

## 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 tablets
- Smooth HD 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
- Access to a wide range of USB peripherals connected to Sun Ray Clients
- Capability to drive up to 32 displays with Sun Ray Clients
- Proactive enterprise monitoring of the Sun Ray Software infrastructure, services, and sessions

### 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, laptops, and tablets. 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 on 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 of sensitive data.

Sun Ray Software enables users to connect to their remote desktop session using enhanced network security options, in addition to standard Windows security. Sun Ray Software provides IPsec network security and encryption to ensure protection of traffic between the client and Sun Ray Software server, and 802.1x authentication when deploying Sun Ray Clients in LAN environments. Remote access to virtual desktops are secured through corporate VPN connections for WAN environments.

### 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, Linux, Mac OS X computer, Apple iPad, or Android tablet. 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 tablet.

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.

### HD Multimedia Experience

Sun Ray Software supports multiple media formats and provides HD 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.

### Accessibility to More USB Peripherals Than Ever Before

Users can connect a wide range of 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.

### Enterprise Scale Monitoring

Organizations can improve their service levels by proactively monitoring the performance and availability of the Sun Ray Software infrastructure, services and sessions by deploying the Oracle Enterprise Manager for Sun Ray Software Plug-in. Oracle Enterprise Manager provides administrators with visibility into the health of the Sun Ray Software deployment. Administrators can view a summary dashboard of the status of the Sun Ray Software deployment, receive notifications of problems and automate corrective actions before they impact users, pinpoint the root cause of problems, audit the Sun Ray Software environment to comply with licensing and inventory assessments, and generate reports on collected metrics.

### Benefits of Sun Ray Software

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

- Access to a broad choice of virtual desktop environments including Microsoft Windows, Oracle Linux, and Oracle Solaris, and to Citrix XenDesktop or VMware View desktops.
- Secure anywhere, anytime access to virtual desktop sessions from a Sun Ray Client, Windows PC, Linux, Mac OS X, iPad, or Android tablet device
- Gain greater mobility and productivity 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
- A PC-like experience for Sun Ray Client users, including compatibility with USB peripherals such as scanners, printers, storage devices, and headsets.
- Continued use of existing PCs using the Oracle 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

**RELATED PRODUCTS**

The following Oracle desktop virtualization products are also offered:

- **Sun Ray 3 Series 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 Client** – Secure anywhere, anytime access to enterprise Windows, Linux, and Solaris desktops and applications from your PC, laptop, and tablet.
- **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.

**RELATED SERVICES**

The following services are available from Oracle Support Services:

- **Product Support Services**

- Smooth HD playback for Adobe Flash content and Windows Media Player multimedia
- Windows application device and location awareness for implementation of capabilities such as follow-me-printing
- 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
- Proactive monitoring ensures the optimal health of the Sun Ray Software deployment with the Oracle Enterprise Manager for Sun Ray Software Plug-in

**Sun Ray Software 5.4.2 Specifications****Installation Platform Requirements****Sun Ray Software – Installation Platforms**

- Oracle Solaris 10 (8/11) and later Solaris 10 updates
- Oracle Solaris 10 with Trusted Extensions (8/11) and later Solaris 10 updates
- Oracle Solaris 11.1 and later Solaris 11 updates
- Oracle Solaris 11.1 with Trusted Extensions and later Solaris 11 updates
- Oracle Linux 5.8, 6.3, 6.4 (64-bit)

**Supported Desktop Environments**

- Oracle Solaris 10 (8/11) and later Solaris 10 updates
- Oracle Solaris 10 with Trusted Extensions (8/11) and later Solaris 10 updates
- Oracle Solaris 11.1 and later Solaris 11 updates
- Oracle Solaris 11.1 with Trusted Extensions and later Solaris 11 updates
- Oracle Linux 5.8, 6.3 (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 SP1 Enterprise (64-bit)
- Microsoft Windows 7 Enterprise SP1 (32-bit and 64-bit)
- Microsoft Windows 8 (32-bit and 64-bit) and Microsoft Windows 2012 (64-bit) – Video Acceleration and Smart Card Services not supported.

**Sun Ray Software Connectors**

- Sun Ray Connector for VMware View Manager (for VMware View 3.1, 4.0, 4.5, 4.6, 5.0, 5.1, 5.2)
- Sun Ray Connector for Citrix XenDesktop (for Citrix XenDesktop 4.0 or later with Citrix Web Interface 5.4)

## Contact Us

For more information about Oracle's Sun Ray Software and Sun Ray Clients, visit [oracle.com](http://oracle.com) or call +1.800.ORACLE1 to speak to an Oracle representative.



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