

About this Manual

This chapter provides an introduction to the *Complete Guide and Reference Manual for UPS, UPD and UPP v4*. In particular you will find:

- the overall structure, the purpose and the intended audience of the manual
- what parts of the manual you need
- where to obtain this manual and where to look for updates
- the typeface conventions and symbols used throughout the document
- an invitation to readers to send us comments

This manual is published in three submanuals: GU0014A, GU0014B, and GU0014C. The structure of the document and its division into these sections is discussed in the following sections.

1. Document Structure, Purpose and Intended Audiences

The *UPS and UPD v4 Reference Manual* is intended for several different user groups as listed on the next page. To best accommodate the different types of users, the manual is divided into five user guides (Parts I-V):

- Part I *Overview and End User's Guide*
- Part II *Product Installer's Guide*
- Part III *System Administrator's Guide*
- Part IV *Product Developer's Guide*
- Part V *Distribution Node Maintainer's Guide*

and three reference manuals (Parts VI-VIII)

- Part VI *UPS and UPD Command Reference*
- Part VII *Administrator's Reference*
- Part VIII *Developer's Reference*

The user guides explain and illustrate the **UPS/UPD/UPP** tasks associated with each user group. The reference guides provide detailed information on commands, concepts, file structure/contents, and so on. On the following page is a guide to which parts of the manual you are likely to need, according to your job functions. Notice that we recommend Parts I and VI for all users:

| Parts | User Functions |
|--|---|
| A: For All Users | |
| Part I <i>Overview and End User's Guide</i> | <i>End Users:</i> List product information in a UPS database on a user system; Access installed software products Access FermiTools ^a software products (<i>Other user groups' functions described later in table</i>) |
| Part VI <i>UPS and UPD Command Reference</i> | |
| B: For Product Installers, UPS Database Administrators, System Administrators of User Machines, Distribution Node Maintainers | |
| Part II <i>Product Installer's Guide</i> | <i>Product Installers:</i> Install software products from a UPS product distribution node into a UPS database on a user system; Install products into the AFS-space UPS database |
| Part III <i>System Administrator's Guide</i> and Part VII <i>Administrator's Reference</i> | <i>System Administrators, UPS Database Administrators:</i> Maintain UPS products in a UPS database; Install UPS/UPD/UPP on a user system; Configure UPS on a user system; Configure UPD on a user system; Configure UPP on a user system; Configure an installed product to start/stop automatically at boottime/shutdown |
| Part V <i>Distribution Node Maintainer's Guide</i> | <i>Distribution Node Maintainers:</i> Install UPS/UPD on a distribution system; Configure UPS and UPD on a distribution system; Configure Web and anonymous FTP servers on a distribution system Maintain UPS database on a distribution system |
| C: Product Developers | |
| Part IV <i>Product Developer's Guide</i> | <i>Product Developers and Maintainers:</i> Develop and maintain software products that are intended to be distributed in accordance with UPS standards; Adapt pre-existing or third-party software to conform to UPS standards; Distribute products |
| Part VIII <i>Developer's Reference</i> | |

a. Fermilab-written software products that are made publicly available.



The table above lists rather generally the topics that the manual covers. Note that it is *not* the purpose of this document to provide information on:

- general UNIX system administration
- general UNIX or Fermilab information (see instead *UNIX at Fermilab*, GU0001)
- the use of any particular software product other than **UPS/UPD/UPP**

CDF and D0 collaborators: Also see *A UNIX Based Software Management System* (GU0013) at http://www-cdf.fnal.gov/offline/code_management/run2_cmgt/run2_cmgt.html to find information describing how **UPS** and **UPD** have been implemented in your experiments' code management systems.

2. Availability

Copies of the *UPS and UPD v4 Reference Manual* (GU0014A, B, and C), can be obtained from the following sources:

Web

<http://www.fnal.gov/docs/products/ups/ReferenceManual/>

This can be accessed under **Documentation** on the Computing Division home page. Search using any of the following keywords: afs, develop(ment), distribute(tion), fermitools, GU0014, install(ation), kits, maintain(enance), man page, product, system administration, unix, upd, upp, ups

Paper Copies

Wilson Hall, 8th floor, NE (just across from what used to be the Computing Division library)

3. Updates

Pending subsequent releases of this manual, updates will be maintained on the Web with the on-line version of the manual. To get there from the Computing Division home page, select **Documentation**, request *GU0014* and follow the pointers (see "Web" under section 2. *Availability*).

4. Conventions

The following notational conventions are used in this document:

| | |
|------------------------|--|
| bold | Used for product names (e.g., UPS). |
| <i>italic</i> | Used to emphasize a word or concept in the text. Also used to indicate logon ids and node names. |
| typewriter | Used for filenames, pathnames, contents of files, output of commands. |
| typewriter-bold | Used to indicate commands and prompts. |
| [...] | In commands, square brackets indicate optional command arguments and options. |
| | When shown in a command example (e.g., x y z), separates a series of options from which one may or must be chosen (depends if enclosed in square brackets). In UNIX commands, used to pipe output of preceding command to the following one. |
| ' ... ' | Single vertical quotes indicate apostrophes in commands. |
| " ... " | Double vertical quotes indicate double quotes in commands |
| ... | In a command, means that a repetition of the preceding parameter or argument is allowed. |
| % | Prompt for C shell family commands (% is also used throughout this document when a command works for both shell families). |
| \$ | Prompt for Bourne shell family commands; also standard UNIX prefix for environment variables (e.g., \$VAR means "the value to which VAR is set"). |
| \ | UNIX standard quoting character; used in commands throughout the manual to indicate that the command continues to the next line |
| <...> | In commands, variables, pathnames and filenames, angle brackets indicate strings for which reader must make a context-appropriate substitution. For example, \$<PRODUCT>_DIR becomes \$EMACS_DIR for the product emacs . |

{ }

In local read-only variables, e.g.,
`${UPS_PROD_DIR}`, string should be used as
shown with the { }.

All command examples are followed by an implicit carriage return key.

Some of the files discussed in this document are shell family-specific, and thus come in pairs. Their filenames carry the extensions `.sh` and `.csh`. We often refer to a pair of these files as `filename.[c]sh`.

The following symbols are used throughout this document to draw your attention to specific items in the text:



A “bomb”; this refers to something important you need to know in order to avoid a pitfall.



This symbol is intended to draw your attention to a useful hint.

5. Your Comments are Welcome!

The *UPS and UPD v4 Reference Manual* may contain some errors, however we endeavor to minimize the error count! We encourage all the readers of this document to report back to us:

- errors or inconsistencies that we have overlooked
- any parts of the manual that are confusing or unhelpful -- please offer *constructive* suggestions!
- other topics to include (keeping in mind the purpose of the manual)
- tricks, hints or ideas that other users might find helpful

Send your comments via email to cdlibrary@fnal.gov.