



Solaris Reference Manual for SMCC-Specific Software

Sun Microsystems, Inc.
901 San Antonio Road
Palo Alto, CA 94303-4900
U.S.A.

Part No: 805-4439
July 9, 1998

Copyright 1998 Sun Microsystems, Inc. 901 San Antonio Road, Palo Alto, California 94303-4900 U.S.A. All rights reserved.

This product or document is protected by copyright and distributed under licenses restricting its use, copying, distribution, and decompilation. No part of this product or document may be reproduced in any form by any means without prior written authorization of Sun and its licensors, if any. Third-party software, including font technology, is copyrighted and licensed from Sun suppliers.

Parts of the product may be derived from Berkeley BSD systems, licensed from the University of California. UNIX is a registered trademark in the U.S. and other countries, exclusively licensed through X/Open Company, Ltd.

Sun, Sun Microsystems, the Sun logo, SunDocs, Java, the Java Coffee Cup logo, and Solaris are trademarks, registered trademarks, or service marks of Sun Microsystems, Inc. in the U.S. and other countries. All SPARC trademarks are used under license and are trademarks or registered trademarks of SPARC International, Inc. in the U.S. and other countries. Products bearing SPARC trademarks are based upon an architecture developed by Sun Microsystems, Inc.

The OPEN LOOK and Sun™ Graphical User Interface was developed by Sun Microsystems, Inc. for its users and licensees. Sun acknowledges the pioneering efforts of Xerox in researching and developing the concept of visual or graphical user interfaces for the computer industry. Sun holds a non-exclusive license from Xerox to the Xerox Graphical User Interface, which license also covers Sun's licensees who implement OPEN LOOK GUIs and otherwise comply with Sun's written license agreements.

RESTRICTED RIGHTS: Use, duplication, or disclosure by the U.S. Government is subject to restrictions of FAR 52.227-14(g)(2)(6/87) and FAR 52.227-19(6/87), or DFAR 252.227-7015(b)(6/95) and DFAR 227.7202-3(a).

DOCUMENTATION IS PROVIDED "AS IS" AND ALL EXPRESS OR IMPLIED CONDITIONS, REPRESENTATIONS AND WARRANTIES, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR NON-INFRINGEMENT, ARE DISCLAIMED, EXCEPT TO THE EXTENT THAT SUCH DISCLAIMERS ARE HELD TO BE LEGALLY INVALID.

Copyright 1998 Sun Microsystems, Inc. 901 San Antonio Road, Palo Alto, California 94303-4900 Etats-Unis. Tous droits réservés.

Ce produit ou document est protégé par un copyright et distribué avec des licences qui en restreignent l'utilisation, la copie, la distribution, et la décompilation. Aucune partie de ce produit ou document ne peut être reproduite sous aucune forme, par quelque moyen que ce soit, sans l'autorisation préalable et écrite de Sun et de ses bailleurs de licence, s'il y en a. Le logiciel détenu par des tiers, et qui comprend la technologie relative aux polices de caractères, est protégé par un copyright et licencié par des fournisseurs de Sun.

Des parties de ce produit pourront être dérivées du système Berkeley BSD licenciés par l'Université de Californie. UNIX est une marque déposée aux Etats-Unis et dans d'autres pays et licenciée exclusivement par X/Open Company, Ltd.

Sun, Sun Microsystems, le logo Sun, SunDocs, Java, le logo Java Coffee Cup, et Solaris sont des marques de fabrique ou des marques déposées, ou marques de service, de Sun Microsystems, Inc. aux Etats-Unis et dans d'autres pays. Toutes les marques SPARC sont utilisées sous licence et sont des marques de fabrique ou des marques déposées de SPARC International, Inc. aux Etats-Unis et dans d'autres pays. Les produits portant les marques SPARC sont basés sur une architecture développée par Sun Microsystems, Inc.

