

THE SLOW DEMISE OF VDI

AND THE RISE OF
THE APP STORE



AUTHOR BIO



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Desktop virtualization is one of the stand out technologies of the past decade. The promise: to deliver all end user IT services neatly wrapped inside a remote desktop window. It was every IT administrator's dream. By providing a consistent desktop for each user, support overhead would be reduced to almost zero, and systems administration slashed to a fraction of previous effort.

It was a promise that was never quite delivered.

Almost at the same time that desktop virtualization became mainstream, cloud services arrived on the scene and began to grow exponentially. With the advent of Google apps and cloud storage services, such as Google Drive and Dropbox, IT users quickly embraced the freedom to migrate to the cloud and to work across multiple devices; mixing local applications with cloud services to enable them to work in new and more flexible ways.

Meanwhile in the data center, IT administrators were grappling with a kind of parallel to Moore's Law: *to deliver acceptable performance to endpoints an equivalent value of hardware and processing power is still required in the server rack*. Even then, 3D applications such as ArcGIS, AutoDesk, and even simple apps like Google Earth are practically unusable over anything but the fastest wired network link.

5 THINGS STUDENTS HATE ABOUT VDI

1. Poor performance of large applications
2. Freezing and slow access
3. Working in a window within a window
4. Unable to work offline
5. Inability to access local files / device

The result: the end user sitting at their expensive laptop, with CPU cycles going to waste, plugged in via a cable (having abandoned Wi-Fi), struggling to flip between local documents and the 3D application running in a window within a window. One student described using Photoshop in VDI as 'like trying to paint a canvas through a mail slot'.

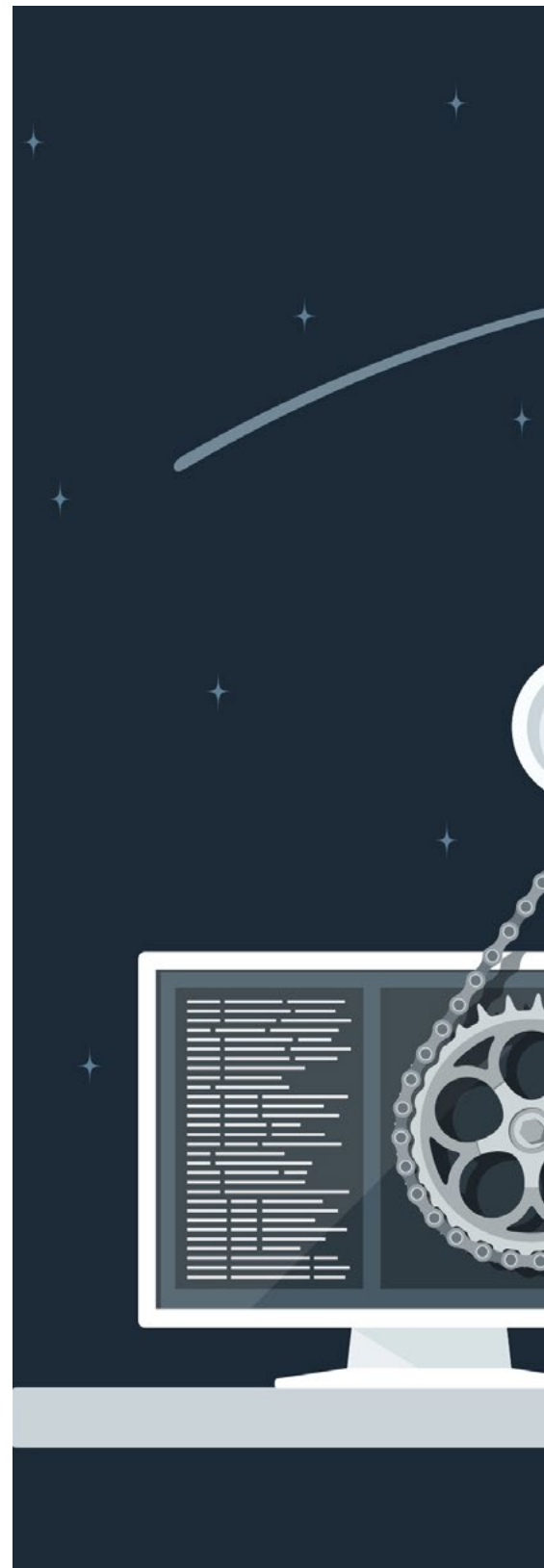
Back in the IT department, VDI administrators soon became the subject of hushed whispers. Not realizing that the only reason they could run 500 endpoints on their expensive server was because the users had long since switched to locally installed apps to get any serious work done.

