

SUN RAY SOFTWARE

SECURE ACCESS TO DESKTOP ENVIRONMENTS WITH GREATER FLEXIBILITY, MANAGEABILITY, AND COST EFFICIENCY

FEATURES

- Highly secure access to server-hosted virtual desktops
- Access to multiple platforms including Windows, Oracle Solaris, and Oracle Linux
- Seamless desktop session mobility between Sun Ray Clients, PCs, laptops, and Apple iPad
- Smooth multimedia playback for Adobe Flash content and Windows Media Player videos
- Bidirectional audio from Sun Ray Clients to Windows, Oracle Solaris, and Oracle Linux
- Real time voice with optimized audio delivery
- Support for USB peripherals connected to Sun Ray Clients
- Capability to drive up to 32 displays with Sun Ray Clients

BENEFITS

- Secure, global access to centralized data and applications
- Eliminate client virus attacks
- Increase mobile productivity
- Reduce the cost of desktop maintenance and manage thousands of desktops with just a few administrators
- Upgrade applications on thousands of desktops in hours – not weeks or months

Sun Ray Software is a secure and cost-effective solution that delivers a rich virtual desktop experience for Sun Ray Clients, PCs, and laptops. It provides access to virtual desktop environments from nearly any location and dramatically reduces the complexity and operational costs incurred by traditional PC deployments. By centralizing management, data, and applications in the data center, desktop maintenance requirements and client security vulnerabilities are virtually eliminated. Rich multimedia capabilities provide users with a seamless end-user experience and a simpler migration path, which makes moving to a virtualized desktop solution easier for both administrators and end-users.

Foundation for Improved Security, Manageability, and Cost Reduction

Virtual desktops are becoming increasingly popular due to their superior security and manageability versus standard PCs, as well as their reduced operational costs. With Sun Ray Software technology, you can essentially eliminate desktop maintenance – all upgrades to software, operating systems (OSs), and memory are performed from the server – reducing IT administration and management requirements. Sun Ray Software enables access to server-hosted desktops for a wide variety of platforms including Microsoft Windows, Oracle Solaris, Oracle Linux, and others, to meet the needs of a diverse enterprise. Because sensitive data and critical applications remain on the server instead of on individual hard drives, desktops, or laptops, data is significantly less vulnerable to theft and loss. Security is built into the system by design and does not depend on patching and updating PCs to ensure data integrity on sensitive data. Sun Ray Software provides user authentication and encryption between the server and the client, as well as user session management across the environment. User sessions are load balanced across the servers in a group to optimize performance.

Sun Ray Software enables users to connect to their remote desktop session using enhanced network security options, which include TLS/SSL (with optional server verification) and Network Level Authentication using CredSSP. These options help protect Windows sessions from malicious users and software by completing user authentication before a full session connection with the server is established.

Choice of Client Devices

With Sun Ray Software, 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 use the Oracle Virtual Desktop Client on an existing Windows PC, Linux, Mac OS X computer, or on an Apple iPad. Sun Ray Software provides seamless integration with supported clients, allowing end-users to instantly move their live desktop session between any Sun Ray Client and any supported PC, laptop, or iPad.

Having a choice for the client device improves mobility and data access, helps mitigate the costs and challenges of migration to an alternative desktop solution, extends the life of existing PC assets, and reduces the environmental impact of frequent desktop refreshes.

Seamless Mobility

The ‘hotdesking’ capability of Sun Ray Software enables users to move from client device to device regardless of location, whether from within a department or globally. Users can access their desktop environment from one location, and resume their session from where they left off at another location. Since no data is cached or saved on clients, there is no risk of data security vulnerabilities.

Sun Ray Software and clients utilize Oracle’s Appliance Link Protocol (ALP), which is specifically designed to enable Sun Ray Clients to work seamlessly over both LAN and WAN distances without requiring WAN repeater hardware, reducing cost and complexity.

Superior Multimedia Experience

Sun Ray Software supports multiple media formats and provides superior multimedia playback for Adobe Flash and Microsoft Windows Media Player content, allowing users to watch multimedia just as they would on a local PC desktop. Video acceleration and audio input capabilities further enhance the multimedia experience for users of Windows virtual desktops.

Universal Serial Bus Peripheral Integration

Users can connect USB devices to a Sun Ray Client and have those devices visible in their remote Windows virtual desktop environments. Printers, scanners, external hard drives, and headsets can be mounted quickly and easily, giving users added flexibility while maintaining the security advantages of a virtual desktop architecture.

