

# CONVERGENT TECHNOLOGIES

## CTIX WORD PROCESSOR

### Features

- Interactive Word Processor for Convergent Technologies MegaFrame™ and MiniFrame™ Systems
- Keystroke compatible with Wang word processing with advanced extensions
- An integrated facility of the CTIX™ Office System environment
- Supported by Convergent Technologies PT and GT intelligent terminals
- Simultaneously display and edit up to four documents with ability to easily copy between and within documents
- Document indexing by name and by recent usage
- Flexible horizontal scrolling for wide documents
- Automatic word wrap-around
- Global search and replacement
- Complete control over page-, paragraph-, and character-level formatting
- Standard letter-quality printer support
- Supports spooled printers
- Allows concurrent editing and printing operations
- Document Exchange Format (DEF) simplifies document interchange between CTIX Word Processor and other word processing systems
- Accepts and converts Wang-format documents to CTIX document format.
- CTIX Office System Environment allows data and text to be copied among word processor documents, spreadsheets and electronic mail

## DESCRIPTION

The CTIX Word Processing Facility is a sophisticated and easy-to-use document-preparation system designed to provide dramatic enhancements to the efficiency of an office. The word processor is available on Convergent Technologies MegaFrame and MiniFrame systems.

Taking full advantage of the comprehensive display attributes of Convergent Technologies intelligent PT and GT video displays, the CTIX Word Processing Facility permits viewing and editing of up to four documents at the same time. Text movement within a document or among documents is simple and flexible, with automatic wordwrap and line adjustments. Text is automatically formatted as it is entered.

The CTIX Word Processing Facility has been designed for OEM's as a fully configurable system with all the hooks needed for customization and expansion.

This provides:

- a system that can be used without enhancement as an OEM's pass-through product.
- a solid foundation that supports the various extensions added by OEM's.

The CTIX Word Processing Facility provides context sensitive "HELP" facilities which provide a quick list of functions plus an in-depth description of each function.

The "UNDO" feature allows text recovery from previous delete operations.

## THE INTERACTIVE WORD PROCESSOR

The word processor creates and edits **documents**. A **document** is a sequence of characters of any length, limited only by the capacity of the disk on which it is stored.

Up to four **windows** occupy the screen. Documents may be edited in one or more of these windows. The **message line** occupies the top line of the screen and provides messages and prompts as appropriate for the currently active window. The **tag line** on the upper boundary of each word processing window displays the name of the document as well as the page, line number, and column number of the cursor position within the document.

## TEXT EDITING

Automatic wordwrap and line adjustment allow text to be entered at rough-draft speed. Text is automatically written to the storage media as the user types, and is instantly changed when editing occurs.

Automatic operation is provided by many features, such as centering, decimal tabulation, underscoring, and pagination.

Text of any size can be rapidly moved or copied within a document or from one document to another. Up to four documents can be simultaneously opened for viewing or editing. The documents may be independently scrolled horizontally or vertically.

### Inserting

Upon entry, the interactive word processor is automatically in the insert mode. To insert new text in a document, typed characters are inserted just before the current cursor position.

### Overtyping

To replace (rather than insert) text in a document an **overtyp** mode is provided. When in this mode, every typed character replaces the existing one at the current cursor position.

### Deleting

To delete the character at the current cursor position a **Delete** key is provided. To delete the character at the previous position, a **Backspace** key is provided. Both keys have autorepeat capability. Text may also be deleted via the block delete operation.

### Strikeover

A strikeover correction capability allows the word processor to specify text to be printed, like ~~this~~.

### Copy, Move, Block Delete

Text **copy**, **move**, and **block delete** operations are performed by pressing the appropriate function key and denoting the extent of the operation via cursor movement (or single character search), possibly spanning multiple pages.

### Tabs

Text, either numeric or alphabetic, can be entered and automatically formatted into columns with the Tabs command. There are five types of tab settings:

- Left-aligned tab: text is left-aligned at the tab setting.
- Right-aligned tab: text is right-aligned at the tab setting.
- Center tab: text is centered at the tab setting.
- Decimal tab: text is aligned under the decimal point.
- Period Leader tab: leader dots fill the area until the tab setting at which point text is left-aligned.

## Page Access

The interactive word processor allows immediate access by page number anywhere within document.

### Review Document

A document review command provides an "eliminate widow" option, automatic repagination only, hyphenation only, or both, with a variable "hot zone."

