

SUN RAY 3i CLIENT

REDUCE MAINTENANCE, UPGRADE, AND OPERATIONAL COSTS

KEY FEATURES

- Plug and go, zero administration client
- Full HD fixed 1920 x 1080 resolution 16:9 widescreen display
- Five USB ports
- Built-in smart card reader
- VESA 100 x 100 mm mount and removable stand offers flexible mounting options
- Remote access to Windows, Oracle Solaris, and Oracle Linux and other Linux desktops
- 'Hot-desking' capability to enable easy mobile access to desktop sessions
- Secure firmware, prevents data theft and attacks
- Supports the feature-rich Appliance Link Protocol (ALP) designed to enable seamless access over LAN and WAN
- Streamlined, solid, compact, and eco-friendly design
- Low power consumption
- Highly recyclable, free from many environmentally hazardous materials

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



Oracle's Sun Ray Clients provide an integrated, 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 3i Client is an all-in-one unit that includes a high performance 21.5-inch HD widescreen display, featuring full support for the Oracle desktop virtualization portfolio. Sun Ray 3i Clients are designed for secure, cost-effective virtualized desktop environments and don't require local software or management, eliminating the complexity, expense, and security vulnerabilities associated with other thin client and PC solutions. The Sun Ray 3i Client is designed to be one of the most energy efficient and environmentally friendly desktops on the market today.



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, UNIX, 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 Integrated Design and Versatility

The Sun Ray 3i Client is particularly well-suited for users in call centers, education, healthcare, 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 3i Client supports a fixed HD 1920 x 1080 graphics resolution on an integrated 16:9 high performance widescreen display. The Sun Ray 3i Client is so tightly integrated with the onboard display, it's almost as thin as a typical PC monitor alone.

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

Because of its solid-state, compact, and industrial strength design, the Sun Ray 3i Client is an ideal device for space constrained or extreme environments. Its simple, sleek, all-in-one design eliminates desktop clutter, creating more spacious and tidier workspaces.



Enhanced Security, Easier Manageability, High Reliability

Sun Ray 3i Client offers a number of benefits that enhance the security, manageability and reliability of desktop environments:

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. Simply plug and go with a new Sun Ray 3i Client without the need for any desktop IT support.
- 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

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**

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 and enables access from any location.
- Solid-state design allows an extended product life with a mean time between failures (MTBF) of greater than 8 years and simple, minimal replacement downtime.
- No moving parts, no vents, and no fans mean Sun Ray Clients are ideal for environments unsuited for traditional desktop computers such as dusty, remote or space-constrained environments.

Environmentally Responsible Computing

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

- Consumes less power than most thin clients and a fraction of a typical PC, earning it the ENERGY STAR 5.0 Category A qualification.
- The Sun Ray 3i 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.
- 98% recyclable, and free from many environmentally hazardous materials, with minimal waste in assembly and packaging, and less production materials than typical PCs.
- Dramatically reduces e-waste with a significantly longer product life expectancy than a typical PC, with dramatically fewer desktop refreshes.

Sun Ray 3i Client Technical Specifications

Hardware	
Integrated Flat Panel Display	<ul style="list-style-type: none"> • 21.5 inch color AM-TFT-LCD • Supports full High Definition (HD) with a fixed 1920 x 1080 display resolution • 2-Lamp Cold Cathode Fluorescent backlight
Peripheral Interface	<ul style="list-style-type: none"> • Five Universal Serial Bus (USB) ports • One serial port (DB9) • One analog video out port
Networking	<ul style="list-style-type: none"> • 10/100/1000 Mbit/sec (RJ45)
Audio	<ul style="list-style-type: none"> • Stereo headphone output jack (1/8" mini-jack) • Microphone input jack (1/8" mini-jack) • Internal 1.8 Watt monaural speaker
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: 230 K

Dimensions and Weights	
<ul style="list-style-type: none"> • Width: 517.6 mm (20.34 in.) • Depth (with rear cover): 48.5 mm (1.91 in.) • Height (without base): 308.8 mm (12.16 in.) • Height (with base): 407.76 mm (16.05 in.) • Weight (without base and rear cover): 4.22 kg (9.30 lb.) • Weight (with base): 5.48 kg (12.08 lb.) 	
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	Typical
Off Mode	≤ 0.4 W
Idle State	≤ 6 W

Sun Ray 3i Client Compliance and Regulations	
Safety	
Country	Standard
Argentina	• S-Mark IEC 60950-1: 2005 2 nd Edition
Canada	• CSA C22.2 No. 60950-1-07, 2nd Edition
CB Members Countries	• CB Report IEC 60950-1:2005 (2nd Edition); including all amendments and full worldwide deviations
China	• CCC GB9254:2008
European Union	• CE Marked to European Union Low Voltage Directive 2006/95/EC • EN60950-1:2006 +A11:2009
Russia	• GOST R IEC 60950-1-2005 and Hygienic Certification
Taiwan	• BSMI CNS 14336:2005
US	• UL 60950-1, 2nd Edition
Electromagnetic Compatibility (EMC)	
Country	Standard
Australia/New Zealand	• AS/NZS CISPR22:2006
Canada	• CAN/CSA ICES-003 Issue 4 (2004) Class B

European Union	<ul style="list-style-type: none"> • CE Marked to European Union EMC Directive 2004/108/EC, Class B • EN55022:2006 +A1:2007 Class B
Japan	<ul style="list-style-type: none"> • VCCI V-3/2004.04 (Class B)
Korea	<ul style="list-style-type: none"> • KCC KN22:2008
Russia	<ul style="list-style-type: none"> • GOST R 51318.22-99
Taiwan	<ul style="list-style-type: none"> • BSMI CNS 13438:2006
US	<ul style="list-style-type: none"> • FCC 47 CFR 15B (Code of Federal Regulations, Part 15, Subpart B) Class B
Immunity	
Country	Standard
European Union	<ul style="list-style-type: none"> • CE Marked to European Union EMC Directive 2004/108/EC • EN55024:1998 +A1:2001 +A2:2003
Korea	<ul style="list-style-type: none"> • KCC KN24:2008
Russia	<ul style="list-style-type: none"> • GOST R 51318.24-99
Ergonomics	
Country	Standard
Germany	<ul style="list-style-type: none"> • GS EK-ITB 2000-2010
Environmental Standards and Compliance	
<ul style="list-style-type: none"> • ENERGY STAR 5.0 Qualification - 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.



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