, and KVM connectivity.

1. VMware, "VMware Workspace ONE," accessed July 18, 2022, **https://www.vmware.com/products/workspace-one.html.**

2. Intel, "What Is the Intel vPro® Platform?," accessed July 18, 2022, **https://www.intel.com/content/www/us/en/architecture-and-technology/vpro/what-is-vpro.html.**

3. Intel, "Brief: Intel® Endpoint Management Assistant," accessed July 18, 2022, **https://www.intel.com/content/www/us/en/architecture-and-technology/intel-active-management-technology/remote-manageability-for-workforce.html.**

4. Intel, "Brief: Intel® Endpoint Management Assistant."

5. Intel, "Brief: Intel® Endpoint Management Assistant."

Read the science behind this report at https://facts.pt/bHod64X ▶

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