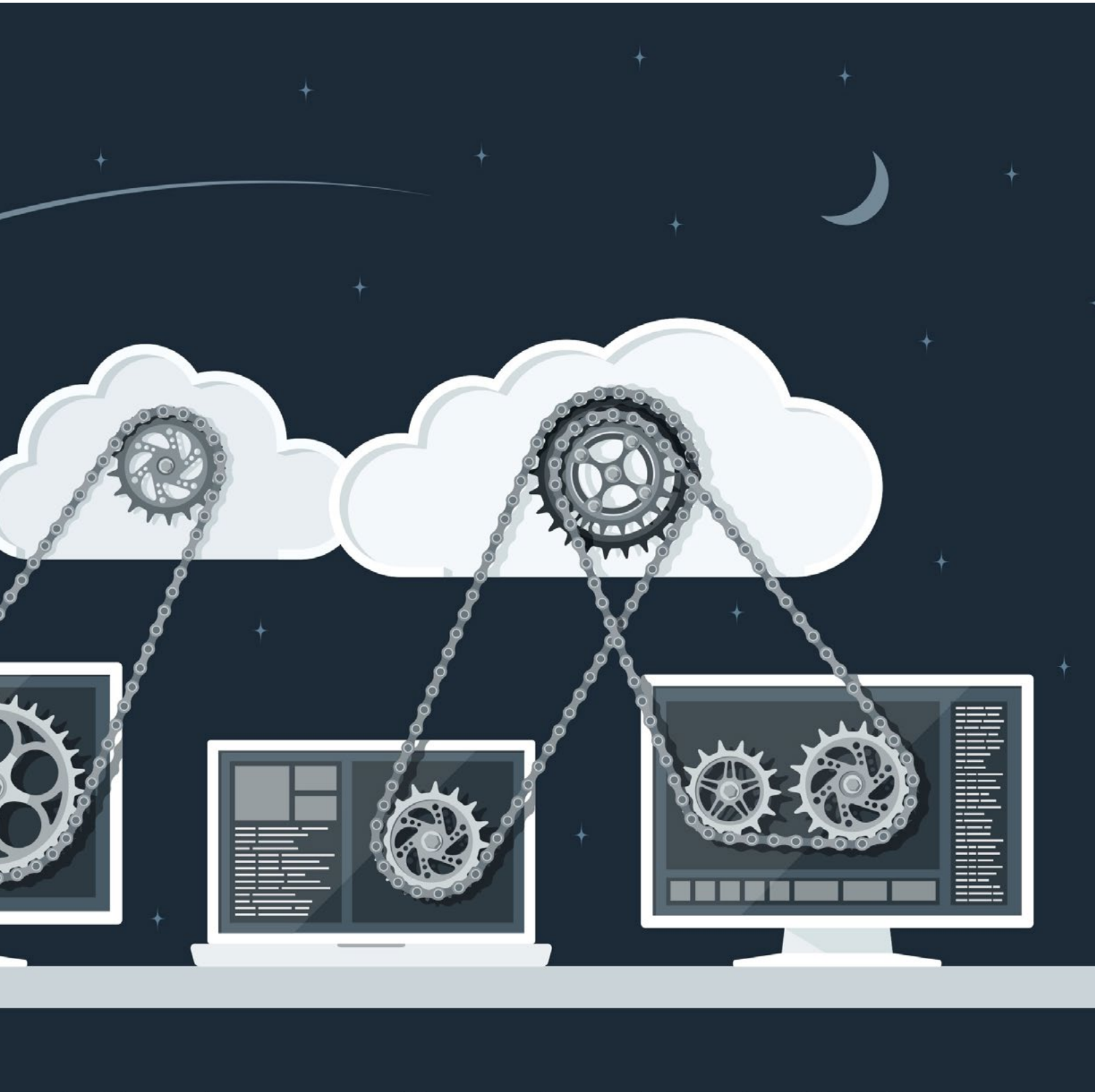
What's more, the promised savings on moving to thin clients were quickly lost as fat clients had to be rolled out again. For example, to do local 3D processing for apps in science and engineering, or for compatibility with local devices in computing.

