



WHITE PAPER

The Alternative to Citrix

Ericom's Complete Application & Desktop Access Solution

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Executive Summary

This paper discusses the merits of choosing Ericom Connect®, the alternative to Citrix, for secure managed access to Windows desktops and applications (also known as Server-based Computing), over the comparable Citrix solutions (Citrix® XenApp™ and Citrix® XenDesktop™).

This paper also examines the technical and business reasons for the much lower than expected penetration of Server-based Computing (SBC). Common perceptions and misperceptions about SBC, as well as other factors, will be discussed, including solution complexity, cost of installation and deployment, security, ease of management, etc.

Overview

Server-based computing (SBC) has developed into a preferred method for delivering applications and desktops across multiple platforms and user locations. This is due in part to advances in networking infrastructure, as well as in the Microsoft® Windows® operating system.

Despite these advancements, the reality is that only a small percentage of organizations that could benefit from using SBC actually are using it. Moreover, of those organizations that are using SBC many are limiting its use to the departmental level, rather than applying it throughout the organization. We estimate the utilization rate of SBC at less than ten percent of corporate desktops worldwide. This is a very low number considering all the proven benefits of SBC.

The reason for such a low adoption rate is that until recently, organizations were trapped between having to choose an entry-level solution (Remote Desktop Services, formerly Windows Terminal Services) that does not provide sufficient benefits and a pricey solution (Citrix) that is expensive and complex to deploy. On the entry-level, Microsoft Windows includes built-in support for Remote Desktop Services (RDS), so organizations can deploy it at very little extra cost. Unfortunately, RDS was designed for small-size and simple deployments, and is inappropriate for larger or more complex scenarios.

Citrix, on the other hand, offers much broader functionality, but at a significantly higher price and at a much greater degree of complexity. Just setting up a Citrix presentation demo, or a Proof of Concept, requires several days of onsite installation and configuration by a certified Citrix professional. Citrix production environments require the continued support of this expensive resource. The intensive overhead generally proves to be a significant hurdle for many organizations, preventing SBC from taking off.

By contrast, Ericom Connect enables organizations to implement large-scale deployments of server-based computing with significant cost savings. These include lower license fees, reduced support costs due to a much simpler IT environment, greater scalability, and more.

These advantages and simplicity enable large scale cost effective, centrally managed and secure SBC deployments. They also enable local and remote access to applications, desktops and data, eliminating the need for IT administrators to install and configure applications on each and every user PC.

Why is there such a dire need for an alternative to Citrix?

Choice and costs. One is hard-pressed to find an area of IT in which a monopoly exists to the extent that it does in the Server Based Computing (SBC) arena. For years, customers were faced with an almost complete lack of choice when selecting an SBC solution. Lack of choice means paying more for licenses and maintenance and getting less in support and access to the features you really need, such as ease of management, ease of use and quality of service.

Lack of choice also stifles progress: Without real competition there has been no incentive for innovation, despite the fact that there is still much room for improvement in SBC, including lowering complexities, reducing costs and more.

The complexity of deploying an SBC solution is perceived to be greater than that of managing locally installed applications. This is a significant misperception. The perceived complexity of SBC stems from the *actual* complexity of the Citrix SBC solution and is not inherent to the concept itself.

SBC does reduce complexity, due in part, to its ability to centralize the management of applications and access permissions that ensure data security.

Hence, the preferred approach would be to use an SBC solution that reduces IT complexity by optimizing the use of existing hardware; automatically installing client updates; constantly providing an up-to-date view of available services without requiring manual refreshes; enabling remote administration and support; and delivering a true seamless experience to end-users.

Cost (both purchase price *and* total cost of ownership) is often a deterrent to full deployment of Citrix. The combination of licenses, maintenance, hardware, consulting, integration, training and help-desk costs can be excessive — even overwhelming.

Citrix addresses this situation by providing multiple packages. The high-end package incorporates every possible bell and whistle; while its lower-end package provides limited capabilities. Unfortunately, this approach often exacerbates the situation: The high-end solution is often overkill, raising costs even higher, while the low-end solution is inadequate in terms of providing scalability and upgrade choices. Moreover, the customer often discovers that upgrading from the low-end solution requires purchasing new licenses, installing a different product and retraining staff.

