

UNICOS® Administrator Commands
Reference Manual

SR-2022 10.0

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The UNICOS operating system is derived from UNIX® System V. The UNICOS operating system is also based in part on the Fourth Berkeley Software Distribution (BSD) under license from The Regents of the University of California.

New Features

This revision of the *UNICOS Administrator Commands Reference Manual*, Cray Research publication SR–2022, supports the 10.0 release of the UNICOS operating system.

The following command has been removed because it was specific to systems using the IOS model D:
`fdmp(8)`

Accounting commands. The socket accounting feature contains the new `csasocket(8)` command to process socket accounting data.

The following accounting commands have been updated:

<code>ckdacct(8),</code> <code>csaswitch(8),</code> <code>shutacct(8),</code> <code>startup(8),</code> <code>turndacct(8)</code>	Updated for the socket accounting feature, which tracks network usage from the perspective of sockets.
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<code>csagcon(8)</code>	Has new <code>-E</code> and <code>-I</code> options that generate unconsolidated output. By default, the <code>csagcon(8)</code> command consolidates accounting data for session and <code>pacct</code> files, making per-process information no longer available. These new options generate unconsolidated output, enabling an administrator to select data for individual processes.
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Array sessions feature commands. The array sessions feature supports the new `arrayd(8)` command.

File system quota commands. The `qudu(8)` and `quadmin(8)` commands were updated for the optional aggregate quota feature.

Network commands. The `named(8)` command was updated for the socket accounting feature, which tracks network usage from the perspective of sockets.

System activity monitoring (SAM) commands. The `-z` option of the `diskusg(8)` command was updated (if a user does not have a primary account ID, then the account ID of 0 is used and always reported).

Tape subsystem commands. The following tape subsystem commands are new:

<code>tpcore(8)</code>	Initiates an interactive monitor that provides continuous information about a running tape subsystem
<code>tpinit(8)</code>	Provides a means of initializing the tape subsystem
<code>xtpldr(8)</code>	Manages tape cartridges on autoloaders

The following tape subsystem commands contain changes:

tpset(8)	Provides information about overcommitted mount requests.
tpconfig(8)	Supports two new options. The -n option enables a user to disable automatic unloading of a volume when a tape that will be used repeatedly is released. The -c option supports a 6-digit number of GigaRing based systems.
tpdaemon(8)	The new -b command option instructs the tape daemon to bypass all configuration tasks and to use the existing tape configuration.
tpdev(8)	Uses the 6-digit number supported on GigaRing based systems in its updated display.
tpgstat(8)	Adds the -a option to provide status information for device groups that are reserved or active.

The tape subsystem command, tpconvert(8), is no longer supported.

Network monitor feature. The network monitor feature is no longer supported; so the following commands are not available: dsa(8), dstrunk(8), dtn1130(8), dtu(8), dxmon(8), logn130(8), netstatd(8), v130(8), xdevmon(8), xdsa(8), xdsn130(8), xdstrunk(8), xdtu(8), xdxmon(8), xlogmon(8), xnetmon(8), xns(8), xnx(8), xdst3(8), xsc(8), and xsnmpmon(8).

Record of Revision

<i>Version</i>	<i>Description</i>
2.0	September 1986 Original Printing.
3.0	June 1987 Revision to support the UNICOS 3.0 release.
4.0	July 1988 Revision to support the UNICOS 4.0 release.
5.0	March 1989 Revision to support the UNICOS 5.0 release.
6.0	January 1991 Revision to support the UNICOS 6.0 release.
7.0	September 1992 Revision to support the UNICOS 7.0 release.
8.0	January 1994 Revision to support the UNICOS 8.0 release.
9.0	September 1995 Revision to support the UNICOS 9.0 release.
10.0	November 1997 Revision to support the UNICOS 10.0 release.

Preface

This publication documents UNICOS release 10.0 running on Cray PVP systems. It provides descriptions of commands used in system administration of the Cray Research UNICOS operating system. It supplements the information contained in other manuals of the UNICOS documentation set.

This manual describes commands and shell procedures that are invoked directly by the super user or by command language procedures. It contains system maintenance procedures that generally reside in the `/etc` directory, which are searched by the command interpreter called the shell (see `sh(1)` in the *UNICOS User Commands Reference Manual*, Cray Research publication SR-2011).

This is a reference manual for system administrators. Readers should have a working knowledge of either the UNICOS or the UNIX operating system.

Related publications

The following man page manuals contain additional information that may be helpful.

Note: For the UNICOS 10.0 release, man page reference manuals are not orderable in printed book form. Instead, they are available as printable PostScript files provided on the same DynaWeb CD as the rest of the supporting documents for this release. Individual man pages are still available online and can be accessed by using the `man(1)` command.

