

CTOS® OFIS® Document Designer OFIS® Document Writer

System Administration Guide

Release OFIS Document Designer 3.0 OFIS Document Writer 1.0 Priced item May 1991

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UNISYS

CTOS[®] OFIS[®] Document Designer OFIS[®] Document Writer

System Administration Guide

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Page Status

Page Issue v through vii Original Blank viii Original ix х Blank xi Original xii Blank xiii through xix Original Blank хх Original 1-1 through 1-28 2-1 through 2-6 Original 3-1 through 3-10 Original 4-1 through 4-36 Original 5-1 through 5-8 Original Glossary-1 through 26 Original Original Index-1 through 4



Contents

About This Guide		
Section 1.	Customizing OFIS Document Designer	
	Introduction	1–1
	Setting the OFIS Document Designer Interface	1–1
	Running Multiple Interfaces on the Same Workstation	1–2
	Customizing Copies of OFIS Document Designer	
	Using User File Entries	1–3
	User Files and User Names	1–3
	User File Entries	1–3
	User File Prefixes	1–4
	Why Create User File Entries?	1–5
	How to Create or Edit User Files	1–5
	Description of User File Entries	1–6
	Using Dictionaries	1–16
	Personal Dictionaries	1–16
	Shared Dictionaries	1–16
	Optional Shared Dictionaries	1–16
	Dictionary Files	1–17
	Dictionary Run Files	1–18
	Typographic Error Correction	1–19
	The Thesaurus	1–19
	Using Cooperating Programs	1–20
	How Multicontext Mode Works	1–21
	Partitions	1–21
	Swapping	1–22
	How Chaining Mode Works	1–24
	Setting Up Multicontext Mode	1–24
	Setting Up the Inter–Context Message	
	Server (ICMS)	1–25
	Modifying the Context Manager	
	Configuration File	1–26
	Setting Up Chaining Mode	1–28
	Setting Up a Chaining Configuration File	1–28

v

Contents

Section 2.	Using	Operator	Statistics
------------	-------	----------	-------------------

What is Operator Statistics?	2–1
Installing the Operator Statistics Feature	2–2
How to Access Recorded Operator Statistics	2–2
Deleting Statistics Files	2–6

Section 3. Maintaining OFIS Document Designer

Files Created During an OFIS Document	
Designer Session	3–1
Document Files	3–1
Typescript Files	3–2
-Old Files	3–2
-New Files	3–2
Operator Statistics Files	3–3
Other Files	3–3
Saving	3–4
Files Affected	3–4
When and How Document Commands Are	
Processed	3–4
Recovering	3–5
Procedures	3–5
Using -Old Files	3–6
Using -New Files	3–7
Cleaning Up	3–7
Using Floppy Disks	3-9
Caring for a Floppy Disk	3-9
	00

Section 4. Exchanging Documents

Introduction	4–1
Exchanging Information Between Files	4–2
Using Document Exchange Format (DEF)	4-4
Translating Other Word Processor Files	
to OFIS Document Designer	4-4
Sending OFIS Document Designer Files to	
Other Word Processors	4–6
Translating and Converting OFIS Document	
Designer to Earlier Versions	4–9
Using DEF With Other Application Systems	4–9

.

	DEF Escape Sequences	4–10 4–11
	Types of DEF Escape Sequences Character, Paragraph, and Page DEF	4–11
	Escape Sequences	4–12
	Escape Sequences for Special Characters	4–13
	DEF Escape Sequences and Style Control	4–15
	List of DEF Escape Sequences	4–17
	Escape Sequences Recognized But Not	
	Generated By OFIS Document Designer 3.0	4–17
	Character Escape Sequences	4–18
	Paragraph Escape Sequences	4–21
	Page Escape Sequences	4–26
	Document Escape Sequences	4–31
	Additional Text Escape Sequences	4–31
	Special Character Escape Sequences	4–32
	Style Control Escape Sequences	4–34
	Translating Documents to and from DCA Format	4–35
Section 5.	Troubleshooting	
	Problems Starting OFIS Document Designer	5–1
	Problems Using The Dictionary Commands	5-3
	Problems Integrating Objects	5-4
	Cannot Access Operator Statistics	5-7
	Miscellaneous Problems	5-7
Glossary		1
alooduly		•

Index	

Figures

1–1. 1–2.	Context Manager Partition	1–22 1–23
2–1.	Operator Statistics Menu	2–3
4–1.	Document Exchange With Other Systems	4–3
4–2.	Document Exchange Format (DEF) Menu	4-5
4–3.	DCA Translation Menu	4–36

Tables

4–1.	DEF Escape Sequences Recognized But Not	
	Generated	4–17
4–2.	DEF Character Escape Sequences	4–18
4–3.	DEF Paragraph Escape Sequences	4–22
4-4.	DEF Page Escape Sequences	4–26
4-5.	DEF Document Escape Sequences	4–31
4–6.	DEF Additional Text Escape Sequences	4–32
47.	DEF Special Character Code Sequences	4–33
48.	DEF Style Control Sequences	4–34

About This Guide

The CTOS® OFIS® Document Designer / OFIS® Document Writer System Administration Guide is part of a three volume set that explains how to customize and maintain OFIS Document Designer and OFIS Document Writer.

Note: OFIS Document Designer and OFIS Document Writer function identically and only differ in how some elements are displayed. As a result, from hereon both programs will be referred to as OFIS Document Designer, unless indicated otherwise. This means that when you read "OFIS Document Designer," read it as "OFIS Document Designer or OFIS Document Writer."

This volume contains information on

- Setting the OFIS Document Designer interface
- User file entries
- Dictionary Files
- Using cooperating programs
- Operator Statistics
- Saving and recovering
- Deleting unnecessary files
- Using floppy disks
- Using Document Exchange Format (DEF)
- DEF escape sequences
- Using Document Content Architecture (DCA)
- Troubleshooting

Who Should Use This Guide

The intended audience for this guide is any OFIS Document Designer user who is responsible for setting up and maintaining an OFIS Document Designer installation. This person is usually referred to as a system administrator.

This guide assumes that you have a working knowledge of both the Executive and Context Manager. You should also be familiar with the text processing aspects of OFIS Document Designer, which are explained in the *Word Processing* volume.

How This Guide Is Organized

This guide contains user and reference information. You can go through the sections in any order, depending on your particular needs. To find specific information, refer to the list below.

To Find	Turn To
How to set up OFIS Document Designer with the menu interface or softkey interface	Section 1, "Customizing OFIS Document Designer"
Information on user options, such as macros, dictionaries, template documents, and so on.	Section 1
Information on dictionary files.	Section 1
How to set up OFIS Document Designer to work with other applications	Section 1
How to record information about an OFIS Document Designer session using the Operator Statistics feature.	Section 2, "Using Operator Statistics"
Information on files created during an OFIS Document Designer session, such as -old files, typescript files, and so on.	Section 3, "Maintaining OFIS Document Designer"
Information on saving and recovering.	Section 3
Information on using floppy disks.	Section 3

To Find	Turn To
How to exchange documents with other systems using the Document Exchange Format (DEF) or Document Content Architecture (DCA)	Section 4, "Exchanging Documents"
Information on DEF escape sequences	Section 4
What to do if you have problems	Section 5, "Troubleshooting"

What's New in System Administration

This edition of the CTOS OFIS Document Designer System Administration Guide describes OFIS Document Designer release 3.0 and OFIS Document Writer release 1.0. The following new information is contained in this edition:

- Format Set files are no longer used. Instead, default formats are now set by using stylebooks.
- The Document Exchange Format (DEF) menu has been revised. Information on DEF format and escape sequences have been added.
- A DCA RFT Translation menu has been provided. With Document Content Architecture (DCA), users can exchange documents with Unisys PCs, OFIS Manager, and OFIS Link 1100.
- Several new user file entries have been added to allow for further customization of an OFIS Document Designer installation.
- Conventions for user file entries have been changed.
- The dictionaries now include a new thesaurus data file.
- OFIS Document Designer can be set up with a Softkey interface or Menu interface.
- An optional feature known as Operator Statistics is provided. Operator Statistics records information about a user's performance during an OFIS Document Designer session.

Changes in Terminology

The terms listed below may be unfamiliar to you if you are new to CTOS systems or OFIS Document Designer. For a complete list of terms used throughout this guide, see the glossary.

CTOS®	Applies to the entire family of workstation and shared resource processor operating systems. (This includes BTOS®, CTOS, and CTOS/XE operating systems.) When required, specific names, such as BTOS II or CTOS/VM, are used.
server	Describes the workstation or shared resource processor that controls resources within a cluster. It replaces the term <i>master</i> , which was formerly used both in Unisys and Convergent Technologies documentation.
shared resource processor (SRP)	Describes the multiprocessor, floor-model computer that functions as a server. It encompasses the "XE" model names, such as XE-520 and XE-530, and the CTOS shared resource processor.
release documentation	Refers to the document or electronic file that accompanies the distribution media and contains the most current information about the product. In most cases, it includes software installation instructions.
	Depending on the application, release documentation may be called Release Notes, Release Notices, Release Information Files, or Software Release Announcement.

Where to Go for More Information

As mentioned earlier, this guide is part of a three volume set. The other two volumes and the topics covered in each one are listed below. See also the release documentation for information on installing OFIS Document Designer.

Volume	Topics Covered
Word Processing	Opening and Closing Documents Moving the cursor Entering text Working with Blocks of Text Using Multiple Windows Formatting Characters Formatting Paragraphs Formatting Pages Using Fonts and Variable Line Spacing Reviewing and Printing Using the Spelling Checker and the Thesaurus Creating and Editing Personal Dictionaries Using the Search and Replace Commands Using Headers and Footers Using Phrases Using Style Control
Office Publishing	Using Columns Integrating Objects Using Box and Rule Using Outline Processing Creating a Table of Contents Automatically Using Cross-References Using Footnotes Using Form Processing Using List Processing Indexing Using Redlining Using Macros Calculating Values Using Voice Annotations

The documents listed below provide additional information related to this guide.

CTOS Generic Print System Using the Print Manager

This guide contains information on the nonadministrative functions of the Print Manager, such as printing and controlling a printer (for example, pausing and restarting it).

CTOS Generic Print System Administration Guide

This guide provides detailed procedures for installing printers. It also contains comprehensive information on device drivers that have been tested and qualified to work with specific printers. In addition, it explains how to troubleshoot problems when they arise.

CTOS Context Manager Manual

This manual describes how to use, install, configure, and troubleshoot the Context Manager™. Also includes information on programming applications to run under CM.

CTOS Executive Reference Manual

This manual provides descriptions and details about parameter fields for Executive commands.

CTOS Executive User's Guide

This guide introduces the most commonly used Executive utilities and features.

CTOS Office Applications Programmer's Guide

This guide explains how to write software applications that interface directly with Convergent applications, such as Context Manager and Document Designer™.

CTOS Status Codes Reference Manual

This manual contains a comprehensive listing of all status codes that can be generated by a workstation or a shared resource processor. The codes are organized, explained, and interpreted in numerical order.

CTOS System Administration Guide

This guide provides detailed information about configuring system software on workstations and shared resource processors.

Conventions

The following conventions are used throughout this guide:

- The hand symbol (¹³⁸) indicates additional information, hints, and shortcuts regarding a procedure.
- New terms and the names of fields are in italics, for example,

A style book is a ...

