

ORACLE VIRTUAL DESKTOP INFRASTRUCTURE

HIGHLY SECURE AND MOBILE
ACCESS TO VIRTUALIZED DESKTOP
ENVIRONMENTS

KEY FEATURES

- Centralized virtual desktop management and hosting
- Facilitates access to VDI desktops from PCs, iPads and Sun Ray Clients
- Supports a broad choice of virtual desktop operating systems and virtualization platforms
- Highly secure access to corporate data and applications
- Mobile access to desktops via global 'hot-desking' across multiple VDI deployments
- Multi-client support enables the sharing of resources across independent user domains
- VDI data center failover
- Rapid desktop re-provisioning and fast preparation for Windows deployments
- Advanced video acceleration for Windows and Linux desktops
- Oracle is the only vendor to offer an enterprise class end-to-end solution for VDI deployments from desktop to applications

KEY BENEFITS

- Highly secure remote access to virtual desktops
- Flexibility to deploy Windows, Linux, and Solaris virtual desktops
- Maximizes IT infrastructure utilization
- Simplifies administration, lowers IT asset lifecycle costs
- Easier for IT to manage, secure, and upgrade desktops
- Higher availability, business continuity, and greater productivity for mobile workforce
- Helps lower overall total cost of ownership (TCO)
- Reduces carbon footprint, power usage and e-waste

Oracle Virtual Desktop Infrastructure offers a complete solution for managing and providing access to virtualized desktop environments hosted in the data center. Oracle Virtual Desktop Infrastructure enables organizations to dramatically improve security, implement Bring Your Own Device (BYOD), reduce operating costs, and increase the utilization and lifespan of existing IT assets by moving from a traditional desktop environment to a virtual desktop architecture. Oracle Virtual Desktop Infrastructure supports a broad variety of client devices, virtual desktop operating systems, and virtualization platforms to meet data security, user experience and TCO goals. Oracle offers the industry's most comprehensive desktop-to-data center virtualization solutions portfolio that can manage your full hardware and software stack from applications to disk, including Sun Ray Clients, a virtual desktop broker and virtualization platform, operating systems, servers, storage and applications.

Unparalleled Security and Data Availability

Oracle Virtual Desktop Infrastructure has a multi-tiered architecture. This robust and scalable solution encompasses three tiers:

Client tier. The end-user devices, which include Sun Ray Clients and nearly any modern desktop device, including Windows PCs, Macs, and new tablet devices such as the Apple iPad.

Session tier. The infrastructure, either physical or virtual, that enables and brokers connections between the client tier and the virtual desktop tier—critical for overall security and scalability.

Virtual desktop tier. The hardware, virtualization software, and storage for all virtual desktop images, storage devices and software, and server platforms.

Oracle Virtual Desktop Infrastructure is installed in the session tier on the Oracle Solaris Operating System, or on Oracle Linux, which acts as a gateway and keeps the end-user from connecting directly to the corporate data center. Business-critical company information is secure because it stays in the data center. No data is stored on the client device.

If you choose to deploy Sun Ray Clients, you will experience an ideal device for displaying virtual desktops. Sun Ray Clients offer both security and mobility, with no resident operating system or applications, making them virtually immune to viruses and service attacks. All the data and applications displayed onscreen disappear the instant the client is turned off or the smart card is removed. Sign on to another Sun Ray Client—within the building, across the country or globally—and reconnect via the 'hot-desking' capability to your virtual desktop, resuming right where you left off. You can even access your virtual desktop session from an existing Windows PC, Linux PC, Mac, or iPad with the Oracle Virtual Desktop Client.

In addition, Oracle Virtual Desktop Infrastructure can be deployed on multiple servers linked

together into a failover group to help protect against outages. This ensures that your virtual desktop deployment is always available and ready to deliver optimal performance. For auditing or compliance purposes, Oracle Virtual Desktop Infrastructure provides tools for tracking access and usage information.

Broad Choice of Devices, Operating Systems, and Virtualization Platforms

With Oracle Virtual Desktop Infrastructure, organizations have the flexibility to choose any combination of Oracle VM VirtualBox (included with Oracle Virtual Desktop Infrastructure), Microsoft Hyper-V, or VMware vSphere virtualization hosts to host their virtual desktop VMs. Oracle Virtual Desktop Infrastructure also enables the use of the Remote Desktop Services feature of Microsoft Windows Server to provide Windows Server hosted desktops. These server-based computing desktops are centrally managed from the same interface as the virtual desktops, reducing complexity for administrators.

Users have a choice of client devices when connecting to their virtual desktop sessions. They can take advantage of the highly secure and energy-efficient Sun Ray Clients or install the Oracle Virtual Desktop Client and use an existing Windows PC, Linux PC, Mac OS X computer, or iPad. Oracle Virtual Desktop Infrastructure provides a seamless user experience, integration and mobility between Sun Ray Clients and traditional PCs, enabling end users to instantly move their live desktop sessions to and from any Sun Ray Client and any device running the Oracle Virtual Desktop Client.

Oracle Virtual Desktop Infrastructure also supports a wide choice of virtual desktop operating systems, including Microsoft Windows 7, Windows Vista, Windows XP, and Windows 2000, Oracle Linux, Oracle Solaris, SUSE Linux Enterprise Desktop, and Ubuntu.

Maximized IT Utilization and Simplified Management

With Oracle Virtual Desktop Infrastructure, desktop services are centrally managed from within the data center—there is no configuration, operating system, or data to manage when using Sun Ray Clients. Customers can reduce the overhead associated with managing individual operating systems and standardize on virtual desktop images that can be used across their organizations from nearly any client device. For ongoing administration, updating the virtual desktop environment becomes a simple matter of modifying a few central servers, so upgrades and updates are done within minutes, not days or months. It enables administrators to manage a thousand virtual desktops virtually as easily as one—saving resources and lowering the total cost of ownership (TCO).