L'interface d'utilisation graphique OPEN LOOK et Sun™ a été développée par Sun Microsystems, Inc. pour ses utilisateurs et licenciés. Sun reconnaît les efforts de pionniers de Xerox pour la recherche et le développement du concept des interfaces d'utilisation visuelle ou graphique pour l'industrie de l'informatique. Sun détient une licence non exclusive de Xerox sur l'interface d'utilisation graphique Xerox, cette licence couvrant également les licenciés de Sun qui mettent en place l'interface d'utilisation graphique OPEN LOOK et qui en outre se conforment aux licences écrites de Sun.

CETTE PUBLICATION EST FOURNIE "EN L'ETAT" ET AUCUNE GARANTIE, EXPRESSE OU IMPLICITE, N'EST ACCORDEE, Y COMPRIS DES GARANTIES CONCERNANT LA VALEUR MARCHANDE, L'APTITUDE DE LA PUBLICATION A REpondre A UNE UTILISATION PARTICULIERE, OU LE FAIT QU'ELLE NE SOIT PAS CONTREFAISANTE DE PRODUIT DE TIERS. CE DENI DE GARANTIE NE S'APPLIQUERAIT PAS, DANS LA MESURE OU IL SERAIT TENU JURIDIQUEMENT NUL ET NON AVENU.



Contents

sunvts(1M)	2
vtsk(1M)	4
vtsprobe(1M)	6
vtstty(1M)	8
vtsui(1M)	10
vtsui.ol(1M)	11
Index	12

Maintenance Commands

NAME	sunvts – Invokes the SunVTS kernel and its user interface
SYNOPSIS	sunvts [-lepqstv] [-o <i>option_file</i>] [-f <i>log_dir</i>] [-h <i>hostname</i>]
AVAILABILITY	SUNWvts
DESCRIPTION	The <code>sunvts</code> command is used to invoke the SunVTS user interface and kernel on the same system. It could be used to start the user interface on the local system and connect to the SunVTS kernel on the remote system. By default, it displays CDE Motif graphic interface for CDE environment, OpenLook graphic interface for OpenWindows environment, or TTY interface for non-windowing system. By default, <code>sunvts</code> will start the appropriate <code>vtstk(1M)</code> depending on the type of the operating system (32-bit or 64-bit) that is running.
OPTIONS	<ul style="list-style-type: none"> -l Displays SunVTS OpenLook graphic interface. -e Disables the security checking feature. -f <i>log_dir</i> Specifies an alternative log_file directory. The default log_file directory is <code>/var/opt/SUNWvts/logs</code>. -h <i>hostname</i> Starts the SunVTS user interface on the local system, which connects to or invokes the SunVTS kernel on the specified host after security checking succeeds. -o <i>option_file</i> Starts the SunVTS kernel with the test options loaded from the specified <i>option_file</i>, which by default is located in <code>/var/opt/SUNWvts/options</code>. -P Starts the SunVTS kernel <code>vtstk (1M)</code> such that it does not probe the test system's devices. -q Automatically quits both the SunVTS kernel and the user interface when testing stops. -s Automatically starts testing from a selected group of tests. The flag must be used with the <code>-o option_file</code> flag. -t Starts <code>vtstty (1M)</code>, a TTY based interface, instead of CDE or OpenLook interface. -v Displays version information from <code>vtsui(1M)</code> and <code>vtstk(1M)</code>.

NOTES | If `vtsk (1M)` is already running on the test system, the `sunvts` command ignores the `--e`, `--o`, `--f`, `--q`, `--p`, and `-s` options.

