SUN RAY 3 CLIENT

Oracle's Sun Ray Clients provide organizations 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 Client features full support for the Oracle desktop virtualization portfolio. Sun Ray 3 Clients are designed for secure, cost-effective virtualized desktop environments and don't require local software or management, eliminating the complexity, expenses, and security vulnerabilities associated with other thin client and PC solutions. The Sun Ray 3 Client is designed to be one of the most compact, lowest power consumption and eco-friendly desktops on the market today.

REDUCE MAINTENANCE, UPGRADE, AND OPERATIONAL COSTS

KEY FEATURES

- Plug and go, zero administration client
- 1920 x 1200 maximum resolution
- Five USB ports
- Built-in smart card reader
- Remote access to Windows, Oracle Solaris, Oracle Linux and other Linux desktops
- 'Hot-desking' capability to enable easy mobile access to desktop
- Secure firmware, prevents data theft and attacks
- Supports the feature-rich Appliance Link Protocol (ALP) designed to enable seamless desktop access over LAN and WAN
- Sleek, solid, compact, lightweight, and ventless design
- Lowest power consumption of any ENERGY STAR 5.0 (Category A) qualified thin client
- EPEAT Silver registered product

KEY BENEFITS

- Reduce operational costs by managing thousands of desktops with just a few system administrators
- 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
- Reduce energy consumption and e-waste

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.

Smart Design and Versatility

The Sun Ray 3 Client is particularly well-suited for use in call centers, public sector, healthcare, education, service providers, manufacturing, finance or other industries where multiple users share common workspaces, or require efficient and secure mobile access to their information from location to location.

The Sun Ray 3 Client provides graphics resolutions of up to 1920 x 1200, via a single-link DVI-I video port. The Sun Ray 3 Client ships without a monitor but is compatible with Oracle as well as other Video Graphics Array (VGA) or Digital Video Interface (DVI) monitors.

The Sun Ray 3 Client features an advanced thermal management system with passive conductive cooling that doesn't require fans, making work environments ultra-quiet.

Because of its solid state, compact, lightweight, and ventless design, the Sun Ray 3 Client is an ideal thin client for most environmental conditions.

Enhanced Security, Easier Manageability, High Reliability

The Sun Ray 3 Client offers a number of benefits:

Enhanced security:

• No local application or data storage eliminates the security risks associated with theft and makes Sun Ray 3 Clients easy to replace if lost or damaged. Simply plug and go with a new Sun Ray 3 Client without the need for desktop IT intervention.

• With only secure firmware on the client device, vulnerabilities associated with PC viruses and malware are dramatically reduced.

• 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.

• Allows one administrator to manage thousands of desktop users.

• Client software configuration and desktop application management is eliminated.

• No client set up—simply connect them to the network—allowing easy deployment to new users or remote locations.

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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 and enables access from any location.

• Solid state design allows an extended product life with a mean time between failures (MTBF) of greater than 20 years and simple, minimal replacement downtime.

Environmentally Responsible Computing

The Sun Ray 3 Client is one of the most eco-friendly clients on the market, offering the following benefits:

• Ultra low power consumption of less than 6 Watts of typical power usage (less than most thin clients and a fraction of a typical PC), earning it the ENERGY STAR 5.0 qualification.

• The Sun Ray 3 Client is an EPEAT Silver registered product. EPEAT is operated by the nonprofit Green Electronics Council and used by corporations and government to identify greener products.

• Compact and light, which means reduced costs and energy for transport.

• Negligible heat emission results in reduced cooling costs and no requirement for fans.

• 92% recyclable, and free from many environmentally hazardous materials, with minimal waste in assembly and packaging, and less production materials than PCs.

• Dramatically reduces e-waste with product life expectancy of approximately 7 times longer than a typical PC (based on a 3 year PC life expectancy), with significantly fewer desktop refreshes.