The Document name field...

• Keys you press or text you type is shown is boldface type, for example,

Press **RETURN**

Type doc.bat

• Sometimes you hold down one key while you press another to issue a command; this sequence is shown as follows:

CODE-F4

• Sometimes you hold down two keys while you press a third key to issue a command; this sequence is shown as follows:

CODE-SHIFT-V

• Sometimes you press a function key and then press a letter or character to select a command or option; this sequence is shown as follows:

F4 C

.

Section 1 Customizing OFIS Document Designer

Introduction

As the system administrator, you have the ability to tailor OFIS Document Designer to fit the needs of each user. You can customize OFIS Document Designer to

- Run with the Softkey or Menu interface
- Function differently based on entries you add to the user file
- Use cooperating programs in multicontext or chaining mode

Setting the OFIS Document Designer Interface

By default, OFIS Document Designer is installed to run with the Softkey interface (such as that used in OFIS Designer 2.0) in WYSIWYG mode.

You can change OFIS Document Designer to run with the Menu interface (such as that used in Document Designer 2.3) or to run with either interface in non-WYSIWYG mode, as described below:

- 1. Finish out of OFIS Document Designer, if necessary, and enter the Executive.
- 2. Start the Context Manager Configuration File Editor: On the Executive command line, type **CM Config File Editor** or a unique abbreviation, such **cm c f e**.
- 3. Press GO.
- 4. Either accept the default ([Sys]<Sys>cmconfig.sys), or edit the file name if the name and location of the user's configuration file is different from the default.
- 5. Press GO to display the CM Configuration File Editor screen.

- 6. In the *Command name* field, type the command name used in Context Manager to start OFIS Document Designer (The default command name loaded during installation is **OFIS Document Designer**.)
- 7. Press GO.
- 8. In the *Command case* field, type one of the values listed below. The default value is **03**. (OFIS Document Designer carries out different processes depending on what command case is specified.) Choose one of the following options:
 - 00 to run OFIS Document Designer with the Menu interface in WYSIWYG mode.
 - **02** to run OFIS Document Designer with the Menu interface in non-WYSIWYG mode.
 - **03** to run OFIS Document Designer with the Softkey interface in WYSIWYG mode.
 - **04** to run OFIS Document Designer with the Softkey interface in non-WYSIWYG mode.
- 9. Press FINISH; then press GO to save the changes you made.

The next time OFIS Document Designer is started, it will run using the interface you specified in the *Command case* field.

For more information on the CM Configuration File Editor, see the CTOS Context Manager Manual.

Running Multiple Interfaces on the Same Workstation

You can customize workstations so users can choose between several different interfaces each time they start an OFIS Document Designer session.

To place several different interfaces for OFIS Document Designer on the same workstation, use the CM Configuration File Editor to create a different Context Manager command name for each interface of OFIS Document Designer the user wants. For each command name, set the *Command case* field to the appropriate number, as described above. Set the other fields for each command name to the values indicated in the release documentation.

Customizing Copies of OFIS Document Designer Using User File Entries

User Files and User Names

A User Configuration file (sometimes called a user profile file or a *Name.user* file) uniquely identifies each user in a cluster. (From hereon, a User Configuration file is referred to as a *user file*.) User files are always located on the system directory [Sys]<Sys>.

File specifications for user files are written in the following format:

[Sys]<Sys>UserName.user

where

UserName is the name used to sign on to the system. For example,

[Sys]<Sys>Tom.user

This name can be any string of up to 30 characters in length.

User File Entries

Entries in user files define such options as the application environment, the default volume and directory, and the messages displayed when you sign on to the system.

For example, OFIS Document Designer automatically displays all measurements in menus in terms of inches. By adding an entry to a user file, you can have OFIS Document Designer display all measurements in centimeters or millimeters. User file entries require the following format:

:Keyword:Value

where

:Keyword: is the name of a user file option, such as :GPSDefaultPrinter: Note that keywords and the placement of colons must not be changed.

Value is the variable, which can be changed, such as :GPSDefaultPrinter:LaserJet. Values can be file specifications or other parameters, such as a printer name or the variables Yes or No.

For an example and explanation of user file entries, see "Description of User File Entries," later in this section.

User File Prefixes

The Keyword can be prefixed with one of the letter combinations listed below to indicate which programs the entry applies to. These interchangeable prefixes allow you, as the system administrator, to customize several different applications on a user's workstation with a single user entry. Also, if you have previously configured users for OFIS Writer or Document Designer, for example, it may not be necessary to re-edit user files when upgrading installations for OFIS Document Designer.

Keywords take precedence, as follows:

For OFIS Document Designer the precedence is

(OFIS Document Designer)	
(OFIS Designer)	
(Document Designer, version 2.3 or earlier)	
(Word Processor, also used by OFIS Writer and Document Designer 2.3 or earlier)	
For OFIS Document Writer the precedence is	
(OFIS Document Writer)	
(OFIS Designer)	
(Document Designer, version 2.3 or earlier)	
(Word Processor, also used by OFIS Writer and Document Designer 2.3 or earlier)	

The keywords take precedence in the order listed above. This allows user files to have entries for multiple products. For example, if a user file contains both the :DDTypeScriptFile: entry and the :OFDDTypeScriptFile: entry, the :OFDDTypeScriptFile: entry is honored.

Why Create User File Entries?

User file entries allow you to customize OFIS Document Designer to include the commands and options you need to do your work.

Also, user file entries may be necessary: Most OFIS Document Designer features are based on the assumption that the program is running on a local workstation that has sufficient memory and a hard disk. This assumption is not always correct. For example, there may not be enough memory or the workstation may be a diskless workstation. In this case, if you want to use features in OFIS Document Designer that require disk space and separate files, such as the phrase, macro, and dictionary features, you have to add user file entries so that those features are directed to the appropriate location on a server.

How to Create or Edit User Files

You can use the Editor to create or modify user files. (The Editor is a text editing application. For information on using the Editor, see the CTOS Editor User's Guide.)

To edit or create a user file,

- 1. Type Editor on the Executive command line, and press RETURN.
- 2. Type [Sys]<Sys>Name.user in the *File name(s)* field, where *Name* is your signon name.
- 3. Press GO. If you're creating a new user configuration file, press GO again.
- 4. Enter the desired keywords and values.
- 5. Press FINISH; then press GO.

Description of User File Entries

Below is an example of an edited user file containing all the possible types of entries. Following this example is a description of each entry.

For the sake of consistency, all user file entry examples in this guide are preceded by the prefix *OFDD* (for OFIS Document Designer).

Note: If a value doesn't follow a keyword, it is the same as if the keyword and value were not specified.

:OFDDConfigFile:[!D1]<config>DdConfig.sys :OFDDDictionary:[[D1]<dictionaries>WP.Correct :OFDDForceForegroundPrint:Yes :OFDDMessageFile:[!D1]<help>OFDMsg.bin :OFDDLineUnit:line :OFDDMacroFile:[[D1]<Macros>Tom.macros :OFDDMeasurementUnit:c :OFDDStatistics:[!D1]<Stats>Tom :OFDDPersonalDictionary:[!D1]<Pers>Tom.Correct :OFDDPhraseFile:[!D1]<Phrases>Tom.phrases :OFDDDefaultPrinter:Tecumsah :GPSDefaultPrinter:Bedford :OFDDAuthorName:Stonewall :SignOnChainFile:[Sys]<Sys>OFISDocumentDesigner.run 'OFIS Document Designer' 03 :SignOnExitFile:Exec.run :OFDDStyle book:[!D1]<Styles>Bobbo :OFDDStyleNode:Pubs :OFDDStvIVol:ID1 :OFDDStyleDir:styles :OFDDTemplateDocument:[!D1]<Cookie>cutter :OFDDTypescriptFile:[!D1]<Type>Tom.ts :OFDDFtntSeparation:2

Explanation of Entries

The information below describes the entries in the sample user file shown above.

Note: Each keyword is listed with its default value shown in italics. If you don't make an entry in the user file, OFIS Document Designer uses the default value. To specify a value other than the default, you must enter the correct keyword with the new location and/or name.

:OFDDConfigFile:[Sys]<Sys>DdConfig.sys

Indicates the location and name of the Chaining Configuration file OFIS Document Designer uses when it runs in chaining mode.

A Chaining Configuration file makes it possible to pass objects to and from other application systems and OFIS Document Designer when a workstation is not running Context Manager.

If a workstation *is* running Context Manager, or you do not plan to pass objects to and from other application systems, do not specify this entry.

For more information on chaining mode, see "Using Cooperating Programs," later in this section.

:OFDDDictionary:[Sys]<Sys>Wp.correct

Indicates the location name of the dictionary files used during the Check Spelling and Show Synonyms commands.

To save local disk space on cluster users' workstations, you may want to place a set of these dictionary files on the server. If this is this case, specify a different location and/or name. For example, [!D1]<Dictionaries>Wp.correct

For more information on dictionary files, see "How OFIS Document Designer Uses Dictionary File," later in this section.

:OFDDForceForegroundPrint:No

Specifies whether printing is forced to run in the foreground. By indicating *Yes*, you can force foreground printing if a workstation frequently runs low on available memory while printing as a background process.

When printing is in the foreground, the document is left on the screen and no other document can be opened. (The Print menu stays on the screen until all documents are reformatted.)

When printing is in the background, the Print menu is removed from the screen. If there is enough memory, you can open another document while the document is formatting and printing. With background printing, a document is *not* left on the screen unless you choose *No* in the *Save pagination changes?* field of the Print menu.

:OFDDMessageFile:[Sys]<Sys>OFDMsg.bin

Indicates the location and name of the file that contains Help text.

:OFDDLineUnit:inches

Indicates the distance of the cursor from the top of the page.

The default measurement unit is *inch*, unless an entry has been made specifying a measurement unit other than inch. (For more information on measurement units, see the :OFISMeasurementUnit: entry, later in this discussion.)

To specify a measurement other than inch or other than the unit specified by the measurement unit entry, enter one of the following values:

:OFDDLineUnit:*i*, *cm*, *mm*, or *line*

where

i = inches

cm = centimeters

mm = millimeters

line = lines

To change the unit of measurement used *throughout* OFIS Document Designer, see the :OFISMeasurementUnit: entry, later in this section.

Note: A line in OFIS Document Designer is a static unit of measurement consisting of 12 points; it is not necessarily equivalent to one line of text on a page.

Also, lines are measured from the top of the page to the top of the line of text that the cursor is in on non-WYSIWYG displays and from the top of the page to the base of the line of text that the cursor is in on WYSIWYG displays.

:OFDDMacroFile:[Sys]<Sys>UserName.macros

where

UserName is the name the user specified at signon.

Indicates the name and location of the macro file that is used when macro commands are issued. (These include commands such as Store Macro, Recall Macro, and so on.)

Note that you can set up a macro file that is shared by several users. To do this, place the macro file on the server; then make the same macro file entry in the user file of each user.

If you share a macro file, you must have exclusive access to the file when updating it. For example, if you are storing a new macro, no one else can use the macro until you save. Similarly, you cannot store the macro until other users who are in the process of storing, recalling, or listing have also saved.

For information on using macros, see the Office Publishing volume.

