

SUN RAY 3 PLUS CLIENT

KEY FEATURES AND BENEFITS

REDUCE MAINTENANCE,
UPGRADE, AND
OPERATIONAL COSTS

FEATURES

- Displays a Windows, Linux, or Oracle Solaris OS desktop
- Ultralow power consumption
- Mobile capabilities to “hot desk”—from office to conference room to home
- Native dual-display capabilities for up to two 30 inch monitors
- Built-in fiber optic networking
- Secure environment prevents data theft and attack

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 ultrasecure, ultrareliable Sun Ray 3 Plus Client has industry leading features such as a 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 thin clients enable access to server hosted applications and desktops for virtually any platform—Oracle Solaris, Linux, UNIX, or Microsoft Windows—to meet the needs of a diverse enterprise.

The Sun Ray desktop virtualization architecture consists of two major components: the Sun Ray thin client device and the Sun Ray Software.

Sun Ray Clients are simple, low-cost, low-power consumption devices that require no desktop administration. Sun Ray thin 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 thin client contains an integrated smart card reader, enabling a user to simply insert their smart card into any available Sun Ray device and instantaneously accesses their existing session over a local- or wide-area network (LAN or WAN). This allows mobile workers in healthcare, manufacturing, or other industries to move from place to place efficiently without having to constantly re-login to access their information.

The 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 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 thin 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 now 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—and 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 thin clients are the 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 making 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 thin clients are ideal for environments unsuited for traditional desktop computers like dusty, remote or space-constrained environments.

Sun Ray 3 Plus Client Specifications

Hardware	
Peripheral Connectivity	Audio
<ul style="list-style-type: none"> • 4 USB 2.0 connectors (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	Networking
<ul style="list-style-type: none"> • ISO-7816 (smart card reader) 	<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	
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.)
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 			
Environment			
Operating		Nonoperating	
<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.) 	
Energy Consumption			
<ul style="list-style-type: none"> • ENERGY STAR® 5.0 Qualified • 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
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.			
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 claculated based on known energy consumption at one hour of operation.			
Acoustic			
<3.5 B, <28 dBA (operator), ISO 9296			

Warranty

Visit oracle.com/sun/warranty for Oracle’s global warranty support information on Sun products.

Services

Visit oracle.com/sun/services for information on Oracle’s service program offerings for Sun products.

Contact Us

For more information about Oracle’s Sun Ray 3 Client, please visit oracle.com/sun or call +1.800.786.0404 to speak to an Oracle representative.

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