



How Citrix & Stratodesk Work Together to Solve the Talent Crunch

Enabling remote work with secure endpoint management

Stratodesk Whitepaper

According to a **study** commissioned by Citrix, 70 percent of knowledge workers living in urban locales say they would move to outlying areas if they could perform their jobs at the same level. And of those workers,

- **69 percent** say working remote would enable them to be more productive and focused
- **83 percent** think it would enable them to strike a healthier work-life balance
- **77 percent** indicated they could save money by reducing commuting costs

Businesses and organizations based in cities around America are finding themselves increasingly short on excellent talent as professionals across the board are seeking to live elsewhere. This is thanks to a combination of skyrocketing housing prices, changes in technology that allow anyone to do their best work from anywhere, and the global talent crunch phenomenon.

Other factors contributing to the dispersion of talent to suburban or even rural areas is in part thanks to the very real talent crunch gripping the nation. Employers simply can't find the talent they need close to home. Instead, they are widening their talent pool by enabling employees to work remotely. Employees, meanwhile, benefit from more flexible work conditions and higher levels of work satisfaction that inevitably cause them to stay at their jobs longer.

This, in turn, reduces turnover, saving employers money on recruiting, training and hiring new employees.

“Traditional work models, where work is organized around a hub like a call center or office building, are fundamentally broken, creating a frustrating employee experience and exacerbating the war for talent,” said Tim Minahan, Executive Vice President of Strategy and Chief Marketing Officer, Citrix. **“People today want to work where they want to work. And to attract them, companies need to rethink what the workplace means and create a more flexible way to work that enables them to get the right people in the right places to unlock innovation, engage customers and move their business forward.”**

But before employers can leverage the full benefit of remote work, there are several challenges that they must first address.

Challenges Facing Remote Work

Saying that remote work is the answer to maintaining great talent is one thing. But enabling remote work is anything but easy. This paper seeks to explore the many challenges facing IT in enabling remote work without opening up security risks, and how they can solve them.

Indeed, perhaps the greatest problem facing businesses and organizations is security. It is already difficult enough to ensure security on premises. Remote work adds to this complexity. When employees work from home, employers cannot be sure that their PCs are compliant with company standards, that they are not outdated, or infected with viruses and/or malware.

Extremely sensitive corporate information is at stake when IT loses control over the location and environment where employees get their work done, making remote work a major challenge for many entities.

Another issue facing remote work is that of software licensing. In order to enable workers access to apps and data and everything they need in order to get their work done, IT is forced to provide double licenses for software – one at home, and one in the office on the company computer. In case of a software audit, IT is hard pressed to prove that software on endpoint devices is appropriately licensed when those

devices lie outside the physical corporate perimeter.

Lastly, IT maintenance costs and demand on resources can quickly escalate through the roof as IT is redirected towards helping and assisting the IT needs of the organization's entire pool of remote work. Helpdesk has no way of knowing what is happening on the endpoint device, whether it is outdated, what operating system it has installed, and it puts the organization at legal risk if somehow IT is responsible for damaging employee's personal property while trying to fix the problem.

With so many challenges standing in the way of organizations and a harmonious remote work solution, it seems that the future of work is doomed to stagnate under the strictest need for workers to only work from PCs in the office.

Thanks to technological advancements, however, America is on the cusp of a new age for work. Whereas before professionals were tied to exact locations dictated by proximity to corporate headquarters, in today's world, both employees and contractors can get their best work done wherever it is most convenient for them. This solution rests in the perfect synergy of advanced VDI and Cloud Desktop solutions providers and the leading endpoint OS and management solution, Stratodesk software.

How Virtual Desktops Solve For Remote Work

Organizations that see the vast benefits remote work provides will first explore Virtual Desktop technology. Called VDI, or Cloud Desktops when accessed from the Cloud and not on-premises, Virtual Desktop Infrastructure has the potential to solve even the most complex remote work concerns facing enterprises and organizations today.

What is VDI?