:OFDDMeasurementUnit: inches

Indicates the following:

- Assumes all measurements are in inches, unless a suffix is specified, such as p for points or cm for centimeters. (The exceptions are for fonts, line spacing, and rule separation.)
- Displays all measurements that appear in OFIS Document Designer menus (except for points, characters, and lines) in inches.
- In window tabs, displays the distance of the cursor, in inches, from the top of the page.

To change the measurement unit, enter one of the following values:

:OFDDMeasurementUnit:*i*, *c*, or *m*

where

- i = inches
- c = centimeters

m =millimeters

Notes:

- 1. If you want the distance of the cursor from the top of the page to display in a measurement unit that is different from that used elsewhere in OFIS Document Designer, add a line unit entry to the user file. (See the discussion under the :OFDDLineUnit: entry, earlier in this section.)
- 2. The measurement unit entry cannot be used to change the unit of measurement in the ruler display.

:OFDDStatistics: FileSpecification

where

FileSpecification is the location and name of the Operator Statistics file. For example, [Sys]<Sys>Diane.stats

There is no default file specification for this file.

Operator Statistics is an optional OFIS Document Designer feature that records information about a user's performance during an OFIS Document Designer session. For more information, see Section 2, "Operator Statistics."

Note: To collect a user's operator statistics, the file OpStatsOFD.run must be in the user's [Sys]<Sys>directory.

:OFDDPersonalDictionary:[Sys]<Wp>UserName.correct

where

UserName is the name the user specified at signon.

Indicates the location and name of the personal dictionary file that holds personal dictionary words. During a spelling check, the Check Spelling command uses this user file entry to find the personal dictionary.

Note that a personal dictionary file is the only dictionary file that can be placed in a separate directory; other dictionary files must reside in the same volume and directory. Also, personal dictionaries are only used by one user. However, you can create personal dictionaries that can be shared. (For more information on shared dictionaries, see "Using Dictionaries," later in this section.) For information on creating and using personal dictionaries, see the *Word Processing* volume.

:OFDDPhraseFile:[Sys]<Wp>UserName.phrases

where

UserName is the name the user specified at signon.

Indicates the name and location of the phrase file that is used when phrase commands are issued. (These include commands such as Store Phrase, Recall Phrase, and so on.)

Note that you can set up a phrase file that is shared by several users. To do this, place the phrase file on the server; then make the same phrase file entry in the user file of each user.

If you share a phrase file, you must have exclusive access to the file when updating it. For example, if you are storing a new phrase, no one else can use the file until you do a Save. Similarly, you cannot store the phrase until other users who are in the process of storing, recalling, or listing have also saved.

For information on using phrases, see the Word Processing volume.

:OFDDDefaultPrinter:PrinterName

where

PrinterName is a default printer name.

Indicates the printer to which print jobs are automatically sent if no printer name is entered in the *Print name* field of the Print menu.

:GPSDefaultPrinter:PrinterName

where

PrinterName is a default printer name.

Indicates the printer to which GPS print jobs are automatically sent no printer is specified in the *Print name* field of the Print menu.

Note: If both a :GPSDefaultPrinter: entry and an :OFDDDefaultPrinter: entry exist in a given user file, the :OFDDDefaultPrinter: entry takes priority.

: OFDDAuthorName: AuthorName

where

AuthorName is the name assigned to redlining versions when tracking revisions by author.

Redlining provides the ability to track changes made to a document from its creation through all its revisions. Revisions can be tracked by author, which means users can view revisions made by each author.

Author names are assigned automatically from either the user's signon name or from the above user file entry.

For more information on redlining, see the Office Publishing volume.

```
:SignOnChainFile:[Sys]<Sys>OFISDocumentDesigner.run
'CommandName' 03
:SignOnExitFile:[Sys]<Sys>Exec.run
```

:SignOnChainFile:[Sys]<Sys>OFISDocumentDesigner.run causes the user to go directly to OFIS Document Designer after signing on.

'CommandName' 03, automatically sets up OFIS Document Designer with the Softkey interface in WYSIWYG mode.

:SignOnExitFile:[Sys]<Sys>Exec.run causes the user to go directly to the Executive after finishing out of OFIS Document Designer.

If necessary, edit these entries to meet your requirements. For example, you may want to change the interface. To do this, you must change the value following 'CommandName'. You can choose

- 00 to run OFIS Document Designer with the Menu interface in WYSIWYG mode.
- **02** to run OFIS Document Designer with the Menu interface in non-WYSIWYG mode.
- **03** to run OFIS Document Designer with the Softkey interface in WYSIWYG mode.
- 04 to run OFIS Document Designer with the Softkey interface in non-WYSIWYG mode.

:OFDDStyle Book: [Sys] < StyleBooks > OFDD. styles

Indicates the selected style book.

By default, OFIS Document Designer selects the style book [Sys]<StyleBooks>OFDD.styles at the beginning of every session. To initially select a different style book, add the new location and/or name to your user file. (A style book is a document containing a collection of styles. All of the styles in a style book work together to create a specific type of document.)

Note that a selected style book cannot be modified.

If you want to place, retrieve, or alter style books in another directory, add the following entries:

:OFDDStyleNode:NodeName :OFDDStyleVol:VolumeName :OFDDStyleDir:DirectoryName

where *NodeName* is the name of the node in which the volume is located; *VolumeName* is the name of the volume in which the directory is located, and *DirectoryName* is the name of the directory in which the style books are located.

Note that the same style book can be shared among users. To do this, specify the same default style book and/or style book directory entries in the users' user files. Note, however, that no one can select a style book if someone else has opened it for editing.

For more information on style books and style control, see the *Word Processing* volume. For information on the various style books provided on the distribution disks, see the release documentation.

:OFDDTemplateDocument:FileSpecification

where

FileSpecification is the location and name of the of the document from which newly created documents are copied. For example, [Sys]<Sys>temp.doc

There is no default file specification for this file.

When you specify a document as a template document, all subsequent documents that are created are exact duplicates of the template document That is, new documents will contain all the formatting attributes, text, style control information, and so on, of the template document.

:OFDDTypescriptFile:[Sys]<wp>UserName.ts

where

UserName is the name specified at signon.

Indicates the location and name of the typescript file that stores all keystrokes a user makes during an OFIS Document Designer session.

Note: OFIS Document Designer automatically adds the suffix .ts to the end of the typescript file entry.

For more information on typescript files, see "Typescript Files," in Section 3, "Maintaining OFIS Document Designer."

:OFDDFtntSeparation:2

Indicates the number of lines from the bottom of the text to the footnote separation line. The minimum and the default is 2.
Using Dictionaries

Personal Dictionaries

Users can create personal dictionaries that are not shared with others. This is handy for proper names, for example, which are not found in the standard OFIS Document Designer dictionaries. For information creating and editing personal dictionaries, see the *Word Processing* volume.

OFIS Document Designer creates a file called [Sys]<Wp> UserName.correct to hold personal dictionary entries. (UserName is the name a user specifies at signon.) You can move this file to another location by making an entry in your user file. For information on how to do this, see the :OFDDPersonalDictionary: entry under "User File Entries," earlier in this section.

Shared Dictionaries

To save local disk space and provide a common word dictionary for all users of a system, you may want to share dictionaries at the server. If this is the case, you need to know how OFIS Document Designer uses dictionary files, which is explained under "Dictionary Files," below.

Optional Shared Dictionaries

You can create optional shared dictionaries (referred to as OEM dictionaries) and place them on the server so they can be shared by other users in the cluster. OEM dictionaries allow you to gather special or unusual terms that a group of users frequently include in their documents.

To create an OEM dictionary, you must first create a personal dictionary; then rename it to the appropriate name for the OEM dictionary (the default name is *Wp.CorrectXX*.)

Note: It is not possible to rename an existing dictionary, such as a legal or medical dictionary, to function as an OEM dictionary.

To create an OEM dictionary,

- 1. Use OFIS Document Designer to load terms into the personal dictionary.
- 2. Rename the personal dictionary Wp.CorrectXX.
- 3. Copy the *Wp.CorrectXX* file into the directory where the shared dictionary files are stored, thereby overwriting the original OEM dictionary that came with the installation disks.

Since OEM dictionaries are always shared dictionaries, there is no separate user file entry to indicate the OEM dictionary's location. You can place unshared personal dictionaries on a server, as discussed under :OFDDPersonalDictionary: user file entry, earlier in this section.

For information on installing shared dictionaries (including those of another language, for example), see the release documentation for the Standard American English Dictionary.

Dictionary Files

All of the Standard American English dictionary files are named *Wp.Correct**, where * represents a file suffix. The files and their corresponding suffixes are:

- S Small dictionary run file (no thesaurus)
- M Medium dictionary run file
- L Large dictionary run file
- X Lexicon file containing most standard dictionary words
- XH Optional lexicon file for hyphenation
- XX Optional shared dictionary file
- XT Thesaurus (for all languages that have the thesaurus feature, except American English)

See your dictionary release documentation for procedures on how to install these files.

Dictionary Run Files

OFIS Document Designer decides how much space in memory is available to run the dictionary file when a user issues the Check Spelling command. While only one run file is required on installation, it is best to load all three run files on the server (the small, medium, and large run files). This way, each user can best use available memory on the local workstation.

OFIS Document Designer uses the small run file when there isn't much memory available. In this case, relatively few dictionary words are loaded into memory at a given time; consequently, the program runs more slowly. (It takes more time to look up words in a disk file than in memory.) The medium or large run file executes when there is more memory available. When the large dictionary run file executes, the spelling checker program runs faster, as more words are loaded into memory.

The difference between the medium and large run file is the size of the memory-resident lexicon, called the *core lexicon*. This is true whether or not a thesaurus exists. If a dictionary has a thesaurus, the difference between the small and medium run file is that the medium run file has the thesaurus and the small one doesn't. If these is no thesaurus, the difference between the small and medium run file is the size of the core lexicon.

The core lexicon consists of the most common words in the language.

The order in which OFIS Document Designer searches the dictionaries for correct spellings and suggested corrections is as follows:

- 1. Core lexicon
- 2. User's personal dictionary
- 3. OEM dictionary (Wp.CorrectXX)
- 4. Main lexicon (Wp.CorrectX)

All of the above dictionary files must reside in the same volume and directory.

Typographic Error Correction

The dictionary suggests corrections for typographic errors by trying all combinations of single transposed, dropped, replaced, or inserted letters in a word against the core lexicon residing in memory only. As a result, the larger the dictionary run file used, the more suggestions to correct typographic errors are provided.

The Thesaurus

The thesaurus, which is activated when a user issues a Show Synonyms command, uses the main lexicon (*Wp.CorrectX*) to provide synonyms. The thesaurus operates only when the medium or large dictionary run files are loaded. If there is only enough memory to load the small dictionary run file, a message is displayed indicating that the thesaurus is not available.

Should this happen, issue a Save command, and then take measures to free up more memory (such as opening only one document or assigning more memory to OFIS Document Designer using the CM Configuration File Editor). Then, issue the Show Synonyms command again.

Using Cooperating Programs

Cooperating programs have the ability to pass information to and from other application systems. OFIS Document Designer uses cooperating programs in one of two ways:

Multicontext mode

In this mode, OFIS Document Designer accesses the cooperating programs through the Context Manager. To prepare a workstation to operate in multicontext mode,

- Install a compatible version of the Context Manager.
- Install the Inter-Context Message Server (ICMS).
- Add the proper entries to the CM Configuration file to allow cooperation with all desired programs. (For more information, see "Modifying the Context Manager Configuration File," later in this section.)
- Chaining mode

If the conditions required to run in multicontext mode are not fulfilled, OFIS Document Designer runs in chaining mode. In this mode, OFIS Document Designer accesses the cooperating programs by using a file called a Chaining Configuration file. This mode requires you to identify which programs OFIS Document Designer is to cooperate with by adding entries to the user's Chaining Configuration file.