Sun Ray 3 Client Technical Specifications	
Hardware	
Graphics	• Support for graphics resolutions of up to 1920 x 1200
Peripheral Interface	• Five Universal Serial Bus (USB) ports • One serial port (DB9) • One single-DVI-I video connector
Networking	• 10/100/1000 Mbit/sec (RJ45)
Audio	• Stereo headphone output jack (1/8" mini-jack) • Microphone input jack (1/8" mini-jack) • Internal 1.2 Watt monaural speaker
Smart Card Reader	• Lighted smart card bezel • Dual-sided reader socket • Supports ISO 7816 T=0 and T=1interface smart cards (synchronous cards not supported) • Supported card voltage: 1.8, 3, 5V • Maximum card baud rate: 230 K
Dimensions and Weights	
• Width: 26 mm (1.10 in.) • Depth: 158 mm (6.22 in.) • Height (without stand): 190 mm (7.48 in.) • Height (with stand): 196 mm (7.72 in.) • Weight (without stand): 0.5 kg (1.10 lb.) • Weight (with stand): 0.66 kg (1.46 lb.)	

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Operating Conditions	
Temperature	0 to 40 degrees C
Humidity	5% to 93% RH
Altitude	3 km
Acoustic Noise Emissions	LWAd less than 3.0 dB operating and idling, ISO9296
Non-Operating Conditions	
Temperature	-20 to 60 degrees C
Humidity	5% to 93% RH
Altitude	12 km
Power Supply	
External autosensing power supply, 100-240V AC, 50-60 Hz	
Operational Mode Power	
(Energy Star Requirement (Category A): Off Mode ≤ 2 W; Idle State ≤ 12 W)	
Mode	**Actual**
Off Mode	≤ 0.5 W
Idle State	≤ 6 W

Sun Ray 3 Client Compliance and Regulations	
Safety	
Country	**Standard**
Argentina	• S-Mark IEC 60950-1: 2005 2nd Edition
Canada	• CSA C22.2 No. 60950-1-07, 2nd Edition
CB Members Countries	• CB Report IEC 60950-1:2005 (2nd Edition) +A1:2009; including all amendments and full worldwide deviations
China	• CCC exemption
European Union	• CE Marked to European Union Low Voltage Directive 2006/95/EC • EN60950-1:2006 +A11:2009
Russia	• GOST R and Hygienic Certification
Taiwan	• CNS 14336:2005 BSMI R-Type Certification
US	• UL 60950-1, 2nd Edition
Electromagnetic Compatibility (EMC)	
Country	**Standard**
Australia/New Zealand	• AS/NZS 3548
Canada	• ICES-003 Class B
European Union	• CE Marked to European Union EMC Directive 2004/108/EC, Class B • EN55022:2006 +A1:2007 Class B
Japan	• VCCI V-3/2004/04 (Class B)
Korea	• KN22:2008 KCC Certification
Russia	• GOST R Certification
Taiwan	• CNS 13438:2006 BSMI R-Type Certification

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US	• FCC 47 CFR 15B (Code of Federal Regulations, Part 15, Subpart B) Class B
Immunity	
Country	**Standard**
European Union	• CE Marked to European Union EMC Directive 2004/108/EC • EN55024:1998 +A1:2001 +A2:2003
Korea	• KN24:2008 KCC Certification
Russia	• GOST R Certification
Ergonomics	
Country	**Standard**
Germany	• GS-Mark EK-ITB 2000-2010
Environmental Standards and Compliance	
• ENERGY STAR 5.0 Qualified – Category A (U.S. Environmental Protection Agency) • Rated EPEAT Silver • RoHS (Restriction of Hazardous Substances) Compliant • WEEE (Waste Electrical and Electronic Equipment) Directive – 2002/96/EC • GRI (Global Reporting Initiative) – 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.

Oracle is committed to developing practices and products that help protect the environment

SOFTWARE. HARDWARE. COMPLETE.

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