

SUN RAY 3 PLUS CLIENT

REDUCE MAINTENANCE, UPGRADE, AND OPERATIONAL COSTS

KEY FEATURES

- Displays a Windows, Linux, or Oracle Solaris OS desktop
- Native dual-display capabilities for up to two 30 inch monitors
- Up to 2560x1600 resolution for a single display or 5120x1600 total resolution across two displays
- Secure environment prevents data theft and attack
- Mobile capabilities to “hot desk” - from office to conference room to home
- Built-in fiber optic networking
- Ultra-low power consumption

KEY BENEFITS

- Save money by managing thousands of desktops with just a few system administrators
- Virtually eliminate costs associated with client virus attacks
- Protect intellectual property by eliminating insecure PC storage or removable media
- Save time by upgrading applications on thousands of desktops in hours - not weeks or months



Oracle’s Sun Ray Clients provide customers with an interoperable, zero-administration desktop client solution that reduces the maintenance, upgrade, and operational costs commonly associated with PC environments. The ultra-secure, ultra-reliable Sun Ray 3 Plus Client has industry leading features such as built-in fiber optic networking, native dual-display capabilities and an integrated smart card reader. Sun Ray Clients are designed for secure, high performance virtual desktop infrastructure (VDI) environments, yet don’t require a local operating system, eliminating the complexity, cost, and vulnerabilities associated with other thin client and PC solutions



Sun Ray Technology Overview

Zero-administration Sun Ray Clients enable access to server hosted applications and desktops for virtually any platform—Oracle Solaris, Oracle Linux and other Linux, or Microsoft Windows—to meet the needs of a diverse enterprise today and well into the future.

The Sun Ray Client architecture consists of two major components: the Sun Ray Client device and Sun Ray Software.

Sun Ray Clients are simple, low-cost, low-power consumption devices that require no desktop administration. Sun Ray Clients differ from complex PCs and other thin clients with embedded operating systems because they have no local operating system (such as Windows XP Embedded or Windows CE) to manage, administer, or create vulnerabilities. This also eliminates the need to upgrade the client when new applications are introduced or more computing power is required. For maximum convenience and security, every Sun Ray Client

contains an integrated smart card reader, enabling a user to simply insert their smart card into any available Sun Ray Client and instantaneously accesses their existing session over a local or wide-area network (LAN or WAN).

Sun Ray Software provides user, client, and server authentication, firmware updates, as well as user session management across the environment. User sessions are load balanced across the servers in the group to optimize performance for users.

Sun Ray Software and clients utilize Oracle's unique Appliance Link Protocol (ALP) that 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.

Sun Ray 3 Plus Client

The Sun Ray 3 Plus Client boasts the highest resolution in the industry at 2560 x 1600 for one monitor or 5120 x 1600 for up to two 30 inch monitors.

The Sun Ray 3 Plus Client provides fiber optic networking via the new SFP (Small Form Pluggable) port module, enabling customers to connect to the network via a fiber optic interface with their choice of fiber optic connector (1000 SX, 1000 LX, or 100 FX) to match their networking infrastructure. Fiber optic networking enhances the security of the network connection to prevent the risk of signal interception.

The Sun Ray 3 Plus Client is also one of the lowest power consumption clients on the market with a meager 14 watts of typical power consumption—less than most thin clients and a fraction of a typical PC—earning it the ENERGY STAR 5.0 rating.

The Sun Ray 3 Plus Client ships without a monitor but is compatible with Oracle as well as other Video Graphics Array (VGA) or Digital Video Interface (DVI) monitors.

Enhanced Security, Easier Manageability, High Reliability

Sun Ray Clients are an ideal solution for today's healthcare, government, industrial, retail, financial and education industries, offering a number of benefits:

Enhanced security:

- No local application or data storage eliminates the security risks associated with theft and makes them easy to replace if lost or damaged.
- The lack of an operating system on the client device dramatically reduces the vulnerabilities associated with PC viruses and malware.
- Data and applications remain on servers in the data center, where they can be easily managed, backed-up, and controlled, facilitating compliance with regulatory laws such as HIPAA or Sarbanes-Oxley.

Easier manageability

- Consolidated management at the server level, within the data center.
- No client set up—simply connect them to the network—allowing easy deployment to new users or remote locations

High reliability operations

- Better business continuity in the event of a natural disaster, as the data and applications are not resident on the client device.
- Solid state design allows an extended product life of up to 10 years and simple, minimal down time replacement when the time comes.

- No moving parts and no fans mean Sun Ray Clients are ideal for environments unsuited for traditional desktop computers like dusty, remote or space-constrained environments.