To run OFIS Document Designer with cooperating programs, you must set up one of the two modes described above. If you don't want or need to have OFIS Document Designer use cooperating programs, however, you do not have to set up either mode.

Note: See the release documentation for information on what version of Context Manager each workstation requires.

How Multicontext Mode Works

When OFIS Document Designer uses a cooperating program in multicontext mode, it operates in one of two ways,

- If enough memory is available, Context Manager creates a partition large enough to hold the cooperating program and OFIS Document Designer. This allows users to switch back and forth between programs quickly. (See Figure 1–1.)
- If enough memory is not available to hold both OFIS Document Designer and the cooperating program at the same time, Context Manager alternates between moving OFIS Document Designer and the cooperating program out of memory and into a *swap file*. (See Figure 1-2.)

Partitions

When enough memory is available to create a large partition, Context Manager holds both programs in memory. Even when a user returns from the cooperating program to OFIS Document Designer, the cooperating program remains "locked" in memory. That way, users can quickly switch back and forth between the cooperating program and OFIS Document Designer because the cooperating program does not have to be reloaded each time.

Error codes can be returned if the partition space is not large enough. If this occurs, enter the Context Manager Configuration File Editor and increase the partition size. For more information, see the *CTOS Context Manager Manual* or the current release documentation.





Figure 1–1. Context Manager Partition

Swapping

When OFIS Document Designer accesses another application (for example, Enhanced or Extended Multiplan) in multicontext mode and there isn't enough memory, the Context Manager moves OFIS Document Designer out of memory and into a temporary swap file. Then it loads the cooperating program into memory and carries out its operation.

When a user finishes with the cooperating program, Context Manager reloads OFIS Document Designer into memory and replaces it in the swap file with the cooperating program. The cooperating program is then considered to be locked (that is, waiting for OFIS Document Designer). An application stays locked until OFIS Document Designer returns to it or enters another cooperating program. Sometimes the swap file is too small to accommodate a cooperating program during a swapping procedure. If this is the case, error code 12097 is returned, indicating there is not enough room in the swap file. For more information, see Section 5, "Troubleshooting."

CONTEXT MANAGER: SWAP FILE



Figure 1-2. Swap File

You can alter the Context Manager Configuration file so multicontext mode will run in either of the two ways described above. For more information on how to alter the Context Manager Configuration file, see the discussions of swap files and partition creation in the CTOS Context Manager Manual.

How Chaining Mode Works

To a user, chaining mode appears to work similarly to multicontext mode. The process, however, is quite different.

When OFIS Document Designer uses a cooperating program in chaining mode, OFIS Document Designer exits memory and the cooperating program is loaded in its former memory space. When the user is finished with the cooperating program, the cooperating program exits memory and OFIS Document Designer is reloaded.

Since no swap file is used in chaining mode, switching back and forth between programs is slower in chaining mode than in multicontext mode when a swap file is necessary, and much slower than in multicontext mode when there is enough memory to create a partition to hold both OFIS Document Designer and the cooperating program.

Setting Up Multicontext Mode

For OFIS Document Designer to run in multicontext mode on a workstation, the following three conditions must be met:

- The required version of Context Manager must be installed.
- Inter-Context Message Server (ICMS) must be installed.
- The workstation's Context Manager Configuration file must be modified to specify which programs are to cooperate with OFIS Document Designer. (Each application must have its own object number entry. For more information, see "Modifying the Context Manager Configuration File," later in this section.)

If the first two conditions are not met, OFIS Document Designer attempts to run in chaining mode when using cooperating programs. For more information on chaining mode, see "Setting Up Chaining Mode," later in this section.

Note: It is recommended that you do not run in chaining mode if the Context Manager is installed. If you use cooperating programs, you must install ICMS when using Context Manager.

Setting Up the Inter-Context Message Service (ICMS)

You must install ICMS for OFIS Document Designer to operate in multicontext mode. To do so, make an entry in the Context Manager Configuration file. (See the *CTOS Context Manager Manual* for more information on the Context Manager Configuration File Editor.)

To set up ICMS,

- Enter the Configuration File Editor: On the Executive command line, type CM Config File Editor or a unique abbreviation, such as cm c f e
- 2. Press GO.
- 3. To accept [Sys]<Sys>CMConfig.sys, the default configuration file name, press GO. (If needed, edit the configuration file name, then press GO.)
- 4. Press **F9** (ICMS) from the Function key menu at the bottom of the screen.
- 5. Type [Sys]<Sys>ICMS.run

This is the full file specification for the ICMS run file.

- 6. Press GO.
- 7. Press FINISH.
- 8. Press GO.

The Context Manager Configuration file now contains the ICMS entry.

This is the recommended way to install ICMS in the Context Manager Configuration file. However, you may improve memory management by entering ICMS in the *sysinit.jcl* file. The entry in the JCL file is

\$Run [Sys]<Sys>ICMS.run

Note that there are no parameters, and ICMS cannot be deinstalled. For more information on the *sysinit.jcl* file and system services, see the CTOS System Administration Guide.

Modifying the Context Manager Configuration File

The Context Manager Configuration file specifies from which applications OFIS Document Designer can get information when it is in multicontext mode.

Each application must have its own object number entry in the Context Manager Configuration file to designate it as a cooperating program.

The entries take the format

:OFDObjectEdited:nnn

or

:DDObjectEdited:nnn

where

nnn is the object number of the application being designated as a cooperating program. For example, the entry you would add to make Enhanced or Extended Multiplan a cooperating program would be either

:OFDObjectEdited:258 or :DDObjectEdited:258

Object Numbers

Object numbers for other CTOS applications include the following:

- Art Designer 257
- BTOS Draw 40000
- OFIS Graphics 257
- Chart Designer 257
- Enhanced Multiplan 258
- Extended Multiplan 258
- Image Designer 259
- OFIS Imager 270
- OFIS Paint 40240
- OFIS Spreadsheet 269

The release documentation also contain object numbers for applications.

To add an **:OFDObjectEdited:** or **:DDObjectEdited:** entry to the Context Manager Configuration file, follow the steps below.

- Note: You should specify No in the Needs Exec screen field when running cooperating programs.
- 1. Enter the Configuration File Editor: On the Executive command line, type CM Config File Editor or a unique abbreviation, such as cm c f e.
- 2. Press GO.
- 3. To accept [Sys]<Sys>CMConfig.sys, the default configuration file name, press GO. (If needed, edit the configuration file name, then press GO.)
- 4. In the *Command name* field, type the name of the application, for example, **OFIS Graphics** (or **O G**),
- 5. Press GO.
- 6. Press F10 (More).
- 7. Type either :**OFDObjectEdited**:*nnn* or :**DDObjectEdited**:*nnn*, where *nnn* is the application object number (see "Object Numbers," above).
- 8. Press GO.
- 9. Press FINISH.
- 10. Press GO.

Add an entry for each application you want to designate as a cooperating program.

Setting Up Chaining Mode

The alternative configuration to multicontext mode is for OFIS Document Designer not to use the Context Manager at all, but to chain between OFIS Document Designer and other applications instead.

This mode requires a Chaining Configuration file that contains entries for all the applications you want to designate as cooperating programs.

The Chaining Configuration file has a default file specification of [Sys]<Sys>DdConfig.sys. Remember, if the location and/or name of a Chaining Configuration file is different from the default, you must add a Chaining Configuration File entry to your user file indicating the file's new specification. (For more information on user file entries, see "Description of User File Entries," earlier in this section.)

Setting Up a Chaining Configuration File

A Chaining Configuration file contains three entries for each cooperating program to which you want OFIS Document Designer to chain. A maximum of ten applications can be specified in a Chaining Configuration file.

The entries take the following form:

:CommandName:[cooperating program command name]

:RunFileName:[cooperating program run file name]

:OFDdObjectEdited:[file type of files edited]

For example, here is a sample Chaining Configuration file designating OFIS Spreadsheet as a cooperating program:

:CommandName:OFIS Spreadsheet

:RunFileName:[Sys]<Sys>OFISSpreadsheet.run

:OFDObjectEdited:269

For a list of other :OFDdObjectEdited: entries, see "Object Numbers," above.

Section 2 Using Operator Statistics

What is Operator Statistics?

Operator Statistics is an optional OFIS Document Designer feature. It allows you to record the following information about a user's OFIS Document Designer session:

- The documents accessed
- Whether the documents accessed were password-protected
- Which documents were modified or deleted, if any
- The number of keystrokes made between each Save operation
- The date and time of each Save operation.

A separate entry containing this information is made in the Operator Statistics file each time a user does a Save operation.

You can access this information in the following ways:

- In an input file for viewing only
- In an output file for viewing, printing, or copying

Installing the Operator Statistics Feature

To gather operator statistics, you must load the feature on a workstation by doing the following;

• Responding Yes during OFIS Document Designer installation to the system message that asks whether to install Operator Statistics. This installs the Operator Statistics run file (*OpStatsOFD.run*) in the user's [Sys]<Sys> directory.

If OFIS Document Designer was installed on a user's workstation without the Operator Statistics run file, copy the *OpStatsOFD.run* file into the user's *[Sys]*<*Sys*> directory.

• Making a unique operator statistics entry in the user's user file. For more information, see the :OFDDStatistics: entry in "Description of User File Entries," in Section 2.

After you have loaded the Operator Statistics feature, the following message appears at the bottom of the screen after each Save operation:

Save complete. Operator statistics collected.

How to Access Recorded Operator Statistics

You can access a user's operator statistics from OFIS Document Designer or from the Executive.

Note: Do not use the Open Document command to view a user's operator statistics file. If you do, OFIS Document Designer will be unable to gather statistics during the user's next Save operation. To access a user's operator statistics from OFIS Document Designer,

1. If you have the Softkey interface, press **Home (F1)**, if necessary. Then press **Command (F8)**, and **Stats (F6)**. The Operator Statistics menu is displayed, as shown below.

If you have the menu interface, press CODE-F7 X O to display the Operator Statistics menu.

OPERATOR STATISTICS

(Press GO to execute, CANCEL to dismiss)

Input statistics file: Ouput statistics file:

Figure 2–1. Operator Statistics Menu

2. In the *Input statistics file* field, type the name of the operator statistics file you want to view. (Include the volume and directory of the file if necessary.)

Note that you cannot print or edit the statistics displayed in the input statistics file. To print or modify statistics, fill in the *Output statistics file* field, as explained in the next step. Otherwise, leave this field blank.

3. In the *Output statistics file* field, type a new file name or an existing file name that the system can overwrite.

When you press GO, the current copy of the operator statistics file is copied into the file you specified. You can then print or edit this separate file.

Note: Do not specify the user's operator statistics file itself as the output statistics file. If you do, an output statistics file will not be generated, and OFIS Document Designer will be unable to collect statistics during the user's next Save operation.

4. Press GO.

The current session of OFIS Document Designer is saved and the operator statistics file is displayed.

If necessary, press NEXT PAGE to scroll through the file.

