

WHITE PAPER



**Free VDI –
Get Even More
Out of Oracle[®] VM**

At No Extra Cost!

*Ericom's FREE Desktop Virtualization Solution
Enhances Oracle VM*

Ericom Software
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Introduction

Virtualization is one of the hottest trends in IT today. The term “Virtualization” refers to many different topics, such as server virtualization, storage virtualization, application virtualization and more. One of the fastest growing virtualization technologies is Desktop Virtualization (also known as VDI). VDI provides a number of significant benefits over the traditional desktop PC model, including easier management, stronger security, facilitation of regulatory compliance, lower TCO (in hardware, energy and administration costs), improved disaster recovery and Green Computing.

Oracle[®] VM is Oracle’s free solution for server virtualization. Ericom Software, an Oracle partner, has developed a complementary, free version of its flagship product PowerTerm WebConnect, called *PowerTerm WebConnect for Oracle VM*, which serves as a VDI connection broker for Oracle VM. This solution extends the capabilities of Oracle VM by enabling it to host virtual desktops in addition to virtualized servers.

The combination of Oracle VM and PowerTerm WebConnect for Oracle VM creates a complete VDI solution and allows organizations to enjoy all of the benefits of desktop virtualization, at no extra cost.

What is Desktop Virtualization?

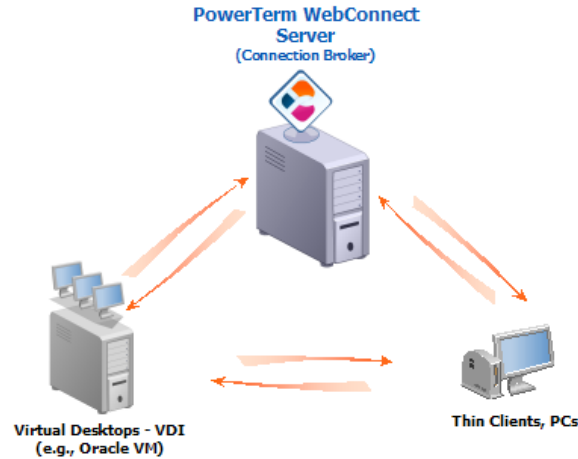
Desktop virtualization takes full advantage of the computing power and capacity available on today’s powerful server machines by hosting full desktops inside virtual machines that are running on servers at a data center - instead of installing users’ desktops on local computers. Users then access these virtualized desktops from a local computer or a thin client, using a remote presentation protocol such as RDP. In this way, Desktop Virtualization separates the end user desktop computing experience from the physical hardware hosting those desktops.

With desktop virtualization, a software layer called a hypervisor is added to the central server(s). The hypervisor allocates the server’s hardware resources dynamically and transparently so that multiple desktop operating systems can run simultaneously on the same physical server.

The Connection Broker

An important component of desktop virtualization is the connection broker, which manages (“brokers”) the connections between the clients and available virtual desktops. It does this by receiving incoming connection requests from clients and then finding an appropriate, available hosted desktop.

Below is a diagram of a typical desktop virtualization deployment using Oracle VM and PowerTerm WebConnect for Oracle VM:



Traditional Desktop Computing – A Management Nightmare

With virtualization, the actual physical nature and location of the computing resources is irrelevant to the end user. This is very different from the traditional desktop computing model, where the applications, and very often sensitive data, reside on individual desktops, thus forcing organizations to invest in powerful PCs that can run the applications and store the data locally. This creates a management nightmare for IT staff who face the costly support challenges of ensuring consistent end user configurations, upgrading hardware on a regular basis, maintaining accurate software inventory, providing timely and efficient end user support (both hardware repair and troubleshooting software problems) and performing time-consuming software updates and rollouts.

Benefits of Virtualization

A properly implemented virtualization strategy can lead to better utilization of computing resources and lower TCO, with savings in hardware, administration and energy costs. Furthermore, it increases security and enhances disaster recovery capabilities, while maintaining the end user experience.

Virtualization provides many compelling benefits:

- **Lowering desktop management and hardware costs, improving IT staff productivity** – Hosting desktops on servers located at a centralized datacenter reduces the time required for IT staff to go from PC to PC installing, updating and troubleshooting applications. Additionally, with VDI the desktops are installed and processed centrally, therefore, the user PCs can be less powerful, less expensive devices (requiring upgrade or replacement only every five-six years, instead of every two-three years). Or, PCs can be replaced by less expensive, more durable and energy-efficient thin clients, resulting in hardware cost and energy savings.