In reality, a single solution is needed, that is both powerful and easy to use, providing the core functionality organizations need, but foregoing extraneous “gold plating.”¹

¹ The cost barrier is even more significant for organizations with mixed server farms, multi-tenant environments, and/or multiple types of back-end systems (e.g., local and cloud-hosted systems). The

Introducing the Desktop Virtualization (VDI) paradigm further compounds the picture; as IT organizations analyze VDI solutions and concepts, they begin to evaluate whether their needs will be better solved by Server-based Computing, Desktop Virtualization (VDI), or a combination of both.

How does Ericom Connect empower businesses and enterprises?

Ericom Connect aligns IT with business objectives and optimizes the application and desktop access infrastructure by providing the following:

- Eliminating the complexities of providing access to local and remote users, whether at the office, home, customer site, branch location or on the road.
- Device-independent access, enabling users to connect interchangeably from Windows and Linux desktops and laptops, as well as from thin clients.
- Secure user access to office servers and workstations from remote locations.
- Highly scalable system and application load-balancing that allocates connections and applications to the optimal server, ensuring optimal use of server resources and a smooth, reliable user experience.
- For flexibility and ease of use, end-users can launch remote applications and desktops in any way they choose — from the Start menu, desktop icons, the built-in, personalized Web interface or the Ericom AccessPad native interface — for faster, more intuitive interactions.
- The IT infrastructure management environment increases overall scalability, reliability and stability, and enhances asset management.

How does Ericom Connect reduce the cost of managing desktops?

- Centralizes the installation, management and update of corporate applications and desktops on a set of secured servers located in the data center, instead of manually doing so on a multitude of workstations dispersed throughout and outside the organization.
- Centralized management and control eliminates the need to define settings at the user's desktop. In addition, the user interface can be published as an install-on-demand downloadable client, increasing staff efficiency.

preferred solution is a comprehensive product from a single vendor that can provide enterprise-wide access to all required systems.

- The built-in Remote Desktop Support tool enables IT staff to provide fast, real-time user support and troubleshooting, enhancing productivity.
- Ericom Connect supports thin-client computing. Thin-client devices are less expensive to purchase and have a much longer lifespan than the average PC. Moreover, all on-going maintenance and administration is performed entirely at the server level, with no need to service or upgrade individual user devices. In addition, thin client devices use significantly less power and produce less heat than traditional or laptop PCs, thus reducing power and A/C costs and supporting Green Computing.

Deploying easily across the organization

- Ericom Connect management layer supports any combination of servers running Windows Server 2008 R2 and higher.
- On the client side, Ericom Connect offers native clients for a wide range of Windows, Mac, Linux, Android and iOS platforms, as well as seamless browser-based access from any device (using the browser's native HTML5 capabilities).
- Ericom Connect's affordability and scalability makes it possible to apply this access solution throughout the organization, rather than as a point solution only for select sectors.
- Ericom Connect simplifies IT staff tasks with enhanced productivity tools such as
 - Terminal Server CPU and Memory Optimization
 - Terminal Server Network performance monitoring and alerting and
 - IT assets management

Ensuring application and desktop access security

- For protection against hackers, a single port relay enables information to be published securely beyond the firewall, without the need to publicly expose the applications, ports or IP addresses.
- Enterprise-level security includes SSL Gateway, Single Sign-on, two-factor authentication (RADIUS certification) and integration with leading SSL VPNs such as Juniper, F5, Array, Aventail, AEP and Microsoft. Connections can be encrypted from clients to Terminal Servers, even across public networks.
- Ericom Connect facilitates compliance with major regulatory standards (such as SOX, JSOX and HIPAA) with features such as detailed logging and auditing and real-time monitoring of user sessions.

Comparative Highlights at a Glance

	Ericom	Citrix
Deployment and Setup	<ul style="list-style-type: none"> Complete product installation and configuration in hours or less No need for dedicated training and costly certification 	<ul style="list-style-type: none"> Lengthy & complex installation and configuration process Requires certification to deploy and operate the platform
Enterprise-wide access solution	<ul style="list-style-type: none"> Ericom Connect® is a single product for managing enterprise-wide access in Windows Terminal Server / Remote Desktop Services, physical desktop, and virtual desktop environments 	<ul style="list-style-type: none"> Citrix XenApp requires multiple products (XenApp, XenDesktop, NetScaler) to provide enterprise-wide access in Windows Terminal Server / Remote Desktop Services, physical desktop, and virtual desktop environments
Application Publishing	<ul style="list-style-type: none"> Publish apps from a web-based console using any web browser - no install or plug-in required Applications may be installed in different path locations on each server 	<ul style="list-style-type: none"> Applications need to be installed in the exact same path on each server Requires Microsoft Management Console (MMC) on Windows
Ease of use	<ul style="list-style-type: none"> Single, intuitive web-based administration console controls all features / functions and configurations 	<ul style="list-style-type: none"> Multiple interfaces (both Microsoft Management Console and web-based) are required for managing the Citrix environment. Admin needs to know where to go in order to configure different features.