SEE ALSO | `vtsk(1M)`, `vtstty(1M)`, `vtsui(1M)`, `vtsui.ol(1M)`, `vtsprobe(1M)`

NAME	vtsk – SunVTS diagnostic kernel
SYNOPSIS	vtsk [-epqsv] [-o <i>options_file</i>] [-f <i>logfile_directory</i>]
AVAILABILITY	SUNWvts
DESCRIPTION	<p>The <code>vtsk</code> command starts up the SunVTS diagnostic kernel as a background process. There can only be one copy of <code>vtsk</code> running at a time. Only the superuser can execute this command.</p> <p>Normally, <code>vtsk</code> is automatically started up by the <code>sunvts (1M)</code> command if it is not already running. <code>vtsk</code> will also be invoked by <code>inetd (1M)</code> when there is a connection request from <code>vtsui</code> or <code>vtsui.ol</code>. In that case, the security file, <code>.sunvts_sec</code>, will be checked for the permission before running <code>vtsk</code> on the target host specified by <code>vtsui(1M)</code> or <code>vtsui.ol(1M)</code>.</p> <p>Starting with SunVTS 3.0, a 64-bit <code>vtsk</code> is bundled with the <code>SUNWvtsx</code> package. This is installed by default in the <code>/opt/SUNWvts/bin/sparcv9</code> directory with the other 64-bit SunVTS binaries. The traditional 32-bit <code>vtsk</code> bundled with the <code>SUNWvts</code> package is installed in the <code>/opt/SUNWvts/bin</code> directory by default. The <code>./sunvts</code> command that normally invokes <code>vtsk</code> will determine which form of the OS is currently running (either 32-bit or 64-bit) and then start the appropriate <code>vtsk</code>.</p> <p>While the <code>/opt/SUNWvts/bin</code> directory is the default location, the package installer has the option of selecting a different parent directory for <code>/opt/SUNWvts/bin</code>.</p>
OPTIONS	<p>-e Enables the security checking for all connection requests.</p> <p>-P Starts SunVTS diagnostic kernel, but does not probe system configuration.</p> <p>-q Quits both the SunVTS diagnostic kernel and the attached User Interfaces when the testing is completed.</p> <p>-s Runs enabled tests immediately after started.</p> <p>-v Display SunVTS diagnostic kernel's version information only.</p> <p>-o <i>options_file</i> Starts the SunVTS diagnostic kernel and sets the test options according to the option file named <i>options_file</i>.</p>

-f logfile_directory Specifies an alternative logfile directory, other than the default.

EXIT STATUS

The following exit values are returned:

0 Successful completion.

--1 An error occurred.

FILES

/var/opt/SUNWvts/options default option file directory.

/var/opt/SUNWvts/logs default log file directory.

SEE ALSO

sunvts(1M), vtsui(1M), vtsui.ol(1M), vtstty(1M), vtsprobe(1M)

NAME	vtsprobe - prints the device probe information from the SunVTS kernel
SYNOPSIS	vtsprobe [-m] [-h <i>hostname</i>]
AVAILABILITY	SUNWvts
DESCRIPTION	vtsprobe is a utility that displays the device and configuration information contained in the SunVTS kernel. The output includes the SunVTS assigned group for the device, the device name, the device instance, the testname attached to this device, and the configuration information obtained from the device-specific test probe.
OPTIONS	<p>-m Specifies manufacturing mode, which displays the probe information in a format that is easy to read using script files.</p> <p>-h <i>hostname</i> Specifies the <i>hostname</i> to connect to and get the device and configuration information. If not specified, the current host will be used.</p>
USAGE	After the SunVTS kernel is up and running, you may type vtsprobe at the shell prompt to get the probe output. (See the sunvts (1M) man page for more information on how to start up SunVTS.
EXAMPLES	<p>Running vtsprobe on a sun4m SPARCclassic produces the following output:</p> <pre> % vtsprobe Processor(s) system(system) System Configuration=sun4m SPARCclassic System clock frequency=50 MHz SBUS clock frequency=25 MHz fpu(fputest) Architecture=sparc Type=TI TMS390S10 or TMS390S15 microSPARC chip Memory kmem(vmem) Total: 143120KB mem(pmem) Physical Memory size=24 Mb SCSI-Devices(esp0) c0t2d0(rawtest) Capacity: 638.35MB Controller: esp0 Vendor: MICROP SUN Id: 1588-15MBSUN0669 Firmware Rev: SNOC Serial Number: 1588-15MB103 c0t2d0(fstest) Controller: esp0 c0t3d0(rawtest) </pre>

```

Capacity: 404.65MB
Controller: esp0
Vendor: SEAGATE
SUN Id: ST1480 SUN0424
Firmware Rev: 8628
Serial Number: 00836508
c0t3d0(fstest)
Capacity: 404.65MB
Controller: esp0
Vendor: SEAGATE
SUN Id: ST1480 SUN0424
Firmware Rev: 8628
Serial Number: 00836508
c0t3d0(fstest)
Controller: esp0
c0t6d0(cdtest)
Controller: esp0
tape1(tapetest)
Drive Type: Exabyte EXB-8500 8mm Helical Scan
Network
isdn0(isdntest)
NT Port TE Port
le0(nettest)
Host_Name: ctech84
Host Address: 129.146.210.84
Host ID: 8001784b
Domain Name: scsict.Eng.Sun.COM
Comm.Ports
zs0(sptest)
Port a -- zs0 /dev/term/a : /devices/ ... a
Port b -- zs1 /dev/term/b : /devices/ ... b
Graphics
cgthree0(fbtest)
OtherDevices
bpp0(bpptest)
Logical name: bpp0
sound0(audio)
Audio Device Type: AMD79C30
sound1(audio)
Audio Device Type: DBRI Speakerbox
spd0(spptest)
Logical name: spd0