Virtual Desktop Infrastructure, such as those enabled by Citrix, allows organizations to run a desktop inside a virtual machine that is housed on a server in a data center or the cloud. The desktops can then be accessed remotely via endpoints. With VDI, end users get the benefit of a desktop-like experience. Meanwhile, enterprises and organizations also get the many benefits of VDI including a secure and manageable digital premises.

VDI has much to offer enterprises and organizations of all shapes and sizes. It saves costs, streamlines management, empowers security, and enables unparalleled flexibility.

VDI Benefits

The core benefits of VDI stem from offloading the considerable computing work done on the endpoint and putting the full brunt of that effort onto the server. And yet, end users interact with their desktops and applications as if they were running locally.

The desktop image is delivered via a secure network to an endpoint device. That device can be a PC, a Thin Client, a Raspberry Pi Thin Client or a tablet/mobile device.

How NoTouch Desktop Solves Security Challenges Facing Remote Work

As technological innovation and virtualization has grown in adoption, so too has the need for a software solution capable of turning a seemingly mixed collection of new and existing devices into one congruent whole. This solution must be able to solve the challenges facing enterprises in deploying their cutting-edge VDI. It must function at the highest level, delivering optimal user experience without breaking the bank.

To solve the talent crunch, enterprises also need a solution capable of enabling remote work.

Amidst the horizon of growlingly complex demands on time, budget, and security, Stratodesk software stands out as a much needed solution for end user computing in an enterprise environment. Capable of repurposing both old and new devices into high performing NoTouch Clients, Stratodesk software seeks to unify, standardize, and enhance end user experience while delivering unparalleled reliability, faster login times, protecting confidential data and information, and making working remotely not only possible, but easy and convenient.

Stratodesk NoTouch Desktop, comprised of NoTouch OS and NoTouch Center, is the only endpoint OS and management solution able to run and manage both x86 and Raspberry Pi devices in the same environment.

Stratodesk Adds an Important Security Layer to Remote Devices

NoTouch is a highly secure software solution ideal for remote work. Stratodesk NoTouch OS is Linux based, which means that it is impervious to common security threats that target or exploit x86 and ARM based devices. It can be installed via various installation methods like network (PXE) boot or MSI installer, and unlike competitors that require a specific piece of hardware to enable secure BYOD, NoTouch can run on any flash drive to let your end users access NoTouch or their native operating system side by side.

No Personal Data Stored

Devices repurposed and powered by Stratodesk software do not store any personal data on the endpoints themselves. Furthermore, Stratodesk also protects against the possibility of confidential data or information being acquired when a device is lost or stolen. Stratodesk software does this by safeguarding critical, sensitive information by encrypting it and blocking access to it. And while this form of encryption is very effective, some companies will inevitably require further and even more extensive security for certain information deemed by most to be not worthy of protection. For such companies, we offer a Disk Encryption upgrade.

NoTouch Desktop Enables BYOD

Stratodesk's software supports BYOD to meet advanced requirements without opening up potential security threats. Remote workers simply need to boot NoTouch OS in live mode from a USB stick in order to access important work files wherever they are at, from any device that they want – not just the ones they bring home from work. When they are done, they can exit their session and remove the USB stick. Native operating systems won't be affected.

This effectively eliminates the challenges facing BYOD by ensuring that no important data is housed on the endpoint device itself. In the case of a personal device being lost or stolen, that device will not have any confidential or important personal or corporate data stored.

PC Repurposing

Instead of throwing out PCs and replacing them with expensive new devices, Stratodesk PC Repurposing allows organizations to leverage their existing pool of devices. This is done by converting those devices into NoTouch Clients. By converting your devices, you can extend their life cycle. Doing so saves an incredible amount of money, eliminates waste, and increases your ROI.

Summary of Benefits | Stratodesk

By repurposes existing devices into NoTouch Clients that require zero maintenance, IT removes Windows licensing obstacles, the need for antivirus/malware contracts, manually updating individual devices, and beyond. Because NoTouch OS is Linux based, it is impervious to common malware and security exploits.

