



Dispelling the 7 Myths Plaguing VDI Technology

VDI has been and will continue to be a buzzword in the technology landscape, but what exactly is VDI? If you've heard of it, does it make you think of The Wizard of Oz - something magical, mysterious and hidden behind the curtain? Does it make you think of a keyfob code that never seemed to work or if it did, would lose connection precisely when you needed it?! Or do you think of something else entirely? Here we will address some myths that continue to plague VDI technology today.

What is VDI?

Virtual Desktop Infrastructure, or VDI, is a virtualization technology that runs desktop operating systems and application software on a centralized server in a data center. In almost all modern cases the datacenter is in the cloud and defined as Cloud-based Virtual Desktop (or Desktop-as-a-Service). Users remote into these virtual desktops running on Amazon Web Services (AWS), Microsoft's Azure, etc. via their existing PCs.

VDI enables fully personalized mobile desktops for each and every user with the security and simplicity of centralized management. Users have the freedom to access virtual desktops anytime, from anywhere and on

any device. Businesses can control application access and user roles as well as possess a single-pane-of-glass visibility across their entire infrastructure. VDI offers a one-to-one relationship between user and virtual machine. This becomes very important if you leverage or plan to leverage ArcGIS Pro



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Myth #1: VDI is expensive.

What is my all in cost – hardware, physical resources, storage, networking, etc?

In today's VDI world, it can actually be cheaper to provide a virtual desktop than to purchase a physical machine. More and more employees are working from home, traveling for work and working out in the field. As a result employees prefer to BYOD (Bring Your Own Device). Virtual Desktops deliver a standard corporate desktop image to ANY user's device.

In some cases IT departments may be able to extend the lifespan of otherwise obsolete PCs by repurposing them as VDI clients or if new devices are required they can purchase thinner, less powerful machines. Organizations no longer need to purchase or maintain servers, upgrade desktop PCs, purchase the most current version of GIS software or worry about the compatibility of different operating systems.

Hear Jason Harris, Chief Technology Officer at Rok Technologies, provide a financial example of a current hardware investment vs. a cloud-based VDI solution at the [15:30 mark of our webinar, Modernize Your GIS in the cloud.](#)

Myth #2: VDI has insufficient processing power and slow response time providing users with a less than ideal experience.

We have officially moved beyond the 2000's; VDI is a mature technology. In the early days of VDI, updates and deployments would impact the end user experience because the cloning technology of today didn't exist. Now VDI leverages a single, central location to perform software deployments and patches, effectively reducing the load time for users.

A "Logon Storm" – the monday 9am everyone is in the "office" and BOOM the server red-lines and connections are lost is a common legacy VDI annoyance. Today with the ready availability of the cloud's compute power organizations can deploy virtual desktops closer to their users minimizing latency and increasing performance.

Another important part of cloud virtualization is using a remote display protocol to deliver graphics to the user's computer. These protocols have special graphic capabilities to optimize the experience. The screen painting and mouse lag that once plagued VDI have been eliminated. See Myth #6 for more about graphics.

Myth #3: VDI is not an option due to our software licenses.

Licensing can be an issue depending on what type of license your organization has procured. Most software providers offer licenses that will work with VDI so check your current plan to make sure you have VDI licenses and virtual machine licensing and if you don't, reach out to your providers. With VDI all licensing (once you have the right ones in place) is centralized, kept up-to-date and in return more secure.



Myth #4: VDI is not secure

Cloud-based virtual desktops function on a one-to-one partnership between the virtual datacenter and the physical tool. This is very important for those who require highly regulated or secure environments. VDI can also be configured at the user level to restrict data and access. VDI also offers increased data security as it relates to computer failures and lost or stolen devices.

Myth #5: VDI needs constant maintenance and management.

VDI introduces a leaner more efficient IT team. The IT team is vital to VDI implementation and maintenance, but fortunately most maintenance issues can be resolved remotely and quickly without too much impact on the end-user. In addition many maintenance issues are outsourced to the company cloud-hosting like server maintenance and security issues.

Myth #6: Graphics are subpar with VDI technology.

While the core of a desktop is the CPU (central processing unit), it needs GPU (graphics processing unit) to handle all the multimedia tasks today's digital world requires, such as video processing, image analysis and signal processing.

Why does ArcGIS Pro perform better with VDI? GPU is a requirement. ArcGIS Pro leverages display technologies which are highly dependent upon a graphics processing capability. This was not an issue with ArcMap since ArcMap is GDI-based and cannot be accelerated by a GPU. In most cases ESRI recommends the use of VDI coupled with GPU management technology to host virtualized ArcGIS Pro desktops.

Want to experience ArcGIS Pro via VDI in your own dedicated cloud environment? If you have an ArcGIS Pro license and credentials, [we invite you to take a 1-hour test drive](#).

Myth #7: VDI doesn't have enough bandwidth to support our organizational needs.

Everyday we encounter messages about bandwidth - "no internet connection" limits search engines, "4G coverage not available" leads to dropped calls, "low bandwidth" while watching videos results in low quality images. Bandwidth is an issue with or without VDI, so this myth is true and is also true for other infrastructures.

With 6 out of 7 myths debunked and recognizing the numerous benefits to VDI, make sure to answer one key question. What business problem are you trying to solve? Employee mobility and flexibility? Reducing IT costs? Improve processing speeds? Need to outsource maintenance? Increase collaboration across a distributed workforce? Implement ArcGIS Pro?

ROK Technologies can help address your business problems, give the support required for corporate buy-in and manage the move from physical to virtual (and on-going maintenance).

Just to recap the myths dispelled:

- VDI is NOT expensive, cost savings come from reducing and eliminating server purchases, hosting fees, hardware maintenance, & software updates as well as IT resources.
- VDI offers faster processing power for greater organizational productivity and efficiencies.
- VDI works with software licenses, just plan ahead to ensure the correct ones are in place.
- VDI is secure & stable. ROK clients directly benefit from the best in class security practices of Amazon and Microsoft.
- VDI can be maintained and managed by ROK Technologies, freeing GIS managers from the need to keep up with hardware, software, and licensing, allowing them to focus on their core responsibility: GIS.
- VDI comes equipped with the GPU to run ArcGIS Pro and other graphic heavy 3D applications.

Have More Questions?

Book a 15 or 30-minute slot on our calendar if you have any cloud or GIS technology challenges you would like to discuss. We are also available to talk about how we can help better your business. We look forward to showing you just how VDI ROKs!

[Schedule a Time](#) or call us directly @ 888.898.3404



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