SierraVDI

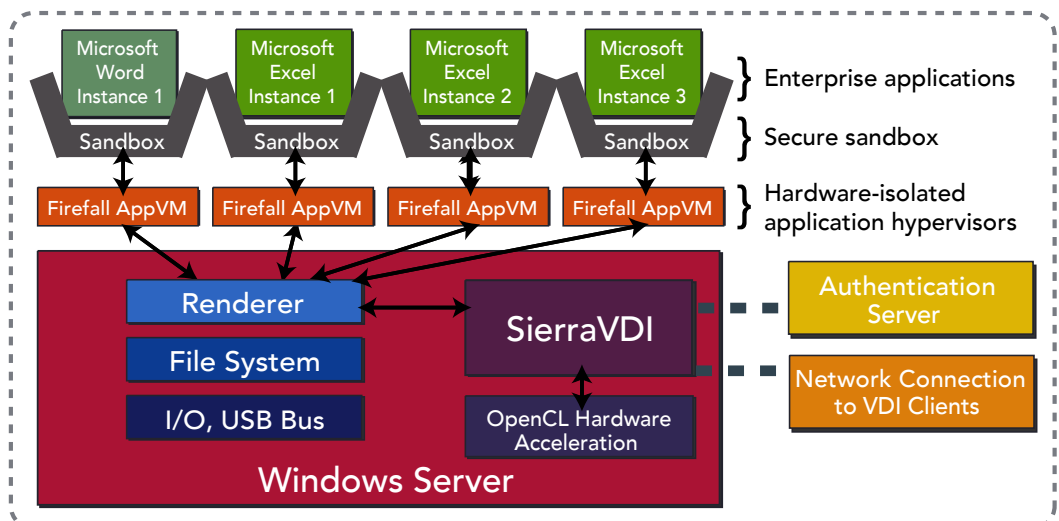## Protect sensitive data by sandboxing virtual application instances

Virtual desktop infrastructure (VDI) has revolutionized the way that IT provisions and manages applications. VDI has automated application deployment, reduced capital costs, and enabled users to access applications from any device and any location. But wait; there's a catch. Unfortunately, most VDI solutions today expose businesses to malware infections and data theft.

Security risks in traditional VDI deployments

Attackers can easily infiltrate VDI servers to monitor, manipulate or steal data. They can trick virtual desktop users into opening malicious files such as spreadsheets which install malware on host servers. In addition, virtual desktop users can inadvertently download malware from virtually hosted web browsers, like Microsoft Explorer, to VDI servers. Alternatively, malicious insiders can initiate VDI sessions and intentionally install rootkits on VDI servers. Without proper security controls, hackers can easily compromise VDI services.

Hardware-isolated protection against attack

SierraVDI not only delivers high-performance virtualized desktop services, it also offers built-in security and isolation through Sierraware's innovative Firefall application VMs. The Firefall VM provides an invisible shield around each application instance, preventing application users from installing malware on the underlying operating system or from accessing other application instances. By sandboxing each application instance with a hardware-isolated hypervisor, SierraVDI prevents targeted attacks and zero-day threats.

Features and Benefits

- Increase productivity by enabling fast, easy access from employee-owned devices

- Automate and centralize application provisioning and management

- Increase security by centrally hosting critical business applications

- Ensure business continuity by replicating services in redundant data centers

- Enable remote or field employees to work anytime and anywhere

- Allow partners to securely access business applications

- Improve user experience with multimedia and USB redirection

- Leverage H.265 encoding to improve performance and application density

The SierraVDI architecture features Firefall virtualization technology and sandbox containers to secure each application instance.

