Lenovo Workstations: Optimising Workflows

Extreme performance for demanding tasks

The modern workplace is built around PCs. But despite growing in power and shrinking in size at a phenomenal rate, their CPUs and graphical resources can't always keep up with the increasing demands of today's software.

Workstations are different. They're designed to tackle the most challenging workflows and keep operations running smoothly. They can run multiple office applications like data-heavy spreadsheets, presentations and video conferences, simultaneously, with no performance issues, increased productivity and better user experiences. **This is what we call a Power Office workflow.**

Workflows before Workstations

Application graphical resource requirements have **doubled** since 2012. Windows 10 has the highest graphics requirement of any operating system to date, with **30%** more CPU power needed than for Windows 7.

Similarly, the GPU resources used by today's most popular applications is rising sharply year on year:

Even contemporary consumer-grade office software, web browsers and operating systems can overwhelm some PCs. And with many organisations adopting increasingly digital workflows, many users need to run multiple power-hungry applications simultaneously to get the job done. In this situation, moving to an entry-level Workstation can add real value to your workflows.

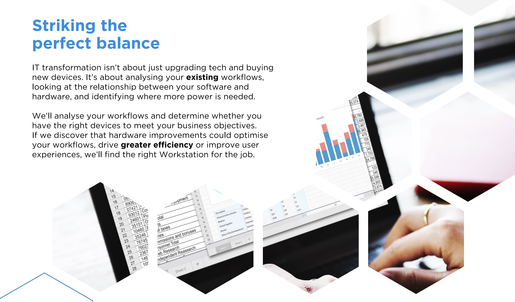
GPU requirement increase

2017	2018	
36%	49%	Chrome
53%	75%	Excel
59%	66%	Firefox
64%	91%	PowerPoint
85%	98%	Outlook
409%	482%	Skype

Striking the perfect balance

IT transformation isn't about just upgrading tech and buying new devices. It's about analysing your **existing** workflows, looking at the relationship between your software and hardware, and identifying where more power is needed.

We'll analyse your workflows and determine whether you have the right devices to meet your business objectives. If we discover that hardware improvements could optimise your workflows, drive **greater efficiency** or improve user experiences, we'll find the right Workstation for the job.



Here's how Workstations can help you find a balance between your software and hardware:

Powerful components

Managing complex workflows can be difficult for PCs, as they often don't have enough Random-Access Memory (RAM) to run multiple applications **smoothly**. When large amounts of data passes between the CPU and other components in a PC with insufficient RAM, information can become bottlenecked, causing workflows to break down.

Storage is also a key component to consider when looking to optimise workflows. Lenovo Workstations typically utilise NVMe (Non-Volatile Memory Express) SSDs to help the system's CPU communicate more quickly with the storage interface, speeding up how quickly data can be accessed and further improving performance.

Microsoft Office applications, from Office 2016 onwards, now support hardware graphics acceleration. Adding an entry-level graphics card to your machine and enabling this feature can offer a significant **performance boost** to your workflows. Especially when you're trying to multitask. Analysing employee workflows and balancing components like this is how you ensure better end-user experiences.

Lenovo Workstations users can even go one step further, introducing additional software tools to fully optimise IT assets and boost productivity by up to **23%** for their Power Office workflows.[1]

[1]PCMark 10 Accelerated Workflow benchmark

Lenovo Performance Tuner

By allowing users to adjust system resources and direct power where it's needed, this free plug-and-play tool ensures a constant balance between hardware and software.

Use the Lenovo Performance Tuner to:

Eliminate interruption: Give demanding applications dedicated CPU resources, and enjoy seriously fast workflows

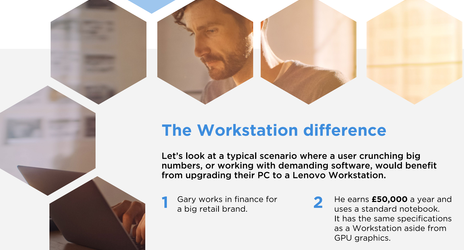
Prevent bottlenecks: Carve out resources for heavy workloads, like multi-threaded applications, and allow your Workstation to continue functioning as normal while producing videos or simulations

Maintain control and flexibility: Customise applications, maintain greater admin control, lock application profiles and monitor resources

NVIDIA Control Panel

Lenovo Workstations use dedicated NVIDIA graphics cards to handle power-hungry applications. With the NVIDIA Control Panel, organisations can easily make the most of their graphical resources and ensure better user experiences.

Simply select which applications you'd like to offload to the GPU, and away you go. A few tweaks here and there can make any application faster, sharper and smoother.



The Workstation difference

Let's look at a typical scenario where a user crunching big numbers, or working with demanding software, would benefit from upgrading their PC to a Lenovo Workstation.

1. Gary works in finance for a big retail brand.
2. He earns **£50,000** a year and uses a standard notebook. It has the same specifications as a Workstation aside from GPU graphics.
3. While his notebook can just about do the job, Gary works with large data sets, which often causes the computer to slow down and freeze. This reduces Gary's productivity by **5%**, costing his employer **£2,500** every year.
4. The company recognises the issue and upgrades Gary's PC to a Lenovo ThinkPad P43s, which instantly increases Gary's productivity by **23%** for approximately **£100**.[2]
5. Gary's new Workstation has paid for itself in just **two** weeks.

Get in touch

Lenovo Workstations, powered by **Intel® Core™** and **Intel® Xeon® processors** and coupled with **NVIDIA®'s ISV-certified Quadro®** graphics cards, are designed from the ground up for reliability, with the lowest repair rates in the industry.

Could moving from a PC to a Workstation help to boost your users' productivity by up to **23%**? Speak to our team today and we'll help you find out.

To get the conversation going, email Liz Helstrom: **lhelstrom@lenovo.com**

[2]Based on list price. Actual product price could be less.