

# 7 Things you Should Know about Thin Clients

Thin client computing is not what it used to be. The idea is still the same: The typical thin client is a lean system with a streamlined operating system and an optimized hardware configuration. It connects to a remote system which provides the full operating system, applications, storage, and even processing power.



But today's thin client solutions are more powerful, more flexible, and more reliable than they were 20 years ago. They still carry an unfair reputation (remembered for their limited processing power and a slow, unreliable user experience). However, improved protocols, better networks, and advanced desktop virtualization solutions have made thin clients an ideal option for the modern IT environment.

Forget the thin clients of the past. Here are seven things you should know about today's thin clients.

## **Built for the cloud**

In a way, those early thin clients were ahead of their time. The virtualization and remote desktop protocols were not as mature as they are now. And there wasn't a proliferation of broadband, ever-present wireless networks, and fast mobile data packages. But the world has caught up.

Current architectures are ideal for thin clients. Fast, pervasive networking connections are commonplace. Virtual machines have become mainstream for servers and desktop environments. Organizations are moving applications and business critical workloads to the cloud. Software as a service (SaaS) and platform as a service (PaaS) models are standard, with many business solutions now delivered remotely. Storage solutions are being centralized in the cloud. And IT professionals are regularly monitoring and managing systems remotely through web interfaces.

Thin clients are ideal for environments where systems are virtualized, data is stored remotely, and processes are handled in the cloud. And by shifting to a thin client architecture, modern management and security scenarios become easier to implement and maintain.



### **Improved data protection and compliance**

Data protection is a key concern for today's organizations. Critical data must be protected, vulnerabilities need to be minimized, and regulatory compliance standards (GDPR, HIPAA, and so on) need to be met. Thin clients inherently protect data by removing common vulnerabilities. A typical thin client architecture stores all data in a centralized location – the data center or a secure cloud storage solution.

Data is not stored on the user's workstation. In fact, many thin clients provide no user storage at all. A user cannot copy files to a USB device and take critical data outside of the network. The thin client OS itself is less vulnerable to common exploits while the managed virtual environment is secured by IT. And if a physical device is stolen, you can be sure no sensitive data has been stored on the stolen system.

### **Secure environment**

Along with protecting data, thin clients help keep the entire IT environment secure. A thin client will typically have a streamlined operating system with far fewer device drivers, system services, components, and user privileges than found on a full operating system. E-mail and collaboration tools, for instance, run on a secured server—not on the local client. And users can't make changes to the virtual environment as one might be able to do on a local PC. This vastly reduces the potential attack surface. There is no risk of a user inadvertently installing malware on the system and ransomware is of no concern. And since the virtual desktops are maintained on a server, IT can easily install patches and update images to ensure every user is operating with all the latest settings and updates.

### **Simplified system deployment and management**

A thin client is like a remote control. When a user logs in, they access a virtual environment running on a server. The actual thin client requires very little configuration. The user profile, credentials, computing environment, and so on are centralized in the data center or the cloud. Deployment is essentially plug-n-play.

Meanwhile, business critical applications and storage systems run on servers in the data center. Updating centralized virtual machines is far easier than coordinating company-wide updates being pushed across the network and to devices that might be outside the network. Likewise, your backup strategy is simplified when all of your organization's files and data are stored centrally rather than dispersed across hard drives and mobile devices throughout your environment.

### **Keep your business running**

All of this translates into high-availability for your systems and less downtime for employees.

A thin client architecture enables a flexible environment—workstations can be swapped or shared, entire departments can be moved, and resources can easily scale up. Because user profiles and data are centralized, provisioning a new system or recovering from a system failure is seamless—just plug in a new thin client and users can log in and pick up where they left off. For users, a thin client is essentially interchangeable. If a group is moving to a new location, there is no need for IT to track individual systems and coordinate schedules. Simply install thin clients in the new location while people continue to work on their existing systems. After the move, they just log into the thin client in the new location.

Since virtual machines and data are stored centrally, IT can implement robust back up and failover strategies. You do not need to worry about recovering files stored across the network or recovering individual user systems.

### **Gone mobile**

In the past, thin clients were not well suited for mobile workers. Today, however, they improve enterprise mobility by enabling better management of mobile devices. A mobile thin client delivers the same level of access a user would get when working within the corporate network.

Provisioning of these devices is streamlined. And since there is no risk of data on a mobile thin client being lost or falling into the wrong hands, IT does not have to manage these devices in the way they would need to protect standard mobile devices.

### **Lower costs**

Businesses are rethinking the modern workspace and finding ways to make better use of real



estate. Thin clients can help. Low profile thin clients require far less space than traditional workstations, making them a great solution for smaller and open workspaces. As a result, space can be devoted to devices that truly boost productivity, such as larger and better monitors like the LG 38-inch curved ultrawide thin client monitor, which provides enough real estate for the most ambitious multi-tasker. And since everything is stored on servers, thin clients are ideal for shared

workspaces, allowing any user to log into any system.

Branch offices with thin clients typically have lower demand for on-site IT support since most system management is done remotely on virtual machines. And thin clients, boasting streamlined hardware and handling fewer processes, consume a fraction of the power used by standard PCs.

### **Wrapping up**

For some, the term "thin client" might conjure memories of the turn of the century. The concept, however, is very modern. Thin clients are ideal for cloud computing and the current proliferation of virtual machines. And thin client architecture enhances many of the current best practices around monitoring, auditing, and security.