The eliminate widow option checks through the document for "widows." A widow is a line at the beginning or the end of a paragraph that formats to a separate page from the rest of the paragraph. The paginate option repaginates the document on the screen before printing. The hyphenate option checks the text for long words that might be hyphenated and rearranges the text accordingly when the document is paginated. "Hot zone" refers to the amount of "white space" that will be permitted within a line without asking the user for a hyphenation decision.

### Searching

The word processor offers two search modes: **Search** and **Replace**. Search searches a document for a specified text (allowing the user to observe case). Replace allows for search and replace of specific words or phrases with replacement specified as either conditional or automatic. Both Search and Replace have options to be either case sensitive or case insensitive.

## RELIABILITY

The Convergent Word Processing facility provides a high degree of reliability by always working on a **copy** of a document until edits are saved. The system also maintains a special file of all edit work done during each session which may be "replayed" to recover to **any** point in the edit session. This allows recovery in the event of catastrophe.

## FORMATTING

The word processor allows text to be "formatted" by assigning **attributes** to characters, paragraphs, and pages.

### Character Attributes

Certain attributes apply to one or more adjacent characters. Characters can be formatted with combinations of the following attributes:

- **Boldface**
- Underscore
- Underscore by Word
- Double Underscore
- **Strikeout**
- Super<sup>script</sup>
- Sub<sub>script</sub>

## Paragraph Formats

Paragraphs are formatted using the **format line** and the **tab**, **indent**, and **hanging indent** keys providing the following format controls:

- Margin and tab control.
- Tab alignment: left-flush, right-flush, centered, decimal aligned, or left-flush dot leadered.
- Indentation including "hanging indents."
- Text alignment: left-flush, right-flush, centered, or justified.
- Line spacing.

## Page Formats

Certain formats apply to one or more adjacent pages. The user has full control of the page number of the first sheet to be printed. Pages are formatted with combinations of the following attributes:

- Page height and width.
- Headers and their format and distance from the top of the page, with the option for different headers on different pages or on odd and even pages.
- Page number, which can be printed as part of a header or footer.

## Special Characters

The word processor can create several special characters for better control of text formatting. These characters are:

- Optional hyphen
- Breaking required (ordinary) hyphen
- Nonbreaking required hyphen
- Nonbreaking space
- Discretionary line break
- Required backspace (for special character overstrike)
- Forced-page character
- Center, indent, hanging indent, and tab characters

## PRINTING

CTIX Word Processing provides **Spooled** printing. In **Spooled** printing, a document is entered into a print queue. When a printer is available, the printer spooler takes the document from the queue for printing. The printer spooler also provides a status display of documents in the printer spooler queues and commands to manipulate queued print jobs. The user need not wait for a printer to be available to request printing, and may continue working on any document.

User control is provided for:

- Page printing by specific page number ranges or entire document.
- Querying status of print queue.
- Removing a document from print queue.

- Stopping a printer.
- Restarting a printer, advancing or reprinting pages.
- Optimized usage of printer resources.
- Flexible sharing of printers.

The word processor offers several printing options:

- **Boldface**
- Underscore
- Double underscore
- ~~Strikeout~~
- Character overprint
- Dual-Bin Sheet Feeder
- Super<sup>script</sup> and sub<sub>script</sub>
- Single-sheet or continuous-form paper handling
- Adjustable print-line spacing
- Adjustable character spacing: 8, 10, 12, and 15 pitch or proportional spacing
- Automatic pagination
- Up to 25-inch document widths
- Correspondence-quality output with interchangeable print wheels
- Line printer support for high speed draft printing
- Easy creation of headers and footers, variable by page (odd or even), first page, subsequent pages, or all pages

## DOCUMENT EXCHANGE FORMAT (DEF)

It is often desirable to export documents created in one word processing environment to other environments utilizing different schemes for the internal representation of formatting information. To simplify the task of the OEM who must provide such import/export facilities, the CTIX Word Processor provides a facility to translate between its own internal format for documents, and a canonical format, containing embedded ASCII codes for all formatting information. The OEM can then take the document in its DEF format, and convert it, with no loss of format information, to whatever format the target word processing system requires. The same procedure can be used in the reverse direction as well; to transfer documents into the CTIX format, the OEM need only convert them from their original format to the DEF format. In this manner, the OEM can interchange documents between dissimilar systems, without the need to learn the highly complex internal formats used by the CTIX Word Processor.

## WANG DOCUMENT FORMAT CONVERSION

Facilities are provided for the conversion of Wang format documents into CTIX Documents to vastly simplify the process of migration from Wang WPS, OIS, and VS systems to Convergent CTIX systems.



**Convergent Technologies**

Data Systems Division

30 East Plumeria Street, San Jose, CA 95134  
(408) 945-8877