With the virtual desktop client feature, existing PCs can be leveraged as clients, reducing the need to upgrade hardware and maximizing the lifespan of PCs, while centralizing management and administration.

For larger virtual desktop environments with multiple user domains, where each domain represents a single client, computing resources can be shared between multiple clients, thus enabling a Desktop-as-a-Service infrastructure deployment.

In addition, Oracle Virtual Desktop Infrastructure provides enhanced management and administration including policy-based memory sharing between desktops, tools to backup and restore the VDI systems, and fast system preparation that reduces the creation time of new Windows desktop clones dramatically. And with Role-based administration, management tasks can be devolved to multiple administrators whilst retaining overall control and security levels of a deployment.

Storage Optimization

Oracle Virtual Desktop Infrastructure provides exceptional data throughput and superior data integrity for business continuity. Instead of necessitating a wait for multi-gigabyte file copies,

RELATED PRODUCTS

The following Oracle desktop virtualization products are also available:

- **Sun Ray Clients** – Provide an interoperable, zero-administration desktop client solution that reduces the maintenance, upgrade, and operational costs commonly associated with traditional PCs.
- **Sun Ray Software** – Secure, cost-effective solution that delivers a rich virtual desktop experience for Sun Ray Clients, PCs, and laptops from nearly any location.
- **Oracle VM VirtualBox** - Enables desktop or laptop computers to simultaneously run multiple operating systems, allowing users to get the most flexibility and utilization out of their PCs.
- **Oracle Secure Global Desktop** – Provides secure access to Oracle and non-Oracle applications from a wide variety of popular client devices.
- **Oracle Display Monitors** – High performance, high resolution displays to complement your Oracle Virtual Desktop Infrastructure deployment.

RELATED SERVICES

The following services are available from Oracle Support Services:

- **Product Support Services**

virtual machine clones can utilize Oracle Solaris ZFS and are created instantly, consuming virtually no disk space.

Superior Desktop User Experience

By leveraging Oracle VM VirtualBox to accelerate multimedia content on guest operating systems, Oracle Virtual Desktop Infrastructure provides superior multimedia capabilities with support for upstream audio, and playback for Adobe Flash content and Windows Media Player on Sun Ray Clients as well as most PCs. Users can view multimedia content as they would on a local PC desktop. In addition, Sun Ray Clients with Oracle Virtual Desktop Infrastructure support many USB devices, ready for use in remote Windows XP virtual desktops. Printers, scanners, and external hard drives can be mounted easily and quickly, providing added flexibility while maintaining the security advantages of a virtual desktop architecture.

Reduced Carbon Footprint, Power Usage, and e-Waste

Because organizations can use their existing PCs as simple virtual desktop client devices, the life spans of these devices can be extended, reducing refresh costs and limiting the e-waste impact on the environment.

With Sun Ray Clients, the product lifecycles can be up to 7 times longer than a typical PC, based on a 3 year PC life expectancy. Sun Ray Clients consume only a fraction of the power of standalone PCs (less than 6 W for a Sun Ray Client, compared to the 80 W to 120 W consumed by many traditional PCs), reducing the capital and operational costs for your enterprise.

The Industry's Most Complete Virtualization Portfolio

Backed by Oracle's world-class support organization, customers now have a comprehensive, enterprise-class portfolio of virtualization solutions across the stack, including Oracle Sun Ray Clients, Oracle's Sun hardware, Oracle Solaris, Oracle Linux, Oracle Database, Oracle Fusion Middleware, and Oracle Applications.

Oracle Virtual Desktop Infrastructure 3.3 Specifications			
Oracle Virtual Desktop Infrastructure Core			
<ul style="list-style-type: none"> • Operating system: Oracle Solaris 10 release 09/10 (Update 9), Oracle Linux 5.6, 5.7 • Processor: 2 GHz or faster x64/x86-based processor 			
Oracle VM VirtualBox (included with Oracle Virtual Desktop Infrastructure)			
<ul style="list-style-type: none"> • Operating system: Oracle Solaris 10 release 09/10 (Update 9), Oracle Linux 5.6, 5.7 • Processor: 2 GHz or faster x64/x86-based processor 			
Virtualization Platforms			
<ul style="list-style-type: none"> • Oracle VM VirtualBox 4.1, 4.0 • Microsoft Hyper-V Server 2008 R2 • Microsoft Windows Server 2003 and 2008 R2—Remote Desktop Services feature • VMware vCenter server 4, 4.1, 5.0 			
Storage Platforms			
Storage Type	VirtualBox (Linux)	VirtualBox (Solaris)	Microsoft Hyper-V
Local Storage	✓		
Network File System	✓		
iSCSI	✓		
Sun ZFS	✓	✓	✓
• VMware vCenter – see VMware documentation for supported storage types.			
Virtual Desktop Operating Systems			
<ul style="list-style-type: none"> • Microsoft Windows 7 • Microsoft Windows Vista Enterprise • Microsoft Windows XP SP2 and SP3 • Microsoft Windows 2000 SP4 (only on Oracle VM VirtualBox) • Oracle Solaris 10 10/09 (only on Oracle VM VirtualBox) • Oracle Linux 5.6, 5.7 (only on Oracle VM VirtualBox) • Ubuntu 10.04/11.04 (only on Oracle VM VirtualBox) 			

Contact Us

For more information about Oracle Virtual Desktop Infrastructure, visit oracle.com or call +1.800.ORACLE1 to speak to an Oracle representative.



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