- **Providing secure remote desktop access for branch offices and users on the move** – With centrally hosted desktops, branch office workers and remote users working from home, or traveling, can access what they need to get their jobs done.
- **Ensuring information privacy** – Storing desktops and data centrally eliminates the need for sensitive information to be saved on laptops, local PCs or home PCs. This reduces the risks that such information will be lost or stolen.
- **Facilitating regulatory compliance** – In addition to ensuring information privacy, centrally hosting desktops facilitates regulatory requirements such as logging and tracking certain types of transactions.
- **Ensuring business continuity** – Users can telecommute from home or other remote locations in the event that a natural disaster or other circumstances prevent travel. In addition, critical data can be backed-up and then later restored in the event of server crashes. Users can also be re-directed to functioning servers with minimal down-time.
- **Guaranteeing data integrity** – Data centrally stored at the datacenter is easier to backup and restore.

Oracle VM

Oracle VM is based on open source server software with an integrated Web browser-based management console. It includes an easy-to-use graphical interface for creating and managing virtual machine pools, running on x86- and x86-64-based systems, across an enterprise with support for a variety of guest operating systems.

Oracle VM enables server optimization and consolidation for enterprises seeking to lower costs related to space, power, cooling and hardware. Ericom Software's free VDI product, PowerTerm WebConnect for Oracle VM, extends the capabilities of Oracle VM to desktop virtualization. The combined solution thus becomes a comprehensive VDI solution, adding further value for Oracle customers.

For current Oracle customers, a critical benefit is that Oracle solutions such as Oracle Database, Fusion Middleware, and Application software are all certified by Oracle with Oracle VM. Check with your Oracle representative for details.

Ericom's FREE Version - Enhancing Oracle VM at No Cost

As described above, PowerTerm WebConnect for Oracle VM extends the capabilities of this platform into a full desktop virtualization solution. Additional enhancements provided by PowerTerm WebConnect include:

- Enabling Virtual Desktop capability for Oracle VM
- Centrally manage and control large groups of virtual desktops, users and sessions in real-time

- Manage groups of identical virtual desktops created from a common template (pools) instead of individual desktops. Users with similar needs are automatically assigned desktops for the pool on-demand
- Intuitive user interface including desktop personalization and a web interface
- Facilitating concurrent use of applications that cannot reside on the same desktop
- Reconnect to virtual desktop from any permitted location while preserving session state
- Resource allocation on demand – when a user needs more resources his or her virtual desktop can be moved to a more powerful server. Likewise desktops of inoperative users can be suspended so that they do not consume resources

PowerTerm WebConnect for Oracle VM is available for **FREE** as a download from Ericom’s website (<http://www.ericom.com/OracleVM>). This version allows organizations to get more out of Oracle VM at no additional cost. The free PowerTerm WebConnect for Oracle VM download package also allows you to evaluate the full commercial version of PowerTerm WebConnect (see below) for the first 30 days.

Getting Even More out of Oracle VM – The Commercial Version of PowerTerm WebConnect

In addition to the enhancements to Oracle VM offered in the free PowerTerm WebConnect for Oracle VM, Ericom also offers a full suite of commercial versions of PowerTerm WebConnect. These commercial versions offer additional features and benefits that allow Oracle VM to be part of an extended, comprehensive virtualization solution, including Presentation Virtualization and Blade PCs in addition to Desktop Virtualization.

Presentation Virtualization (SBC)

Presentation virtualization, otherwise known as Server Based Computing (SBC), enables an application to be run in one location, and controlled in another. The technology behind presentation virtualization is Microsoft Windows Server Terminal Services, which is often enhanced with third party products such as Ericom Software’s PowerTerm WebConnect.

With presentation virtualization, applications are installed and managed on centralized Terminal Servers in the data center. Screen images are delivered (presented) to the users, and the users' client machines, in turn, send keystrokes and mouse movements back to the server.