Press CANCEL at any time to close the file.

If you created an output statistics file document, you can open it and edit it as you would any other OFIS Document Designer document.

To access a user's operator statistics from the Executive,

1. On the command line, type **Operator Statistics OFD** and press **RETURN** to display the following command form:

Operator Statistics OFd

2. In the *Input Stats File* field, type the name of the operator statistics file you want to view. (Include the volume and directory of the file if necessary.)

Note that you cannot print or edit the statistics displayed in the input statistics file. To print or modify statistics, fill in the *Output Stats File* field, as explained in the next step. Otherwise, leave the *Output Stats File* field blank.

3. In the *Output Stats File* field, type a new file name or an existing file name that the system can overwrite.

When you press GO, the current copy of the operator statistics file is copied into the file you specified. You can then print or edit this separate file.

Note: Do not specify the user's operator statistics file itself as the output statistics file. If you do, an output statistics file will not be generated and OFIS Document Designer will be unable to collect statistics during the user's next Save operation.

- 4. In the Delete Stats file field, choose of the following:
 - a. Type Y if you want to delete the user's operator statistics file. Note that the file will not be deleted until *after* the user's operator statistics are displayed and the output statistics file document (if specified) is created. (For more information on deleting the contents of operator statistics files, see "Deleting Statistics Files," later on in this section.)
 - b. Leave this field blank to save the contents of the operator statistics file after you finish viewing it.
- 5. Press GO.
 - a. If you receive an error message, read the explanation below. Otherwise, proceed to step b.

You may receive the following message:

ERROR—INPUT STATISTICS FILE UNAVAILABLE; INVALID PATHNAME. Press NEXT PAGE to continue.

This means that you either entered an invalid file specification for the user's operator statistics file, or the file contains no information at this time. Press **NEXT PAGE** and reissue the command with the correct file location and name. (For additional troubleshooting information, see "Cannot Access Operator Statistics," in Section 5, "Troubleshooting.")

- b. The user's operator statistics file is displayed one page at a time, from beginning to end, You cannot scroll backwards through the file.
- c. Press NEXT PAGE to scroll forward through the file.
- d. Press CANCEL at any time to close the file and return to the Executive.

If you created an output statistics file document, you can open it and edit it as you would any other OFIS Document Designer document.

Deleting Statistics Files

From time to time, you should delete a user's operator statistics file to shorten the length of statistics reports and free up disk space.

You can delete a user's operator statistics file in one of three ways:

- Use the Delete command in the Executive
- Use the Delete Document command in OFIS Document Designer
- Type Y in the *Delete Stats file* field when accessing operator statistics from the Executive. (See "How to Access Recorded Operator Statistics," earlier in this section.)

Section 3 Maintaining OFIS Document Designer

To keep OFIS Document Designer running smoothly on an ongoing basis, there are certain maintenance tasks that you must perform for OFIS Document Designer users; these tasks are described in this section. Also included in this section are some different methods of performing the same tasks.

Files Created During an OFIS Document Designer Session

OFIS Document Designer creates the following files during its operation:

- Document files
- Typescript files
- -Old files
- -New files
- Operator Statistics files
- Other files

These files are described below.

Document Files

Document files are the standard files that users create and edit in their user directory. These files are updated each time a Save command is issued.

Typescript Files

OFIS Document Designer creates a typescript file in each user's [Sys]<wp> directory and names it UserName.ts, where UserName is the name supplied when the user signs on. OFIS Document Designer stores all keystrokes the user makes during an OFIS Document Designer session in this typescript file. After a user issues a Save command and the command is successfully carried out, the typescript file is reinitialized, thereby readying it for a new editing session. Typescript files are used for recovery. (See "Recovering," later in this section.)

To keep typescript files in a location other than [Sys]<wp>, you must make an entry the user's user file. For information on how to do this, see "Description of User File Entries," in Section 1, "Customizing OFIS Document Designer."

-Old Files

When a user issues a Save or Finish command, OFIS Document Designer updates the current copy of the document that has been edited and saves the previous version of that document as a separate file. This file has the same name as the current document followed by the suffix *-old*. The presence of *-*old files in a user's directory is normal. (See "Recovering" and "Cleaning Up," later in this section, for more information on these files.)

-New Files

During a Save operation, OFIS Document Designer renames the -old file to -new in the user's directory. The -new file has the same name as the document the user is editing followed by the suffix *-new*. As the user edits the document, the edits are written into several scratch files (DD.tmp, DDBin.tmp and DDFop.tmp).

When a user issues a Save command, the edits are written from the scratch files to the appropriate -new files. After OFIS Document Designer has checked the integrity of the -new files, it drops the -new suffix from the files and writes them over the corresponding document files to update them. -New files exist temporarily during a Save operation; their presence on the disk *after* a session indicates that some failure has occurred during the Save. In this case, see "Recovering," later in this section, for information on how to use -new files to recover.

Operator Statistics Files

If the Operator Statistics feature is installed, OFIS Document Designer creates and appends a file containing a user's operator statistics. The operator statistics file has the name indicated in the user file. (For more information on the operator statistics user file entry see "Description of User File Entries," in Section 1, "Customizing OFIS Document Designer." For more information on the Operator Statistics feature, see Section 2, "Using Operator Statistics.")

OFIS Document Designer enters a separate statistics entry in the Operator Statistics file each time a Save is performed.

Other Files

OFIS Document Designer may create the files UserName.macros, UserName.correct, and UserName.phrases in a user's $\langle Wp \rangle$ directory, where UserName is the name supplied at signon. OFIS Document Designer creates these files if keystroke macros, personal dictionaries, or phrases are stored during the session and an alternate file location or name has not been specified in the user file.

OFIS Document Designer also creates the following files that contain various temporary data structures needed internally during OFIS Document Designer sessions in the <\$> directory:

- DdBin.tmp
- DdBinB.tmp
- DdFop.tmp
- Dd.tmp
- DdB.tmp

See "Cleaning Up," later in this section, for more information on these files.

Saving

Issuing the Save or Finish command writes all edits since the last save to disk, thereby updating document files. As the session is continued after the Save, any changes overwrite the contents of the typescript file. If it is necessary to recover, all keystrokes entered in the typescript file are played back on the screen. When the recovery is complete, a Save command should be issued to update the current copy of the document on the disk.

Files Affected

After the Save command has updated the current document file on disk, the previous document file (the one issued before the Save command) becomes the -old file.

While a user is editing, OFIS Document Designer creates -new files that can be used for recovery in the event of a failure. Under normal conditions, OFIS Document Designer deletes the -new files when it determines that an editing session was successful.

For more information, see "-Old Files," "-New Files," and "Recovering," in this section.

When and How Document Commands Are Processed

When a Save or Finish command is issued, the commands entered during the session complete their execution. This means that the files that were copied are not actually written to disk until a Save or Finish command is issued.

As each command is issued, OFIS Document Designer partially executes the command so that the text a user sees is affected immediately. Tasks such as listing the contents of a directory or opening a document are implemented to function as though the operation has been fully carried out. For more information, see "Recovering," later in this section.

Information displayed by the List Documents command, such as document length or time to print, is incorrect for a document copied with the Executive Copy command. If the document is subsequently modified with OFIS Document Designer and a Save or Finish command is issued, OFIS Document Designer recalculates and displays the correct information when the List Documents command is reissued.

Recovering

The Recover feature protects documents from loss or damage caused by sudden loss of power or equipment malfunction. OFIS Document Designer maintains a special file, the typescript file, that records all keystrokes executed since the last Save or Finish command.

During the first OFIS Document Designer session after an installation, documents created with a previous version of OFIS Document Designer cannot be resumed or recovered.

Procedures

When OFIS Document Designer is started after a power, equipment, or software failure, the workstation beeps and this message appears at the bottom of the screen:

Your last session did not finish successfully. Press GO to recover, CANCEL to start a new session

To see an instant replay of the keystrokes made since the document was last saved to disk, press GO.

OFIS Document Designer replays all the keystrokes entered and any editing that was performed on the open documents. It stops at the point where the failure occurred, and this message appears at the bottom of the screen:

Recovery complete

To interrupt the recovery at any time, press **CANCEL**. This message is displayed:

Recovery suspended; Press GO to continue, CANCEL to stop recovery

Issue the Save command immediately after the recovery is complete. If there is an error when attempting to save, or if the recovery fails because of the same error that caused the problem originally, start the recovery again and stop it before it reaches this point.

Because keystrokes are buffered, the last few keystrokes in an OFIS Document Designer session may not be recoverable.

Notes:

- 1. When attempting to recover an aborted OFIS Document Designer session, the whole environment must be exactly as it was before the recovery. For example, if the Font Service was installed during the original session, it must be installed when recovering.
- 2. If a List Documents command or a Printer Status command was issued during the session that is being recovered, dots replace the document names on the screen. This is done for efficiency and does not indicate an error condition. Also, -old and -new files are never displayed.

If a recovery should fail, try to reconstruct the file by comparing the contents of the different versions of a document, such as -new and -old files. You will have to determine which version or combination of versions to use to bring the file up to date.

Using -Old Files

-Old files cannot be displayed with the List Documents command or opened in OFIS Document Designer. And, -old files cannot be used during the recovery process or with the Discard Edits command. However, a -old file can be renamed or copied in the Executive and opened in OFIS Document Designer. To do so,

- 1. Enter the Executive.
- 2. Rename the -old version of the document so that it no longer has the -old file name suffix. (If necessary, see the Rename command in the CTOS Executive User's Guide for further instructions.)

For example, you could rename a document named Section21-old to Sec21. With the new name, Sec21 can be opened and edited.

3. Return to OFIS Document Designer and open the renamed document.

The -old file is now the current copy of the document.

Using -New Files

If -new files exist after a session has ended, some type of failure has occurred. You should attempt to recover. If unable to do so, you should compare the contents of the various versions of the document to determine which is the most accurate.

If you are going to use OFIS Document Designer to compare the contents of the files, you must make copies of the *-old* and *-new* files first without the *-old* and *-new* suffixes.

If the -new file is determined to be the most accurate, use the Rename command to rename it to your document file name without the -new suffix.

Cleaning Up

You will find that, at some point, users no longer need some of the files created by OFIS Document Designer. Since OFIS Document Designer cannot make that kind of judgment for you, you must delete files that you feel are no longer necessary. This simple action frees disk space, which can be used for more important purposes.

The types of files you can delete are -old, -new, typescript, temporary data structure files and unused document files. You will also want to clear the Operator Statistics files on occasion (if you enabled that feature) to keep them from growing excessively large.

You can delete -old files when you feel confident that you do not want to return to this prior state (the contents of the document just prior to the most recent Save or Finish). See "-Old Files", earlier in this section, for more information.

You can delete -new files when you have determined that you do not need to rename a -new file to be the current file. Remember that -new files are created during an edit session, and the presence of -new files after a session indicates that a failure has occurred. Normally, you won't need to be concerned about -new files. See "-New Files," earlier in this section, for more information. You can delete typescript files (*UserName.ts*) when these files are very large or you have inactive users. Typescript files for active users are recreated at the next session. However, deleting a typescript file for a user whose last session ended abnormally makes recovery impossible. See "Typescript Files," earlier in this section, for more information.