- *UNICOS User Commands Reference Manual*, Cray Research publication SR-2011
- *UNICOS System Calls Reference Manual*, Cray Research publication SR-2012
- *UNICOS File Formats and Special Files Reference Manual*, Cray Research publication SR-2014
- *UNICOS System Libraries Reference Manual*, Cray Research publication SR-2080

The following ready references are available in printed form from the Distribution Center:

- *UNICOS User Commands Ready Reference*, Cray Research publication SQ-2056
- *UNICOS System Libraries Ready Reference*, Cray Research publication SQ-2147

- *UNICOS System Calls Ready Reference*, Cray Research publication SQ-2215
- *UNICOS Administrator Commands Ready Reference*, Cray Research publication SQ-2413

The following manuals contain additional information that may be helpful:

- *TCP/IP Network User's Guide*, Cray Research publication SG-2009
- *UNICOS Text Editors Primer*, Cray Research publication SG-2050
- *Tape Subsystem User's Guide*, Cray Research publication SG-2051
- *UNICOS vi Reference Card*, Cray Research publication SQ-2054
- *UNICOS ed Reference Card*, Cray Research publication SQ-2055
- *Scientific Libraries Reference Manual*, Cray Research publication SR-2081
- *Remote Procedure Call (RPC) Reference Manual*, Cray Research publication SR-2089
- *UNICOS Shells Ready Reference*, Cray Research publication SQ-2116
- *UNICOS Environment Variables Ready Reference*, Cray Research publication SQ-2117
- *Intrinsic Procedures Reference Manual*, Cray Research publication SR-2138
- *NQE Administration*, Cray Research publication SG-2150
- *General UNICOS System Administration*, Cray Research publication SG-2301
- *UNICOS Resource Administration*, Cray Research publication SG-2302
- *UNICOS Configuration Administrator's Guide*, Cray Research publication SG-2303
- *UNICOS Networking Facilities Administrator's Guide*, Cray Research publication SG-2304
- *Kerberos Administrator's Guide*, Cray Research publication SG-2306
- *Tape Subsystem Administration*, Cray Research publication SG-2307
- *CF90 Ready Reference*, Cray Research publication SQ-3900
- *CF90 Commands and Directives Reference Manual*, Cray Research publication SR-3901

- *Fortran Language Reference Manual, Volume 1*, Cray Research publication SR-3902
- *Fortran Language Reference Manual, Volume 2*, Cray Research publication SR-3903

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Conventions

The following conventions are used throughout this document:

<u>Convention</u>	<u>Meaning</u>						
command	This fixed-space font denotes literal items such as commands, files, routines, path names, signals, messages, and programming language structures.						
manpage(x)	Man page section identifiers appear in parentheses after man page names. The following list describes the identifiers: <table><tbody><tr><td>1</td><td>User commands</td></tr><tr><td>1B</td><td>User commands ported from BSD</td></tr><tr><td>2</td><td>System calls</td></tr></tbody></table>	1	User commands	1B	User commands ported from BSD	2	System calls
1	User commands						
1B	User commands ported from BSD						
2	System calls						

3	Library routines, macros, and opdefs
4	Devices (special files)
4P	Protocols
5	File formats
7	Miscellaneous topics
7D	DWB-related information
8	Administrator commands

Some internal routines (for example, the `_assign_asgcmd_info()` routine) do not have man pages associated with them.

variable

Italic typeface denotes variable entries and words or concepts being defined.

user input

This bold, fixed-space font denotes literal items that the user enters in interactive sessions. Output is shown in nonbold, fixed-space font.

[]

Brackets enclose optional portions of a command or directive line.

...

Ellipses indicate that a preceding element can be repeated.

The following machine naming conventions may be used throughout this document:

<u>Term</u>	<u>Definition</u>
Cray PVP systems	All configurations of Cray parallel vector processing (PVP) systems.
Cray MPP systems	All configurations of the CRAY T3D series. The UNICOS operating system is not supported on CRAY T3E systems. CRAY T3E systems run the UNICOS/mk operating system.
All Cray Research systems	All configurations of Cray PVP and Cray MPP systems that support this release.

The default shell in the UNICOS and UNICOS/mk operating systems, referred to in Cray Research documentation as the *standard shell*, is a version of the Korn shell that conforms to the following standards:

- Institute of Electrical and Electronics Engineers (IEEE) Portable Operating System Interface (POSIX) Standard 1003.2–1992
- X/Open Portability Guide, Issue 4 (XPG4)

The UNICOS and UNICOS/mk operating systems also support the optional use of the C shell.

Cray UNICOS Version 10.0 is an X/Open Base 95 branded product.

Man page sections

The entries in this document are based on a common format. The following list shows the order of sections in an entry and describes each section. Most entries contain only a subset of these sections.

<u>Section heading</u>	<u>Description</u>
NAME	Specifies the name of the entry and briefly states its function.
SYNOPSIS	Presents the syntax of the entry.
IMPLEMENTATION	Identifies the Cray Research systems to which the entry applies.
STANDARDS	Provides information about the portability of a utility or routine.
DESCRIPTION	Discusses the entry in detail.
NOTES	Presents items of particular importance.
CAUTIONS	Describes actions that can destroy data or produce undesired results.
WARNINGS	Describes actions that can harm people, equipment, or system software.
ENVIRONMENT VARIABLES	Describes predefined shell variables that determine some characteristics of the shell or that affect the behavior of some programs, commands, or utilities.
RETURN VALUES	Describes possible return values that indicate a library or system call executed successfully, or identifies the error condition under which it failed.

EXIT STATUS	Describes possible exit status values that indicate whether the command or utility executed successfully.
MESSAGES	Describes informational, diagnostic, and error messages that may appear. Self-explanatory messages are not listed.
ERRORS	Documents error codes. Applies only to system calls.
FORTTRAN EXTENSIONS	Describes how to call a system call from Fortran. Applies only to system calls.
BUGS	Indicates known bugs and deficiencies.
EXAMPLES	Shows examples of usage.
FILES	Lists files that are either part of the entry or are related to it.
SEE ALSO	Lists entries and publications that contain related information.

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