Benefits of Sun Ray Software

IT organizations can realize the following benefits by using Sun Ray Software:

- Access to virtual desktop sessions from Sun Ray Clients, Windows PCs, Linux, and Mac OS X systems
- Greater mobility through ‘hotdesking’ from device to device
- Elimination of client security vulnerabilities and reduced risk of data theft
- Decreased maintenance costs, with no OS, software, or memory to physically upgrade at the desktop
- Reduction of desktop support and administration costs due to centralized management
- Access to a broad choice of virtual desktop environments including Microsoft Windows, Oracle Linux, and Oracle Solaris
- A PC-like experience for Sun Ray Client users, including compatibility with USB peripherals such as scanners, printers, storage devices, and headsets.
- Simple “plug-and-work” setup or replacement of Sun Ray Clients
- Continued use of existing PCs using the included virtual desktop client software for Windows PCs, Linux, and Mac OS X systems, extending the life of these assets and avoiding the need to upgrade all users to Sun Ray Clients at the same time
- Gain greater productivity and mobility to work anywhere and anytime with the Oracle Virtual Desktop Client for iPad.
- Seamless integration of full-screen Windows desktops
- Reduced power consumption and operating costs
- Smooth playback for Adobe Flash content and Windows Media Player multimedia
- Microsoft Windows Server 2008 applications are displayed in 32-bit color

RELATED PRODUCTS

The following Oracle desktop virtualization products are also offered:

- **Sun Ray Clients** – Provide an interoperable, zero-administration desktop client solution that reduces the maintenance, upgrade, and operational costs commonly associated with PC environments.
- **Oracle Virtual Desktop Infrastructure** – A complete solution for managing, hosting, and providing access to virtualized desktop environments housed in the data center.
- **Oracle Secure Global Desktop** – Provides secure access to centralized, server-hosted Windows, Linux, Oracle Solaris, mainframe, and midrange applications from a wide variety of popular client devices.
- **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 Display Monitors** – Ideal choice of high resolution and high performance displays to complement Oracle Sun Ray Clients.

RELATED SERVICES

The following services are available from Oracle Support Services:

- **Product Support Services**

- Instant access to a customized compute environment from any Sun Ray Client, supported PC or laptop on the LAN or WAN using a smart card

Sun Ray Software 5.2 Specifications

Installation Platform Requirements
Sun Ray Software - Server Platforms
<ul style="list-style-type: none"> • Oracle Solaris 10 (5/09 and later Solaris 10 updates) • Oracle Solaris 10 with Trusted Extensions (5/09 and later Solaris 10 updates) • Oracle Linux 5.5, 5.6 (32-bit and 64-bit)
Sun Ray Software – Oracle Virtual Desktop Client Platforms
<ul style="list-style-type: none"> • Microsoft Windows XP • Microsoft Windows Vista • Microsoft Windows 7 • Mac OS X 10.6 or later • Ubuntu 10.4 (32-bit/64-bit) • Red Hat Enterprise Linux 6 (32-bit) • iOS 4.2 or later (iPad)
Supported Desktop Environments
<ul style="list-style-type: none"> • Oracle Solaris 10 (5/09 and later Solaris 10 updates) • Oracle Solaris 10 with Trusted Extensions (5/09 and later Solaris 10 updates) • Oracle Linux 5.5, 5.6 (32-bit and 64-bit) • Microsoft Windows XP SP3 (32-bit) • Microsoft Windows XP SP2 (64-bit) • Microsoft Windows Server 2003 R2 SP2 Enterprise Edition (32-bit and 64-bit) • Microsoft Windows Server 2008 R2 Enterprise (64-bit) • Microsoft Windows 7 Enterprise (32-bit and 64-bit)
Sun Ray Software Connectors
<ul style="list-style-type: none"> • Sun Ray connector for VMware View Manager (for VMware View 3.1,4.0,4.5,4.6,5.0)
Windows Media Requirements
Microsoft Windows Applications Support
<ul style="list-style-type: none"> • Microsoft Windows Media Player 10, 11 • Microsoft Internet Explorer version 7, 8 (32-bit) • Adobe Flash Player version 9, 10
Media Content Format Support
<ul style="list-style-type: none"> • MPEG-2 - 720 x 480 @ 30 fps • MPEG-4 (H.264) - 352 x 288 @ 30 fps • WMV 9 (VC-1) - 352 x 288 @ 30 fps • Adobe Flash 9, 10 - up to 4 Flash animations, total maximum 1024 x 768
Sun Ray Client Requirements for Windows Media
<ul style="list-style-type: none"> • Sun Ray 2 Series Clients and Sun Ray 3 Series Clients

Contact Us

For more information about Oracle's Sun Ray Software and Sun Ray Clients, visit oracle.com or call +1.800.ORACLE1 to speak to an Oracle representative.



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