When using Stratodesk software, enterprises can expect these benefits:

- **Cut Your Security Bill:** NoTouch OS installs directly onto all of your endpoint devices bare metal, transforming them into high performing NoTouch Clients. Cancel your malware and antivirus contracts and save your money.
- **No Windows:** Cancel all of your Windows licenses and save a fortune!
- **Enable BYOD securely** with live boot mode from any USB stick.
- **Stratodesk protects against threats** from devices being lost or stolen. It does this by protecting confidential information and making sure no personal information is stored on the endpoint device itself.
- **Stratodesk offers Disk Encryption** for advanced security use cases.

Raspberry Pi Thin Clients and Remote Work

Raspberry Pi Thin Clients are the crown jewel of VDI Thin Client endpoints. Considered by some to be the next generation defining Thin Client endpoint device, the Raspberry Pi platform is able to deliver a PC-like experience from a motherboard at a mere fraction of the cost of competing PCs, or bloated Thin Clients.



Thanks in part to the Raspberry Pi 4, the Raspberry Pi platform has the native capabilities needed by enterprises around the world to reap the full benefits of VDI. Skype for Business, Dual View, H.264 decoder and inherent Citrix connectivity and management are capable directly out of the box from Raspberry Pi based endpoints like the **Citrix Ready workspace hub**.

Available from NComputing, ClearCube and ViewSonic, the workspace hub comes with Stratodesk included and are ready to securely connect to corporate networks directly out of the box with virtually zero IT involvement.

In practice, the Citrix Ready workspace hub combines the convenience of Stratodesk software and repurposed devices with the low cost of Raspberry Pis. It is truly a next generation solution capable of powering the future of work, fully streamlining everything involved in the process of adding endpoints to a secure digital perimeter from purchasing, setting up, and running.

Ultimately, the workspace hub affords the full effect of an endpoint network that no longer simply encompasses a set physical space, but stretches to wherever your remote workers need it to.

The Raspberry Pi Thin Client in Production Environments

The Citrix Ready workspace hub is already being used in production environments today, handling critical business needs for organizations that rely heavily on their virtual desktops to handle the core needs of their business.

In 2019 alone, Stratodesk has released two groundbreaking success stories that garnered great reception by the press. These two stories focus on how organizations use the Citrix Ready workspace hub from NComputing and ViewSonic to accomplish key business goals.

In both cases, the workspace hub granted incredible benefits for the organizations. For Gaston County of North Carolina, the workspace hub single handedly reduced the average 20 user department PC/Endpoint refresh implementation from what used to take approximately 4 business weeks to 4 business days and reduces basic PC costs from approximately \$800-\$1000 per workstation to \$100 per workspace hub.

In the words of Fred Hinson, Virtualization Administrator of Gaston County, **“The Stratodesk Citrix Ready workspace hub will be a keystone of Gaston County’s software defined secure digital perimeter. Stratodesk is now positioned to lead us into the future of work.”**

The second success story cites Nick Casagrande, IT Director of LGL Recycling, for being particularly impressed with the user experience of the workspace hub, which he says is not only comparable but actually exceeds the user experience of the Thin Client solution that he had in place previously.

For Casagrande, the solution not only saved an incredible amount of time and money (reducing the average PC and endpoint update time by 40 to 60 hours when updates were required), it also enabled him to solve his remote work problem.

“An added benefit has been the ability to send the RX-HDX’s to our work from home staff direct from CDW and have them configured with zero IT involvement,” said Nick Casagrande, IT Director at LGL Recycling. **“All I needed to do was add one simple firewall rule. I didn’t have to set up a VPN, deploy any hardware, or gather public IP addresses. I just had to pop a hole in the corporate firewall so the RX-HDX’s could reach the Stratodesk NoTouch Center and obtain their configurations.”**

IT administrators around the world can expect similar benefits from the workspace hub, and will also be enthused to learn that Stratodesk software announced day one support for the brand new and groundbreaking Raspberry Pi 4 – complete with native dual view support, 4k scaling, and lightning fast speed.