Blade PCs and Remote Workstations

Blade PCs refer to PCs that are entirely contained in a thin, modular card (Blade) housed in a centralized, secure chassis (“rack”). The Blade PCs are connected to the user’s display, keyboard and mouse via standard network connections.

Some of the advantages of Blade PCs over the traditional desktop model include:

- Reduction of administrative, operational and maintenance costs

- Reducing space requirements at the workstation by replacing clumsy PCs with thin clients
- Ease of adding and relocating end users
- Sharing of accessories such as fans and uninterruptible power supplies
- Improved physical security by placing hardware in a central, locked location

Getting the Best of All Worlds – Ericom’s Hybrid Approach

The fact is, most organizations will require, and be better served by, a mix of virtualization technologies. That is due to the fact that different types of users have different needs, so that a virtualization technology that’s appropriate for one type of user might not be appropriate for a different type of user.

A typical organization consists mainly of three types of users:

- **Task-based users**, who require access to one or two specific applications, and do not need to customize their environment outside these applications
- **Knowledge or general-purpose users**, who require access to a wider range of applications and have greater needs for individual configuration capabilities
- **Power users** who require dedicated hardware resources for access to performance intensive applications, such as CAD/CAM or powerful trading software

Ericom’s hybrid approach combines the different virtualization technologies while addressing the needs of these different user groups. The principal behind this approach is to address the requirements of the various types of users while minimizing costs as much as possible by only paying for what you need. Under this approach:

- Task-based users (usually 70%-80% of the organization’s users) use presentation virtualization
- Knowledge or general-purpose type users (20%-30% of users) use desktop virtualization
- Power users (5%-10% of users) use Blade PCs

Taking a stock brokerage as an example, the traders would use the high performance, high cost Blade PC solution to access their powerful trading software, upper management and account executives would access virtual desktops customized for their unique individual requirements, while administrative staff would connect to applications such as Microsoft Office running on Windows Terminal Servers.

The hybrid approach makes virtualization more affordable for the organization, by using the lower cost virtualization option (presentation virtualization instead of desktop virtualization, or desktop virtualization instead of Blade PCs) wherever possible. This approach provides

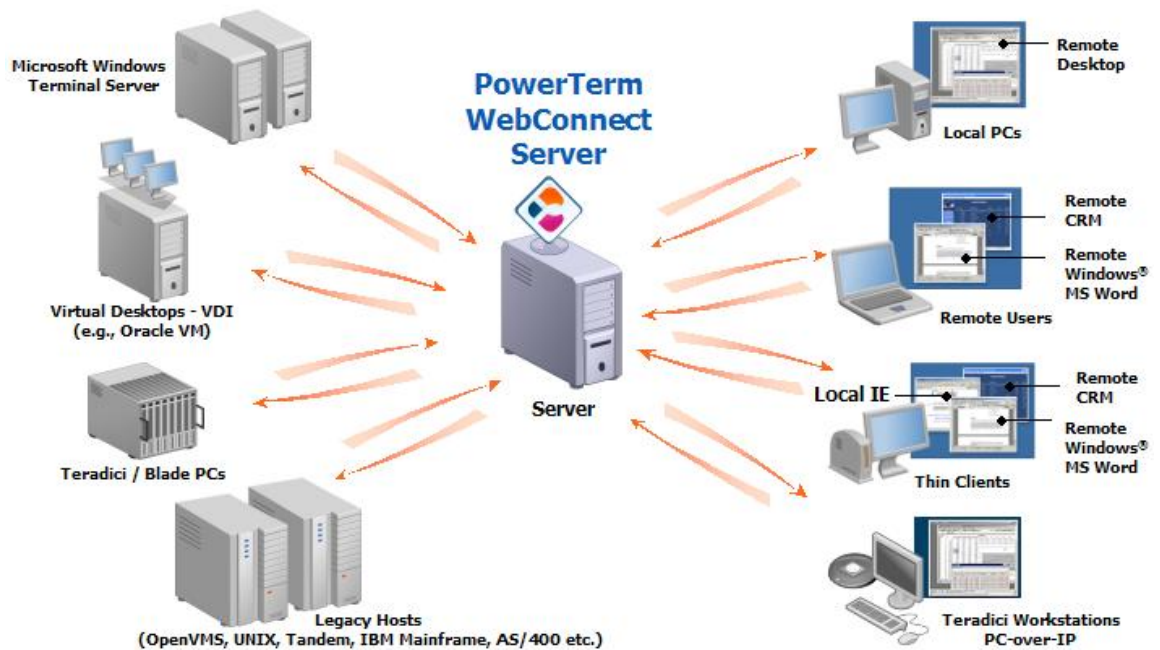
users with the functionality they require, while at the same time allows organizations to apply virtualization to the broadest range and number of users possible across the entire organization instead of to isolated departments and specific groups of users.