<p>Scalability</p>	<ul style="list-style-type: none"> ■ Ericom Connect supports 100,000 users per management server ■ Ericom Connect grid technology provides flexibility, redundancy and easy addition of new servers as needed 	<ul style="list-style-type: none"> ■ Citrix only support 5,000-10,000 users per management server ■ The process of adding new servers to the deployment is complex
<p>Performance</p>	<ul style="list-style-type: none"> ■ Ericom Blaze technology is included as part of the Connect product and optimizes RDP-based sessions effectively 	<ul style="list-style-type: none"> ■ Citrix ICA/HDX protocol is a proprietary Citrix technology
<p>Reporting and Analytics</p>	<ul style="list-style-type: none"> ■ Ericom Connect provides wealth of reports and insights across multiple datacenters and tenants, via a built-in BI and analytics capabilities that are an integral part of the admin web console 	<ul style="list-style-type: none"> ■ Citrix mainly provides a dashboard of alerts, errors and overall system health peer site. It is not a business insight tool
<p>Security</p>	<ul style="list-style-type: none"> ■ Ericom Connect centrally manages data security and adheres to common regulatory and compliance policies (e.g., SOX, HIPAA, PCI DSS) ■ Ericom Connect provides monitoring and reporting of system and end-user usage, all from within a single management interface. 	<ul style="list-style-type: none"> ■ Many aspects of Citrix security are driven by NetScaler, which is a separate product that significantly increases the cost of the overall solution
<p>Multi-Site</p>	<ul style="list-style-type: none"> ■ Ericom Connect streamlines the process of handling geographical multi-site configurations 	<ul style="list-style-type: none"> ■ With Citrix, multi-site configuration is very complex

Clientless access from HTML5 browsers	<ul style="list-style-type: none">■ Ericom's HTML5 remote access client is the most mature solution in the marketplace■ A rich set of features ensures a superb user experience for users of both mobile devices and workstations, such as mobile optimized windows, gesture-based touch screen capabilities, auto-sensing keyboard and an overall consistent experience on any device	<ul style="list-style-type: none">■ Citrix HTML5 is usually suggested as a fall-back method to their native clients■ Citrix Receiver does not include rich mobility tools, therefore users are generally directed to the native client
Cost	<ul style="list-style-type: none">■ Ericom Connect comes in a variety of attractive pricing models with a flexible cost structure, including named user, concurrent user, site license and more	<ul style="list-style-type: none">■ Citrix baseline prices are usually higher and offer only a concurrent user-licensing model

Summary

For a long time, the presentation virtualization (SBC) space has been dominated by Citrix, for a simple reason: a lack of alternatives. However, with Ericom Connect, the marketplace is now very different. Organizations and IT departments have a choice — a cost-efficient, less complex and more attractive alternative.

Within the dynamic market of evolving desktop and application access and delivery paradigms, Server-based Computing (SBC) has achieved an accepted status as the preferred method for managed application and desktop access. Desktop Virtualization is an emerging technology in this space, and the preferred solution should be well positioned to provide the benefits of both technologies.

Visit http://www.ericom.com/citrix_alternative to learn more about the benefits of the alternative to Citrix or to download a free product demo.

About Ericom

Ericom Software is a global leader in securing and connecting the unified workspace. Ericom empowers today's connected workforce and the IT organizations that support them by securing and optimizing desktop, application, and web content delivery to any device, anywhere. Founded in 1993, Ericom provides enterprise-grade secure remote access, desktop virtualization (VDI), and web security solutions to a global customer base of more than 30,000 midsize to Fortune 100 organizations. With a focus on application delivery, cloud enablement, and secure browsing, Ericom advances secure connectivity—providing end users with a superior work experience and optimizing enterprise productivity. With over 10 million end users, Ericom has offices in the United States, United Kingdom and EMEA and an extensive network of distributors and partners throughout North America, Europe, APAC, and Africa.

For more information on Ericom's products and services, contact us at the location nearest to you. And visit our web site: <http://www.ericom.com>

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