You can delete temporary data structure files (such as *DdBin.tmp* and *DdBinB.tmp*) between sessions. You would do this to recover disk space. The creation of these files is time consuming, so OFIS Document Designer does not delete them automatically. OFIS Document Designer recreates these files as required. See "Other Files," earlier in this section, for more information.

To delete any of the above-mentioned files, use the standard procedure to delete files:

- 1. Enter the Executive.
- 2. Type Delete.
- 3. Press RETURN.
- 4. Type the file name(s).

Assuming all users have finished from OFIS Document Designer successfully, you might want to delete the following files:

[Sys]<*>*-old [Sys]<*>*.ts [Sys]<*>*-new [Scr]<\$*>*.tmp

(In the sample files above, the asterisk (*) is a wild card character. For information on wild card characters, see the *CTOS Executive User's Guide*.)

CAUTION

Be especially careful when using wild card characters with the Delete command. You can easily delete more than you intend to. It is a good idea to use the *Confirm each* option with this command when using wild card characters in file specifications. (The confirm option is not necessary with the [Scr]<\$*>*.tmp file.)

5. Press GO.

The files you specified are deleted.

You can delete actual document files when you and the creator of the document decide it is best. You can delete them using either the Executive or OFIS Document Designer.

If a user has the Operator Statistics feature installed on his or her workstation, you can also clear that Operator Statistics file from time to time to shorten the length of statistics reports and free up disk space. For more information on how to clear Operator Statistics files, see "Deleting Statistics Files" in Section 2, "Using Operator Statistics."

Using Floppy Disks

You can use properly formatted floppy disks to store OFIS Document Designer documents, application files, and operating system software. (See the *CTOS Executive User's Guide* for the procedures required to format floppy disks.)

You can also use floppy disks to transfer OFIS Document Designer files between systems. See "Issuing Commands," later in this section, for more information.

Floppy disks require a certain amount of care to function properly. Caring for floppy disks and issuing commands while using floppy disks are discussed below.

Caring for a Floppy Disk

A floppy disk is a flexible, plastic disk coated with a substance that allows it to record data magnetically. A square envelope protects the disk.

Take the following precautions when using floppy disks:

- Store them in their paper envelopes.
- Insert them carefully into the drive slot with the write-protect notch up (the surface *without* seams toward the door latch on the floppy disk drive).
- Do not touch the open slot on the disk.

- Do not expose the disk to extreme temperatures. (The acceptable temperature range is 50 degrees F to 125 degrees F.)
- Do not expose the disk to magnets (including telephones, which have magnets in them), magnetized tools, or electric motors.

Issuing Commands

When working with floppy disks and issuing OFIS Document Designer commands, the commands are executed so the results can be seen on screen; however, they don't complete execution until a Save or Finish command is issued. OFIS Document Designer functions this way because all operations have to be recoverable from the typescript file following a failure.

Use the following guidelines for successful operation using floppy disk:

- Never remove a floppy disk from the drive slot while documents are open, whether or not they are displayed on the screen. A document is not closed until you issue a Save command.
- Always close all open documents on the floppy disk and issue a Save or Finish command before removing the floppy disk.
- If you change your work area to a directory on the floppy disk, it is important to insert the disk *before* issuing the command, or to reissue the command after you have inserted the disk.
- If the default path, as specified by either the Executive's Path command or by the *Name.user* file executed at signon, refers to a disk that is not mounted in the drive when OFIS Document Designer is started, you must issue a Change Work Area command after you have inserted the floppy disk. (For more information on work areas, see the *Word Processing* volume.)
- Remember that documents are not permanently stored on any disk, floppy or hard, until a Save or Finish command is issued. A file can be destroyed if the floppy disk is removed from the drive slot before one of theses two commands has been issued, whether or not the document is displayed.
- **Note:** It is recommended that you use the Executive to copy, rename, and work with files contained on floppy disks.

Section 4 Exchanging Documents

Introduction

This section provides information on

- Using the Document Exchange Format (DEF) feature
- DEF escape sequences
- Making word processed files Document Content Architecture (DCA) compatible

OFIS Document Designer provides a way to exchange documents between itself and other word processing systems. It does this with the Document Exchange Format (DEF) program. DEF provides a common language through which word processing files created by some other word processing systems (such as IBM or Wang) can be interpreted by OFIS Document Designer. Files from the OFIS Document Designer can also be translated into a format that can be used by other word processors.

DEF can be used to exchange documents between the current version of OFIS Document Designer and earlier versions, including documents created with Document Designer, OFIS Writer, or Word Processor. DEF can also be used to translate files from other application systems, such as Enhanced or Extended Multiplan, to OFIS Document Designer. These topics are discussed in this section.

For information on exchanging documents between OFIS Document Designer and IBM Display Write 3, see the *Document Interchange Management System Manual*. For information on exchanging documents with Unisys PCs, OFIS Manager, and OFIS Link 1100, see "Translating Documents to and from DCA Format," later in this section.

Exchanging Information Between Files

Each word processing system has its own internal structures to indicate format characteristics such as paragraphs, pages, boldface text, and so on. Documents created on OFIS Document Designer have a complex binary internal structure that differs from word processing systems. Formatting information is kept in tables at the end of the file.

Other word processing systems, on the other hand, embed format information in the text, using escape sequences to activate and deactivate formats. Translating files from one system to another calls for an intermediary formatting scheme. DEF format provides such a scheme.

DEF format uses a series of escape sequences that can be put in the text to indicate format characteristics. Figure 4–1 shows the file conversion process with other systems using DEF.



Figure 4–1. Document Exchange With Other Systems

Using Document Exchange Format (DEF)

Regardless of which way files are exchanged, whether to or from OFIS Document Designer, certain tasks must be performed, as dedscribed below.

- When you convert another word processor file to OFIS Document Designer, you execute a program that embeds DEF codes (escape sequences) into the file. Then you use the DEF command to convert the file to OFIS Document Designer format.
- When you convert an OFIS Document Designer file to another word processor system, you use the DEF command to embed DEF codes into the file. Then you execute a program that translates the DEF codes into the internal structures of the other word processor system.
- When you convert an OFIS Document Designer file to an earlier version or to Document Designer, OFIS Writer, or Word Processor, you use the DEF command to embed DEF codes into the file. Then you execute the DEF command from the earlier version or from OFIS Writer or Word Processor.
- **Note:** If you want to use a document created with an older version of OFIS Document Designer with a newer version of OFIS Document Designer, simply open the file with the new version and begin editing. Conversion is not necessary when going from older to newer versions. This is known as upward compatibility.

Translating Other Word Processor Files to OFIS Document Designer

To translate other word processor files for use with OFIS Document Designer, you must first put those files into DEF format. This usually requires the following steps:

1. A program is written to embed DEF escape sequences in the file based on the word processing format information. (For information on DEF format and escape sequences, see "Types of DEF Escape Sequences," later in this section.)

- 2. The program is run to translate the word processor's file into a DEF formatted file.
- 3. Within OFIS Document Designer, either the DEF file is opened directly (OFIS Document Designer unDEFs the file and automatically translates it), or the DEF command is used to translate the DEF formatted into file OFIS Document Designer format. (You would perform the latter operation if you needed to specify particular parameters.)

The following procedure shows you how to use the DEF command after you have copied the DEF version of the file onto your system.

1. If you have the Softkey interface, press **Home (F1)**, if necessary. Then, press **Files (F5)**, and **DocExch (F8)**. The Document Exchange menu is displayed, as shown below.

If you have the Menu interface, press **CODE-F7** to display the Commands menu; then, press **D** for *Document Exchange*. The Document Exchange menu is displayed, as shown in Figure 4–2.

```
Document Exchange_
```

Press GO to execute, NEXT for next item, CANCEL to dismiss

Document name: [DEF file name]			
Direction:	To DEF	From DEF	(Press T or F)
Target (units):	OFIS Document Designer/Document Writer		
	OFIS/Document Designer 2.0 OFIS/Document Designer 1.0		
	Word Processor or OFIS Writer		(Press O, 2, 1, or W)
Incorrect codes:	Discard	Pass through as text	(Press D or P)
Output:	Attributes	Styles Both	(Press A, S or B)

Figure 4-2. Document Exchange Format (DEF) Menu

- 2. In the *Document name* field, type the name of the OFIS Document Designer document you will create from the DEF file.
- 3. In the DEF file name field, type the name of the DEF file.
- 4. In the Direction field, press F to select From DEF.
- 5. In the *Incorrect codes* field, press **D** to discard any incorrect DEF codes that may be embedded in the file, or press **P** to pass the incorrect codes to the new file as text.

D discards all incorrect/invalid codes; **P** keeps all codes so you can review the document to determine where formatting did not occur. This gives you the option of changing the formatting.

6. Press GO.

The new OFIS Document Designer file is created from the DEF file and stored in the directory you specified as part of the document name.

Sending OFIS Document Designer Files to Other Word Processors

To send OFIS Document Designer files to other word processing systems, you must first put those files into DEF format. This usually requires the following steps:

- 1. The **DEF** command is used from within OFIS Document Designer to produce a DEF file from a OFIS Document Designer document.
- 2. The program is run to translate the DEF file into a word processor file that the other word processing system can read.

To process the DEF program,

1. If you have the Softkey interface, press **Home (F1)**, if necessary. Then, press **Files (F5)**, and **DocExch (F8)**. The Document Exchange menu is displayed, which is shown earlier in this section.

If you have the Menu interface, press **Code-F7** to display the Commands menu; then, press **D** for *Document Exchange*. The Document Exchange menu is displayed, which is shown earlier in this section.

- 2. In the Document name field, type the document name.
- 3. In the DEF file name field, type the name of the DEF file.
- 4. In the Direction field, press T to select To DEF.
- 5. In the *Target* field, select the appropriate program for your DEF output, if known (see the options below).

For the most part, DEF is backwards compatible; however, certain DEF code changes can cause problems with older programs.

Note: If your document contains objects or boxes, you must select the appropriate program for your DEF output.

If you select 1 or W in the *Target* field, all measurements are output in 240ths of an inch, regardless of any inaccuracies. In this case, some format information may be lost when bringing the same document back into OFIS Document Designer using DEF. (The older DEF applications can only process in 240ths of an inch, which could possibly result in rounding off errors. OFIS Document Designer outputs measurements in 1440ths of an inch.) For more information on numeric values, see "Units of Measurement," later in this section.

Choose one of the following options:

- a. Press O if the the program to receive the DEF file is OFIS Document Designer or OFIS Document Writer.
- b. Press 2 if the program to receive the DEF file is OFIS Designer or Document Designer, version 2.0.
- c. Press 1 if the program to receive the DEF file is OFIS Designer or Document Designer, version 1.0 or later.
- d. Press W if the program to receive the DEF file is Word Processor or OFIS Writer.

Note that when you convert an OFIS Document Designer file to an earlier version or to OFIS Writer or Word Processor, the Keep Together attributes are replaced by the old-style Keep Together braces. (For more information on Keep Together, see the *Word Processing* volume.)
- 6. In the Output field, choose one of the following:
 - a. Press A to output DEF codes for individual format attributes.

In this case, all style information is omitted. This is the most concise form of output to older applications (created prior to 1991) that recognize DEF codes.

b. Press S to output DEF codes for styles only.

In this case, format attribute information is omitted. This is the most concise form of DEF output for stylized documents, retaining all information required by OFIS Document Designer 3.0 to reconstruct the document, including style definitions and format exceptions. *Do not* choose this option if the receiving application was created and last updated prior to 1991.

c. Press B to output DEF codes for both styles and attributes.