Implementing Ericom's Hybrid Approach

How is this hybrid approach implemented? Isn't it difficult to manage three different technologies?

Enhancing Virtualization

While the various virtualization options offer significant benefits to the organization, end-users and IT staff alike, the challenge is in tying them all together. Ericom's answer is a multi-platform access and management solution that enhances the overall functionality of each of these options. Ericom's PowerTerm WebConnect, the Alternative to Citrix, uses a **single management environment** to provide secure anytime, anywhere access to desktops and applications hosted on over a dozen leading virtualization platforms such as Oracle VM, as well as Windows Terminal Servers and Blade PCs.



Ericom's Hybrid Approach – The best of all worlds in one solution

PowerTerm WebConnect enhances the benefits provided by these platforms with the following capabilities:

Efficiently manage large groups of servers, desktops and users with a single, centralized administration and control console.

Enhance server performance and scalability through centrally managing and load-balancing VM pools, Terminal Servers and Blade PCs.

Facilitate regulatory compliance with customizable logging and auditing capabilities which enable monitoring and auditing users' access to applications, services and documents.

Improve user experience through improved performance as well as with the ability to customize the desktop environment in accordance with user requirements.

Provide remote support to users in branch offices or other locations with tools that allow IT staff to take over user sessions and desktops, reducing the need to travel and speeding support response time.

Most importantly, PowerTerm WebConnect provides these enhancements **with one product, one license**. This makes managing these varied platforms much simpler and cost effective than having to manage them with multiple solutions from multiple vendors.

A 30 day evaluation version of PowerTerm WebConnect is available for download on Ericom's web site.

Upgrading from the free version for Oracle VM to the complete commercial version of PowerTerm WebConnect does not require installation or replacement of components. Simply activating the product makes all these enhancements instantly available.

Summary

Oracle VM is a powerful, yet free, solution for server virtualization. Ericom's FREE PowerTerm WebConnect for Oracle VM extends that benefit to the realm of virtual desktops, adding even more value for Oracle customers. With features such as centralized management, group desktop pooling and virtual desktop reconnect PowerTerm WebConnect for Oracle VM helps IT maximize the benefits of Desktop Virtualization for small, mid-size and large organizations.

Visit <http://www.ericom.com/OracleVM> to learn more about Ericom's FREE enhancements for Oracle VM, or to download PowerTerm WebConnect for Oracle VM.

About Ericom

Ericom® Software is a leading global provider of **Application Access and Virtualization Solutions**. Since 1993, Ericom has been helping users access business-critical applications running on a broad range of Microsoft® Windows® Terminal Servers, Virtual Desktops (VDI), Blade PCs, legacy hosts, and other systems. Ericom provides concrete business value by helping organizations realize the benefits of their IT investments. With offices in the United States, United Kingdom, EMEA, India and China, Ericom also has an extensive network of distributors and partners throughout North America, Europe, Asia and the Far East. Our expanding customer base is more than 30 thousand strong, with over 7 million installations.

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>

North America

Ericom Software Inc.
231 Herbert Avenue, Bldg. #4
Closter, NJ 07624 USA
Tel +1 (201) 767 2210
Fax +1 (201) 767 2205
Toll-free 1 (888) 769 7876
Email info@ericom.com

UK & Western Europe

Ericom Software (UK) Ltd.
11a Victoria Square
Droitwich, Worcestershire
WR9 8DE United Kingdom
Tel +44 (0) 845 644 3597
Fax +44 (0) 845 644 3598
Email info@ericom.co.uk

International

Ericom Software Ltd.
8 Hamarpeh Street
Har Hotzvim Technology Park
Jerusalem 91450 Israel
Tel +972 (2) 591 1700
Fax +972 (2) 571 4737
Email info@ericom.com

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