Keep employees happy by supporting BYOD

Employees today want to access their Microsoft Windows applications from all types of devices—their iPad, their Android-based phone, or even a low-cost thin-client device. IT departments simply cannot keep up with the deluge of different devices in most corporate environments. SierraVDI enables all of these devices to access Windows-based applications with a look and feel that is adjusted based on the size of the display of the device.
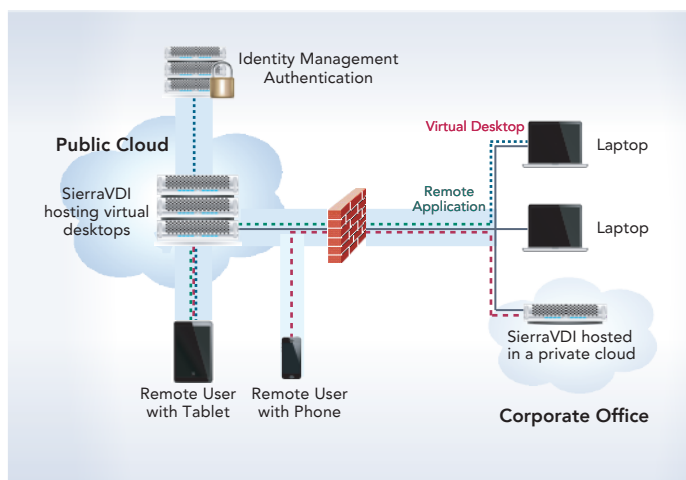
Support BYOD and work-from-home initiatives by enabling access from tablets, smartphones, and thin clients as well as desktops.

Optimize video streaming

SierraVDI provides multimedia redirection to enhance users' audio and video playback experience. SierraVDI transfers multimedia in a compressed format directly to the client rather than playing multimedia files on the server and then compressing the content again and streaming it to VDI clients.

Multimedia redirection allows users to experience smooth, consistent playback of multimedia content. This feature decreases bandwidth usage—because video files are often more optimally compressed then VDI screen captures--and it reduces the load on server resources because VDI servers do not need to decode video content and then compress it and transfer it to VDI clients. Instead, servers can send video streaming files directly to clients.

Leverage high-speed H.265 compression

SierraVDI uses the latest video coding technologies to display remote screen images without distortion or loss. Offering twice the data compression and the same level of quality as H.264/MPEG-4 AVC, H.265 compression ensures the best user experience, even when applications are accessed through low-rate bandwidth links.

One of the main advantages of H.265 encoding is that an entire window screen does not need to be sent from the VDI server to the client. Instead, after the original screen is sent, only the delta needs to be compressed and sent.

SierraVDI can offload GPU processing to standard GPU accelerator hardware to further boost performance. By supporting off-the-shelf GPU accelerator cards, SierraVDI eliminates the need to buy expensive, proprietary processors to compress and encode video streams.

Support USB and printing services

Employees will inevitably want to access their USB devices in virtual desktop environments. USB redirection allows users to connect local devices like USB flash drives, USB keyboards, headphones, and more to their VDI client devices. SierraVDI will automatically detect USB devices, allowing users to interact with devices from virtual desktop applications as if the devices were connected to the SierraVDI server.

SierraVDI printing services enable users to print files anywhere, including network or local printers that are connected to VDI client devices or VDI servers. SierraVDI printing services eliminates the need to install printer drivers on client devices.

Quickly roll out secure remote access

Remote workers and business partners often need to access corporate applications. SierraVDI allows IT to provision Windows applications and desktops to remote users and partners on-demand without the hassle of setting up IPsec VPN networks or walking users through unwieldy VPN client installations.

Automate IT Operations

With SierraVDI, IT departments can centrally manage and upgrade applications without needing to individually update every client machine in an organization. Plus, IT administrators no longer have to worry about application compatibility issues. And users don't need to hand over their laptops to IT for a day while applications are updated. SierraVDI streamlines management and lower operating costs.

Best-of-Breed Virtual Desktop Solutions

SierraVDI provides organizations of all sizes an ideal, cost-effective solution for virtual application and desktop infrastructure. SierraVDI enables organizations to:

- Lower the risk of data loss by isolating each SierraVDI application instance with Firefall appVM technology

- Protect sensitive data without needing to secure all client devices, including employee-owned smartphones and tablets

- Streamline application deployment and upgrades by eliminating the need to install individual applications on a myriad of client devices

- Empower employees to use their personal devices at work to increase productivity and improve satisfaction levels.

- Allow remote users and partners to securely access applications without needing to set up complicated IPsec VPN networks

Learn More

For more information about SierraVDI, visit http://www.sierraware.com, call 408-337-6400, or email sales@sierraware.com.

About Sierraware

Sierraware, founded in 2010, is a leading provider of virtualization and security solutions, including the SierraVisor Hypervisor, the SierraTEE Trusted Execution Environment, and SierraVDI virtual desktop and application products. Sierraware also offers communications and media toolkits for a wide range of ARM architectures. For more information, visit www.sierraware.com.

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