Nowadays of course, fully fledged Intel PCs (with HD graphics) have shrunk to the size and price point of thin clients, and over 90% of students come to University with a laptop anyway - the other 10% bring a desktop! The smart strategy is taking advantage of all that free local resource.

Indeed, the challenge for the next few years is to rethink IT services for the new generation of digital natives. IT users who are so used to working anywhere and across multiple devices that they already save all of their documents and data to the cloud, and have only ever launched software from an app store.

Thankfully advances in application virtualization over the past 10 years have offered a way out of VDI hell, though it wasn't all plain sailing. Initially, separating applications from the OS gave users the flexibility to work outside of the remote desktop window; but many of the same problems with connectivity and performance remained, and not all applications were compatible.





That is until the latest generation of application virtualization technology made it possible to run applications locally, and even to work offline, whilst still retaining license control and providing usage data for the IT department.

The clever part is not just virtualizing the application client-side, but creating *layers of virtualization*. For example, the most advanced solution from Numecent provides the ability to fully install applications to a user's device, or to integrate them virtually, or to isolate them within a virtual bubble. But that's not all. These options can be defined per registry key and on a file-by-file basis.

It's that flexible layering approach that now allows 100% of applications to be virtualized, where other solutions are still stuck at 50-60%.

Cloudpaging technology then allows the application to be delivered on-demand page-by-page, meaning that to run a 900MB application may only require 100MB of data to be downloaded. It's similar to the YouTube idea of progressive download in that you can start running an app right away, whilst the rest of the data is delivered in the background. The application behaves just like it was locally installed - even while the progressive download is ongoing - then once all of the data is through you can work offline.

The only tether to the data center now is for the software license, and offline use can be set to timeout after a set number of days - at which point the app is removed automatically. Finally, any application can be configured with a concurrent license limit, or set to online use only.

As most virtual Windows apps also work across multiple versions of the OS, we now have a solution that delivers all the promised benefits of VDI but with none of the previous drawbacks.

Of course, users still need a method to access the library of applications, and that is where Software2 are leading the field. Working exclusively in education the S2Hub app store was developed to meet the diverse needs of Universities and colleges. Education is a unique environment where IT need to provide hundreds of applications, with dozens of different licensing models, to thousands of students and staff.

BREAK FREE OF THE DESKTOP

1. Deliver all apps through an app store
2. Run natively with full performance
3. Apps work across Windows versions
4. Access data from sync clients or locally
5. Work anywhere (even offline)

AppsAnywhere.

AppsAnywhere provides flexible controls to deploy apps to managed desktops, to existing VDI (for example as part of a migration plan, or to reduce costs) as well as directly to BYOD users. Apps are delivered from an institution-branded app store which is hosted on-site with local administration.

As you'd expect, the response from students is overwhelmingly positive. They can now run virtualized apps alongside installed apps, accessing data locally or from the cloud, and with the flexibility to work anywhere, including offline. At last, after 20 years, technology is finally freeing users from the shackles of a single desktop.

As one student put it 'why would you install software when you can get it from the app store?'. We were going to ask them about VDI, but they didn't seem to know what it was...

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