In this case, all style and format attribute information is retained. Choose this option if you do not know what DEF application is going to read the output or if you are unfamiliar with the capabilities of that application. (This option requires the most disk space.)

For detailed information on how DEF interacts with style control, see "Escape Sequences and Style Control," later in this section.

Note that redlining information is not output since there are no DEF codes for redlining.

7. Press GO.

The DEF file is ready to process with other word processing programs.

Translating and Converting OFIS Document Designer to Earlier Versions

To translate OFIS Document Designer to earlier versions of OFIS Document Designer or Document Designer files, or to OFIS Writer or Word Processor files, you must first create a DEF file using the DEF command.

Next, you must convert the DEF file, using the DEF command in the other program, to get the version you want. (Refer to the documentation that comes with the earlier word processing system.)

Using DEF With Other Application Systems

DEF can be used to get the output of application systems, other than word processors, into OFIS Document Designer documents. Other applications (such as Enhanced or Extended Multiplan) may provide a command to produce output in DEF format.

For example, the Print command, followed by the Document Exchange command, allows you to create a DEF file from an Enhanced or Extended Multiplan spreadsheet. A full file specification is required. Read the file into OFIS Document Designer format, as shown in "Translating Other Word Processor Files to OFIS Document Designer," earlier in this section.

After you have converted the DEF file to OFIS Document Designer format, you can open the file and manipulate it as you would any OFIS Document Designer text.

The advantage of incorporating data (for example, an Enhanced or Extended Multiplan spreadsheet) into your OFIS Document Designer text in this manner (as opposed to inserting an object using the Object command) is that you can manipulate it fully from within OFIS Document Designer. You can apply character format attributes, move the text around, change tab settings, and so on. Because it has the same format as OFIS Document Designer, it becomes a part of the text like any other OFIS Document Designer text. The disadvantage of incorporating data in this manner is that it is no longer possible to go back to the application to change the data (for example, you could not return to your spreadsheet program to recalculate a spreadsheet based on new input). Data included in your text using DEF cannot be updated.

DEF Escape Sequences

This subsection contains information to help you do the following:

- Write a document translator (a program that translates the document formatting characteristics of one word processing system into the formatting characteristics of another word processing system).
- Customize the document translator.
- Understand the document exchange process.

DEF uses escape sequences to signify each of the possible format attributes. All DEF escape sequences have the format \$(aa), where *aa* is two or more characters. Escape sequences signal the beginning or end of a format run or insertion of a special character.

Notes:

- 1. Stop codes are not transferred into DEF format.
- The DEF escape sequences for outputting of objects, which were deimplemented in Document Designer 2.0 (but not in OFIS Designer 2.0) have been reimplemented. These include \$(ACn), \$(ATn), \$(OB), and \$(IOn). If Document Designer 1.0 is selected as the target, measurements in the objects output will be corrected for Document Designer 1.0.

Units of Measurement

Certain DEF escape sequences require numeric values in addition to the two- or three-character escape sequence identifiers. Many of these numeric values are measurements, such as margins, tab stops, and page sizes. Previous to OFIS Designer and Document Designer 2.0, these measurements were given in units of 240ths of an inch. This allowed the lowest common denominator of many standard word processing schemes. Therefore, a numeric value of 240 represented one inch, and 48 represented 1/5 inch.

OFIS Document Designer utilizes a finer resolution than OFIS Writer, OFIS Designer 1.0, or Document Designer 1.0, imposed by the need to support points, the units commonly used by typographic systems, especially for describing font sizes and line spacing. Therefore, OFIS Document Designer can now read and write DEF files using either units of 240ths of an inch or 1440ths of an inch (six times 240). In the latter units, one point is represented by the numeric value of 20. In the former units, three points is represented by the numeric value ten. Any point value which is not a multiple of three cannot be represented accurately using the former units.

An escape sequence is used to indicate which units of measure are in use: 240ths of an inch or 1440ths of an inch. The units of measure can change at any place in a DEF file. Initially, the units of measure are assumed to be 240ths of an inch.

OFIS Document Designer does not change the units of measure in its DEF output to 1440ths of an inch until it encounters a measurement that cannot be represented accurately using 240ths of an inch. At that time the DEF code \$(UMn) will be output.

If a user selects OFIS/Document Designer 1.0, or Word Processor or OFIS Writer as the choice target in the DEF menu, OFIS Document Designer outputs all measurements in 240ths of an inch, regardless of any inaccuracies. In that case, some format information may be lost when bringing the same document back into OFIS Document Designer using DEF.

Note that these numeric values are kept in ASCII rather than binary, thereby enabling DEF to be used with simple communications schemes that permit ASCII data only. It also makes DEF files easier to read.

Types of DEF Escape Sequences

There are seven types of DEF escape sequences:

- Character escape sequences
- Paragraph escape sequences
- Page escape sequences
- Document escape sequences
- Additional text escape sequences (headers, footers, and footnotes)
- Special escape sequences
- Style control escape sequences

Character, Paragraph, and Page DEF Escape Sequences

OFIS Document Designer applies document formatting attributes in three levels. DEF also applies three levels of formatting. The format levels are

- Character (for example, boldface)
- Paragraph (for example, tabs)
- Page (for example, margins)

Formatting attributes are described in detail in the Word Processing volume. Certain format characteristics, such as boldface, are applied to characters. All characters in a paragraph can be boldface, but OFIS Document Designer assigns the attribute to each character individually. Other format characteristics, such as tabs, however, apply tab settings to an entire paragraph, and the tab settings exist for all text within the paragraph.

DEF Format Processing

DEF indicates formatting as a *run* of any one type of format attribute. A *format run* is a contiguous portion of text sharing the same format attributes. The three types of format run are *character format run*, *paragraph format run*, and *page format run*. Each type of format run can coexist with the other types without dependencies, so that a new paragraph run, for example, does not affect an existing character run.

DEF escape sequences indicate format runs. Any DEF escape sequence remains in effect until some other DEF escape sequence terminates the run. For example, if a DEF escape sequence sets the left document margin at two inches, all subsequent document margins are set at the same position until changed.

DEF files are stream files and are accessed sequentially. DEF escape sequences apply to subsequent text only. No DEF escape sequence can apply to prior text. DEF files are interpreted in a single pass. Although it may be necessary to make several passes on a foreign system document to create a DEF file, the DEF file can only be a sequential file. DEF escape sequences for character runs apply to the characters that immediately follow the escape sequence.

When paragraph and page escape sequences are used, however, the new attributes do not go into effect until an explicit New Paragraph or New Page escape sequence is encountered. This enables the DEF file to set a variety of paragraph and page formats prior to their actual invocation.

Escape Sequences for Special Characters

Unique DEF escape sequences exist for some special characters parts of it. Additional text is text that is not part of the main body of the document, but is associated with it. Examples are headers, footers, and footnotes, where headers and footers are associated with page breaks, and footnotes are associated with footnote reference characters.

This additional text is not stored with the document text, but is stored immediately following the rest of the text in an *additional text array*. There can be more than one piece of additional text. In this case, pieces of additional text are stored in the array sequentially. Headers and footers are page format attributes. They are both treated in the same way internally by OFIS Document Designer and by DEF. (When this discussion uses the word *headers*, it also applies to footers.) Each page can have a different header, or each page can have the same header, or some or all pages can have no header at all. Header format includes the following:

• The Header command

This command specifies that a header will reside on a given page, and also refers to the additional text array entry for the text for that header.

• The additional header text itself

Since multiple headers are allowed (that is, each page can have a different header independent from the other pages), each new header is stored in the additional text array at the end of all other text in the DEF file.

Footnotes are character format attributes. They are treated in the same way by DEF as they are treated internally by OFIS Document Designer. Footnote format includes the following:

• The Footnote command

This command specifies that a footnote will be associated with a particular reference character and will be printed at the bottom of the page on which the reference character is printed. The footnote reference character also refers to the footnote text in the additional text array at the end of the DEF file.

• The additional text itself

A special DEF escape sequence indicates the end of the text for the body of the document and the beginning of the additional text array. Note that additional text can contain paragraph and character formats, but page formats are ignored. This end of main body text is signified only by the start of additional text array entries. All text from an additional text escape sequence to the next one, or the end of the DEF file, is considered part of the additional text definition. Note that while additional text can contain paragraph and character formats, page formats are ignored.

For example, suppose a three-page document contains headers. In the body text portion of the first page, a Header escape sequence would indicate that a header is used on the page, and the first header text (first element on the array of additional text) defined is that to be used. On the second page, the header escape sequence could specify the third header text item, since order in the array is not important. The third page would specify the second header text item.

DEF Escape Sequences and Style Control

Certain DEF escape sequences define or apply style. A *style* is a collection of formatting attributes grouped under a single name. By applying a single name to a block of text, you apply several different formatting commands at the same time. For example, if you apply a style named *Head1*, you apply the formatting commands required to format a heading in your document. This might include a specific font, paragraph indent, tab stop, and so on. (For more information about style, see "Using Style Control," in the *Word Processing* volume.)

The beginning of the DEF file includes Define Style DEF escape sequences, which give definitions of each style. That is, the Define Style DEF escape sequences indicate that the current DEF attributes define the look of a named page, paragraph and/or character style. For example, a Define Style DEF escape sequence may indicate that the *Head1* paragraph style is defined by the following formatting attributes: Justification: centered; Leading: 2 points; Whitespace before: 18 points.

Apply Style DEF escape sequences indicate that the text that follows has a named page, paragraph, and/or character style. For example, an Apply Style DEF escape may indicate that the style *Head1* is to be applied to the body of text that follows. In the *Output* field of the Document Exchange menu, you can choose to output style definitions and/or individual format attributes. Depending on the choice you make, at the beginning of the DEF file, either a \$(DSAY) or \$(DSAN) DEF escape sequence is output to indicate how styles are to be interpreted.

If you choose Attributes, the Define Style and Apply Style DEF escape sequences are omitted. Instead, all attributes defined by the style and exceptions to the style are output. (Exceptions to the style include formatting attributes that do not have any style control applied to them, such as attributes that were applied using the Format Character menu.) You should choose this option if you're sending output to older applications that were created before style control was implemented (prior to 1991).

If you choose Styles, (DSAY) is output. In this case, all attributes that were specified through style control are output at the beginning of the document using Define Style DEF escape sequences. Also, the attributes of each style *are not* output each time they are encountered in the body of the text – only the individual attributes that are exceptions to the style are output in the text. This is the most concise form of DEF output for stylized documents. You should not choose this option if the receiving application was created prior to 1991.

If \$(DSAY) is set, the receiving application must update the attributes of the current run whenever an Apply Style DEF escape sequence is read.

If you choose *Both*, \$(DSAN) is output. In this case, the Define Style and Apply Style escape codes are output, as well as all attributes in the text, whether they are an exception to the style or part of the style definition. In short, individual format attributes are output as well as Apply Style DEF codes. Because this output is readable by systems that either recognize or do not recognize style control, you should choose this option if you do not know the capabilities of the receiving application.

If \$(DSAN) is set, the receiving application *must not* update the attributes of the current run whenever an Apply Style DEF escape sequence is read.