RELATED PRODUCTS

The following Oracle Desktop Virtualization products are also offered:

- **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 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**

Sun Ray 3 Plus Client Specifications

Hardware			
Peripheral Connectivity		Audio	
<ul style="list-style-type: none"> • 4 USB ports (2 front, 2 back) • 2 DVI-I connectors • One serial port • 1 stereo audio microphone in • 1 audio headphone/line-out • 1 cable lock slot 		<ul style="list-style-type: none"> • CD-quality audio in/out • Microphone • Headphone jack • Stereo line level in 	
<ul style="list-style-type: none"> • Two standard dual-link DVI-I (Digital Video Interface) connectors that support Oracle or third-party monitors" • Up to 2560x1600 resolution for a single display or 5120x1600 total resolution across two displays 			
Smart Card Reader			
<ul style="list-style-type: none"> • Lighted smart card slot indicates smart card access activities • Dual-sided reader socket • Supports ISO 7816 T=0 and T=1 interface smart cards (synchronous cards not supported) • Supported card voltage: 1.8, 3, 5V • Maximum card baud rate: 230K 			
Networking			
<ul style="list-style-type: none"> • 10/100/1000 Gigabit Ethernet (RJ-45 port) • 1000-X SFP (Small Form Pluggable) socket (for fiber-optic modules) 			
Dimensions and Weights			
Unit With / Without the Stand		Stand Dimensions (Without Unit)	
Width: <ul style="list-style-type: none"> • 75.3 mm (2.95 in.) / 28 mm (1.09 in.) Depth: <ul style="list-style-type: none"> • 180 mm (7.09 in.) / 180 mm (7.09 in.) Height: <ul style="list-style-type: none"> • 221 mm (8.70 in.) / 215 mm (8.46 in.) Weight: <ul style="list-style-type: none"> • 1 kg (2.2 lbs.) / 0.75 kg (1.64 lbs) 		<ul style="list-style-type: none"> • Width: 75.3 mm (2.95 in.) • Depth: 173 mm (6.8 in.) • Height: 6.0 mm (0.24 in.) • Weight: 0.22 kg (0.5 lbs.) 	
Energy Consumption			
<ul style="list-style-type: none"> • External power supply input: Worldwide auto-sensing 36W, 100-240 VAC, 50-60Hz 			
Energy Consumption	115 vac/60Hz	230vac/50Hz	100vac
Idle State	13.85 W	14.15 W	13.75
Off State	0.31 W	0.35 W	0.31 W
<p>NOTE: The actual power consumption at your location could vary and is dependent on many factors including, but not limited to attached peripherals and environmental factors.</p>			

BTU/hr	115 vac/60Hz	230vac/50Hz	100vac
Idle State	47.29 BTU/hr	42.28 BTU/hr	46.93 BTU/hr
Off State	1.05 BTU/hr	1.20 BTU/hr	1.04 BTU/hr
NOTE: Heat dissipation is calculated based on known energy consumption at one hour of operation.			
Environmental Conditions			
Operating Conditions		Non-Operating Conditions	
<ul style="list-style-type: none"> • 0°C to 35°C (32°F to 95°F) • 5% to 93% RH • 3 km (10 K ft.) 		<ul style="list-style-type: none"> • - 20°C to 60°C (- 4°F to 140°F) • 5% to 93% RH • 12 km (39 K ft.) 	
Regulations			
Safety		EMC	
<ul style="list-style-type: none"> • EN 60950-1:2006 • IEC 60950-1:2005, 2nd Edition (Evaluated to all CB countries) • UL 60950-1, 2nd Edition • CSA C22.2 No. 60950-1-07 		<ul style="list-style-type: none"> • EN55022:2006 + A1:2007 Class B • EN55024:1998 + A1:2001 + A2:2003 • EN61000-3-2:2006 • EN61000-3-3:1995 + A1:2001 +A2:2005 • 47CFR15 Subpart B (FCC) Class B • EN300386:2005 (V1.3.3) for Telecommunications Centers and for Other Than Telecommunications Centers • ICES-003 Class B • AS/NZS CISPR22:2006 Class B • CISPR22:2008: Class B 	
Ergonomics			
The product has been tested and found to comply with all applicable GS ergonomic requirements.			
European Union Directives Compliance			
<ul style="list-style-type: none"> • 2006/95/EC (73/23/EEC) Low Voltage Directive • 2004/108/EC (89/336/EEC) EMC Directive • 2002/96/EC Waste Electrical and Electronic Equipment (WEEE) Directive • 2002/95/EC Restriction of Hazardous Substances (RoHS) Directive 			
Environmental Standards and Compliance			
<ul style="list-style-type: none"> • ENERGY STAR 5.0 (U.S. Environmental Protection Agency) - Category B • Rated EPEAT (Electronic Product Environmental Assessment Tool) Silver • RoHS Compliant • WEEE (Waste Electrical and Electronic Equipment) Directive - 2002/96/EC • Global Reporting Initiative (GRI) - Corporate Responsibility Report • ISO 14000/14001 • California Proposition 65 			

Contact Us

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



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