# UNICOS® File Formats and Special Files Reference Manual

SR–2014 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

*UNICOS® File Formats and Special Files Reference Manual* SR–2014 10.0

This rewrite of the *UNICOS File Formats and Special Files Reference Manual*, Cray Research publication SR–2014, supports the 10.0 release of the UNICOS operating system. The following changes have been made:

- Addition of `arrayd.conf`(5) to support the array session feature.
- Revision of `quota`(5) to support the optional aggregate quota feature.
- Addition of `text_tapeconfig`(5) to replace `tapeconfig`. The default configuration file is now `text_tapeconfig`. This updated command provides information about overcommitted mount requests: the new `-a` option outputs device status. The `DEVICE` statement provides support for IBM ESCON tape devices: the new `timeout` parameter specifies the time-out value in seconds that the ESCON IOP waits for a response from the channel, and the `type` parameter now accepts 3590 as a type.

# Record of Revision

| *Version* | *Description* |
|---|---|
| 1.0 | March 1986<br>Original Printing. This documentation supports the UNICOS 1.0 release. |
| 1.1 | June 1986<br>Online documentation only. This documentation supports the UNICOS 1.1 release. |
| 2.0 | October 1986<br>This documentation supports the UNICOS 2.0 release. |
| 3.0 | July 1987<br>This documentation supports the UNICOS 3.0 release. |
| 4.0 | July 1988<br>This documentation supports the UNICOS 4.0 release. |
| 5.0 | February 1989<br>This documentation supports the UNICOS 5.0 release. |
| 6.0 | January 1991<br>This documentation supports the UNICOS 6.0 release. |
| 7.0 | July 1992<br>This documentation supports the UNICOS 7.0 release. |
| 8.0 | January 1994<br>This documentation supports the UNICOS 8.0 release. |
| 9.0 | September 1995<br>This documentation supports the UNICOS 9.0 release. |
| 10.0 | November 1997<br>This documentation supports the UNICOS 10.0 release. |

# Preface

This publication documents UNICOS release 10.0 running on CRAY PVP and CRAY T3D systems.

## 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 Administrator Commands Reference Manual*, Cray Research publication SR–2022
- *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

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## Conventions

The following conventions are used throughout this document:

| Convention | Meaning |
|---|---|
| `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: |

| | |
|---|---|
| 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<br><br>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:

| Term | Definition |
|---|---|
| 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.

| Section heading | Description |
|---|---|
| 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. |

| | |
|---|---|
| FORTRAN 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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