Stratodesk Software – Solving the Talent Crunch

No longer just a short term problem, the talent crunch is in fact expected to only get worse if anything as we head into the next decade. In fact, McKinsey & Company estimates that both America and Europe will be at a deficit of 16 to 18 million college educated workers. Also astoundingly, the majority of corporate executives view hiring¹ among their biggest obstacles!

With the talent crunch worsening, and organizations around the world now competing in the harshest of environments for attaining skilled talent, it's no wonder that so many are thinking outside the box and enabling remote work as a way to widen and maintain their talent pool.

Unfortunately for employers, the big city, once the mecca of skilled professionals, is quickly losing its appeal to workers. Skyrocketing housing prices are pushing young and seasoned professionals alike out of the city in search of housing havens where they can actually afford to live and keep up a certain lifestyle. The willingness to commute is also something of the past, as more and more workers search for jobs with flexible hours that allow them to ditch the morning commute. This is particularly prevalent among younger workers.

What is perhaps even worse news for the “city hub” minded companies is that as many as 71% of working professionals² find city life to be “crippling” in comparison to the kind of lifestyle they could find for themselves elsewhere.

To combat this, employers are turning to remote work as the most immediate solution. The Citrix-One Poll survey, for instance, found that as many as 31% of organizations polled are already looking for talent nationwide – not just those in the immediate area.

Flexible Work Becomes Mainstream

Once perceived as a fringe perk reserved for tech startups and the self employed, flexible work has quickly become the mainstream and expected way to get work done. Some even argue that flexible work is already the norm, with some studies showing that upwards of 50% of workers are already working remotely at least two and a half days a week.³

And why not? With technology that makes easy communication accessible to all, it's no wonder that so many feel more productive doing their work from home or even from their local co-working space or coffee shop.

¹ Stripe and Harris Poll

² Citrix One Poll, 2019

³ IWG Workplace Survey

What Can Enterprises and Organizations Do To Stand Out?

With the rising tide of remote work and talent shortage, the most obvious way for employers to stand out is to simply ride the wave. They can enable secure remote work, thanks to advanced and fully secure solutions.

Take, for example, the combination of Stratodesk software and any of the major VDI or Cloud Desktop providers. Thanks to Stratodesk's secure endpoint OS and management solution, employees can get secure access to their virtual apps and data without adding burden on IT resources. IT, meanwhile, can rest assured that their digital perimeter is safe. In fact, Stratodesk software enables them to monitor and manage their entire network from one place, including peripheral devices. Endpoints can be managed as near or as far away as needed.

The Talent Gap Can Be Crossed

More than a simple problem that needs to be solved, we are witnessing a fundamental shift in the work culture of America. And it is a shift that should be celebrated, not mourned over. As the industrial revolution once brought workers streaming into cities, the digital age will allow workers to choose where they want to work while enabling employers access to a much wider pool of fantastic talent.

By enabling remote work, Stratodesk continues to innovate, helping forge the future of work.

In Summation

As you can see, VDI technology can go a long way to deliver an advanced solution for remote work – one that reduces complexity while also saving money for enterprises around the world.

In order to fully deliver on the promise of providing a solution for the future of work, and provide an answer that will help employers to compete on an incredibly competitive field, VDI alone is not enough.

For this reason, Stratodesk software does the impossible – it stands at the intersection of VDI and IoT innovation, delivering a solution that not only solves remote work – it supercharges it, making it not only convenient but available to any organization or business, big or small, by democratizing remote work technology.

About Stratodesk

Stratodesk is the world's leading endpoint OS and management solution. It is used by government and healthcare organizations, banks, SMBs and large enterprises to eliminate cost and scalability obstacles facing their complex network of devices. By delivering the only management software for mixed environments of x86, ARM and Raspberry Pi devices, Stratodesk is reinventing endpoint computing for enterprise IoT and VDI. Our cutting edge, linux-based solution, NoTouch, is hardware-agnostic and runs on the Raspberry Pi.

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