```

NOTES

The output of `vtsprobe` is highly dependent on the device being correctly configured into the system (so that a SunVTS probe for the device can be run successfully on it) and on the availability of a device-specific test probe.

If the device is improperly configured or if there is no probing function associated with this device, `vtsprobe` cannot print any information associated with it.

SEE ALSO

`sunvts(1M)`, `vtsk(1M)`, `vtsui(1M)`, `vtsui.ol(1M)`, `vtstty(1M)`

NAME	vtstty - TTY interface for SunVTS
SYNOPSIS	vtstty [-qv] [-h <i>hostname</i>]
AVAILABILITY	SUNWvts
DESCRIPTION	<i>vtstty</i> is the default interface for SunVTS in the absence of a windowing environment. It can be used in a non-windowing environment such as a terminal connected to the serial port of the system. However, its use is not restricted to this; <i>vtstty</i> can also be used from shell window.
OPTIONS	<p>-q The "auto-quit" option automatically quits when the conditions for SunVTS to quit are met.</p> <p>-v Prints the <i>vtstty</i> version. The interface is not started when you include this option.</p> <p>-h <i>hostname</i> Connects to the SunVTS kernel running on the host identified by <i>hostname</i>.</p>
USAGE	<p>The <i>vtstty</i> screen consists of four panels: main control, status, test groups, and console. The panels are used to display choices that the user can select to perform some function and/or to display information. A panel is said to be "in focus" or in a "selected" state when it is surrounded by asterisks and the current item is highlighted. In order to choose from the items in a panel, the focus should be shifted to that panel first.</p> <p>The following are the different types of selection items that can be present in a panel:</p> <p>Text string Describes a choice that, when selected, either pops up another panel or performs a function. For example, "stop" will stop the SunVTS testing.</p> <p>Data entry field To enter or edit numeric or textual data.</p> <p>Checkbox Represented as "[]". Checkboxes are associated with items and indicate whether the associated item is selected or not. A checkbox can be in one of the following two states: Deselected [] or Selected [*].</p> <p>The key assignments given below describe the keys for shifting focus, making a selection, and performing other functions:</p> <p>TAB or <CTRL>W Shift focus to another panel</p> <p>RETURN Select current item</p>

Spacebar	Toggle checkbox
Up arrow or <CTRL>U	Move up one item
Down arrow or <CTRL>N	Move down one item
Left arrow or <CTRL>P	Move left one item
Right arrow or <CTRL>R	Move right one item
Backspace	Delete text in a data entry field
ESC	Dismiss a pop-up
<CTRL>F	Scroll forward in a scrollable panel
<CTRL>B	Scroll backward in a scrollable panel
<CTRL>X	Quit <code>vtstty</code> but leave the SunVTS kernel running
<CTRL>L	Refresh the <code>vtstty</code> screen

NOTES

1. To run `vtstty` from a telnet session, carry out the following steps:
 - a. Before telnet-ing, determine the values for "rows and "columns". (See `stty(1)`).
 - b. Set term to the appropriate type after telnet-ing(for example, set `term=vt100`
 - c. Set the values of columns and rows to the value noted above. (See `stty(1)`).
2. Before running `vtstty` ensure that the environment variable describing the terminal type is set correctly.

SEE ALSO

`sunvts(1M)`, `vtsk(1M)`, `vtsui(1M)`, `vtsui.ol(1M)`, `vtsprobe(1M)`

NAME	vtsui – SunVTS Graphic User Interface (CDE)
SYNOPSIS	vtsui [-qv] [-h <i>hostname</i>]
AVAILABILITY	SUNWvts
DESCRIPTION	<p>The <code>vtsui</code> command starts up the CDE Motif version of SunVTS graphic user interface. There can be multiple instances of <code>vtsui</code> running at the same time, all connected to one SunVTS diagnostic kernel, <code>vtstk(1M)</code>. The name of the host machine running the diagnostic kernel, <code>vtstk(1M)</code>, will be displayed in the title bar of the graphical user interface window.</p> <p><code>vtsui</code> is automatically started up by the <code>sunvts(1M)</code> command. <code>vtsui</code> can be also used to start <code>vtstk(1M)</code> if <code>inetd(1M)</code> is in operation. In that case, the security file, <code>sunvts_sec</code>, will be checked for the permission before running <code>vtstk</code> on the target host.</p> <p>See the "SunVTS User's Guide" for a complete description on using the graphical user interface.</p>
OPTIONS	<p>-q Quits the SunVTS graphic user interface when testing has terminated.</p> <p>-v Displays graphic user interface version information only.</p> <p>-h <i>hostname</i> Starts the SunVTS graphic user interface and connects to the SunVTS diagnostic kernel running on <i>hostname</i>, or invokes the kernel if not running, after security checking succeeds. If <i>hostname</i> not specified, the local host is assumed.</p>
EXIT STATUS	<p>The following exit values are returned:</p> <p>0 Successful completion.</p> <p>1 An error occurred.</p>
SEE ALSO	<code>sunvts(1M)</code> , <code>vtstk(1M)</code> , <code>vtsui.o1(1M)</code> , <code>vtstty(1M)</code> , <code>vtsprobe(1M)</code>

NAME	vtsui.ol – SunVTS Graphic User Interface (OpenLook)
SYNOPSIS	vtsui.ol [-qv] [-h <i>hostname</i>]
AVAILABILITY	SUNWvts
DESCRIPTION	<p>The <code>vtsui.ol</code> command starts up the OpenLook version of SunVTS graphic user interface. There can be multiple instances of <code>vtsui.ol</code> running at the same time, all connected to one SunVTS diagnostic kernel, <code>vtsk(1M)</code>. The name of the host machine running the diagnostic kernel, <code>vtsk(1M)</code>, will be displayed in the title bar of the graphic user interface window.</p> <p><code>vtsui.ol</code> can be used to start <code>vtsk(1M)</code> if <code>inetd(1M)</code> is in operation. In that case, the security file, <code>.sunvts_sec</code>, will be checked for the permission before running <code>vtsk</code> on the target host. <code>vtsui.ol</code> is also automatically started up by the <code>sunvts(1M)</code> command.</p> <p>See the "SunVTS User's Guide" for a complete description on using the graphic user interface.</p>
OPTIONS	<p><code>-q</code> Quits the SunVTS graphic user interface when testing has terminated.</p> <p><code>-v</code> Displays graphic user interface version information only.</p> <p><code>-h <i>hostname</i></code> Starts the SunVTS graphic user interface and connects to the SunVTS diagnostic kernel running on <i>hostname</i>, or invokes the kernel if not running, after security checking succeeds. If <i>hostname</i> not specified, the local host is assumed.</p>
EXIT STATUS	<p>The following exit values are returned:</p> <p>0 Successful completion.</p> <p>1 An error occurred.</p>
SEE ALSO	<code>sunvts(1M)</code> , <code>vtsk(1M)</code> , <code>vtsui(1M)</code> , <code>vtstty(1M)</code> , <code>vtsprobe(1M)</code>

Index