List of DEF Escape Sequences

The following DEF escape sequences are listed and described below:

- Escape sequences recognized but not generated by OFIS Document Designer 3.0.
- Character escape sequences
- Paragraph escape sequences
- Page escape sequences
- Document escape sequences
- Additional text escape sequences (headers, footers, and footnotes)
- Special escape sequences
- Style control escape sequences

Escape Sequences Recognized But Not Generated By OFIS Document Designer 3.0

The DEF escape sequences shown in Table 4–1 are generated by prior OFIS products. They are recognized by OFIS Document Designer 3.0 but are not generated.

Escape Sequence	Format Action	
\$(SL)	Keep Together open.*	
\$(SM)	Keep Together closed.*	
\$(QD)	Document assembly on.	
\$(QE)	Document assembly off.	
\$(QY)	Print suppress on.	
\$(QO)	Print suppress off.	

Table 4-1.	DEF Escape	Sequences Reco	ognized But Not	Generated
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*These codes are generated if the target is *not* OFIS Document Designer in order to simulate the old-style Keep Together braces.

Escape Sequence	Format Action	
\$(QUY)	Non-blank underline <i>on</i> .	
\$(QUN)	Non-blank underline off.	
\$(QT)	Table of contents open.	
\$(QS)	Table of contents <i>close</i> .	

Table 4-1. DEF Escape Sequences Recognized But Not Generated (con	nt.)
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Character Escape Sequences

DEF character escape sequences affect formatting when they occur. (See Table 4-2.) All OFIS Document Designer character formats have corresponding escape sequence representations. Character formats set by DEF escape sequences remain in effect until reset by some other escape sequence. For a detailed discussion on escape sequences, see "DEF Escape Sequences," earlier in this section.

Escape Sequence	Format Action	
\$(AY)	Start alternate ribbon.	
\$(AN)	Stop alternate ribbon.	
\$(BY)	Start boldface.	
\$(BN)	Stop boldface.	
\$(DY)	Start double underline.	
\$(DN)	Stop double underline.	
\$(IY)	Start italics.	
\$(IN)	Stop italics.	
\$(KY)	Start keyword.	
\$(KN)	Stop keyword.	

Table 4–2. DEF Character Escape Sequences

Escape Sequence	Format Action	
\$(NY)	Start nonprinting.	
\$(NN)	Stop nonprinting.	
\$(OY)	Start outline number.	
\$(ON)	Stop outline number.	
\$(PY)	Start phrase.	
\$(PN)	Stop phrase.	
\$(SY)	Start strike-through.	
\$(SN)	Stop strike-through.	
\$(UY)	Start underline.	
\$(UN)	Stop underline.	
\$(VY)	Start word underline.	
\$(VN)	Stop word underline.	
\$(XY)	Start superscript.	
\$(XN)	Stop superscript.	
\$(YY)	Start subscript.	
\$(YN)	Stop subscript.	
\$(ZY)	Start noneditable.	
\$(ZN)	Stop noneditable.	
\$(NR)	Start normal text. This resets all character attributes, including fonts.	
\$(WHname)	Use pseudo font family specified by <i>name</i> . The named pseudo family must be included in the Font Database or this escape sequence will be ignored. This escape is not output by OFIS Document Designer, but by the Word Processor. The pseudo family table is a feature of the Font Database that enables OFIS Document Designer to convert wheel names, used by OFIS Writer or the Word Processor, into complete font descriptions, including font family, size, and style.	

Table 4–2. DEF Character Escape Sequence	ces (cont.)	
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Escape Sequence	Format Action	
\$(FFname)	Use Font family specified by <i>name</i> . The named font family must be listed in the Font Database or this escape sequence is ignored.	
\$(PSn)	Set the font size, where <i>n</i> represents the height of the font. For example, if the unit of measurement is 1440ths of an inch, 10 point text would have the escape sequence of \$(PS200).	
\$(PS0)	Point size unspecified; implied by pitch. PS can be set to 0 (zero) if point size is never set from <i>Point Size</i> in the Font menu (F5), or if point size is overridden by using the Pitch menu.	
\$(PTn)	Set character pitch, where <i>n</i> represents the width of subsequent characters in the current unit of measurement. For example, if the unit of measurement is 240th of an inch, 12-pitch text would have the escape sequence \$(PT20). Pitch is set by the Pitch menu.	
\$(PT0)	Reset pitch to the default of the current font or point size.	
\$(WPn)	Pitch of the font, if monospaced, whether specified by the Pitch menu or implied by the Font menu. This DEF code is output by OFIS Document Designer for information only. It is similar to the \$(PTn) escape sequence. However, it also indicates the actual pitch of the font when the pitch has not been set explicitly (for example, when \$(PT0) is specified).	
\$(WP0)	Indicates that the current font is proportional, or a nonstandard pitch.	
\$(FRn)	Footnote reference; the subsequent characters have footnote text associated with them. The footnote text is stored in the additional text array at the end of the document. The particular text for this footnote is indicated by n , which is an index into the additional text array. OFIS Document Designer may output the sequence ACn in place of this one. FRO is used to turn footnote reference off.	

Table 4-2. DEF Character Escape Sequences (cont.)

Escape Sequence	Format Action	
\$(ACn)	Set cross-reference id or anchored object id to the value specified by <i>n</i> . If the anchor character type (see escape sequence below) is footnote or stop code prompt, <i>n</i> is used to index into the additional text array at the end of the DEF file. If the anchor character type is a target reference or page reference, the id is merely a unique number used to link page references to the correct target. \$(AC0) is used to turn anchor character/cross reference id <i>off.</i>	
\$(ATn)	Set anchor character type. <i>n</i> is the type of anchor character specified. These are as follows:	
	0 Footnote 1 Voice 2 Text or graphic object	
	4 Target reference 5 Page reference	

Table 4-2. DEF Character Escape Sequences (cont.)

Paragraph Escape Sequences

Paragraph escape sequences (those that describe the paragraph attributes) do not go into effect immediately when encountered. Instead, their actions are saved until a New Paragraph escape sequence [\$(SB)] is encountered. (See "Special Character Escape Sequences," later in this section.) This allows several formatting commands to go into effect at one time. All OFIS Document Designer paragraph formats have corresponding DEF escape sequences. (See Table 4–3.) For a detailed discussion on escape sequences, see "DEF Escape Sequences," earlier in this section.

Note: Whenever numeric values are required, these are represented in ASCII rather than in binary.

Escape Sequence	Format Action	
\$(IFn)	Set the paragraph first line indent to the value specified by n (given in units of 240ths of an inch or 1440ths of an inch). The first line indent is measured relative to the paragraph left margin indent (see below).	
\$(ILn)	Set the paragraph left margin indent to the value specified by <i>n</i> (given in units of 240ths of an inch or 1440ths of an inch). The left margin indent is measured relative to the left document margin (see "Page Escape Sequences," later in this section).	
\$(IRn)	Set the paragraph right margin indent to the value specified by n (given in units of 240ths of an inch or 1440ths of an inch). The right margin indent is measured relative to the right document margin (see "Page Escape Sequences," later in this section).	
\$(LF)	Set the paragraph to left-flush.	
\$(RF)	Set the paragraph to right-flush.	
\$(JS)	Set the paragraph to justified.	
\$(CN)	Set the paragraph to centered.	
	Unlike other text handling systems, centered is a paragraph format attribute. The left-flush, right-flush, justified, and centered attributes are mutually exclusive.	
\$(TBtp<,tp>,p)	Set the tab stops to the position represented by p , and of the type represented by t .	
	The tab types can be one of the following: L (left-flush), R (right-flush), C (centered), D (decimal-aligned), V (tabular rule), or A (comma- aligned for nationalized DEF). Note that the V entry is <i>not</i> a tab stop; tabs will automatically skip over it. Note too that each type of tab can be preceded by a period (.) to indicate leader dots. For example, L indicates a left-aligned leader dot tab.	
	The angle brackets are not part of the escape, but indicate that tp can occur one or more times, separated by commas, to set multiple tabs.	
\$(TB)	Indicates that the following paragraphs contain no tab stops.	

Table 4-3. DEF Paragraph Escape Sequences

Escape Sequence	Format Action	
\$(LNb,w,a)	Set paragraph line spacing. These measurements are required to set paragraph line spacing: whitespace before (<i>b</i>), base-to-base within (<i>w</i>), and whitespace after (<i>a</i>).	
	For example, assume that the font size is 12 point (1/6 inch) and unit of measurement is 240ths of an inch. To indicate single line spacing, with no white space between lines or paragraphs, specify $(LN0,40,0)$.	
	For systems that support only two kinds of paragraph spacing, <i>within</i> and <i>between</i> , it is suggested that both <i>before</i> and <i>after</i> be set to the value <i>between</i> .	
\$(VSY)	Set variable line spacing <i>on</i> . Spacing of lines within a paragraph is determined by the tallest font present on each line, plus the amount of leading specified for the paragraph. The base-to-base (<i>within</i>) spacing value is ignored.	
\$(VSN)	Set variable line spacing <i>off</i> . Spacing of lines within a paragraph is uniform, determined by the base-to-base (<i>within</i>) spacing value specified for the paragraph, without regard to the size of any fonts in the paragraph. The leading value is ignored.	
\$(LDn)	Set paragraph leading to <i>n</i> . If variable line spacing is in effect, <i>n</i> units of white space are inserted between each pair of lines in a paragraph This occurs after accounting for the height of each line, based on the largest font size present on each line.	
\$(VTn)	Paragraph has a vertical tab of <i>n</i> units of measurement from the top edge of the paper.	
\$(VBY)	Vertical tab (if any) is aligned at the baseline of the first line of the paragraph.	
\$(VBN)	Vertical tab (if any) is aligned at the top edge of the first line of the paragraph, determined by the largest font size present in that line.	

Table 4-3. DEF Paragraph Escape Sequences (cont.)

Format Action	:	
Set heading level for paragraph, or for table of contents. <i>n</i> specifies type of heading level, with the following numbers:		
0	Ordinary text	
1	Section level heading	
2-6	Heading levels 1-5	
128-133	Outline levels 1-6	
253	Outline body text	
254	Table of contents	
Set numbering sc	heme for paragraph.	
0 A	rabic	
1 U	Ippercase Roman	
2 L	owercase Roman	
3 U	Ippercase alphabetic	
4 L	owercase alphabetic	
Set numbering concatenation for paragraph		
0 N	lo concatenation	
1 C	Concatenation with required hyphen	
2 C	Concatenation with period	
3 C	Concatenation with discretionary hyphen	
Set numbering for	rmat for paragraph	
0 5	Simple	
1 P	arentheses	
2 F	Right parenthesis	
3 F	Period	
4 C	Colon	
5 E	Brackets	
6 E	Braces	
Forced paragraph	n number to <i>n</i> .	
Hidden text on. S	Subsequent paragraphs are part of a collapsed outline.	
Hidden text <i>off.</i> Soutline.	Subsequent paragraphs are not part of a collapsed	
	Format Action Set heading level type of heading level 2-6 128-133 253 254 Set numbering sc 0 A 1 U 2 L 3 U 4 L Set numbering co 0 N 1 C 2 C 3 U 4 L Set numbering co 0 N 1 C 2 C 3 C Set numbering for 0 S 1 F 2 F 3 F 4 C 5 E 6 E Forced paragraph Hidden text off. S outline.	

Table 4–3. DEF Paragraph Escape Sequences (cont.)

Escape Sequence	Format Actio	n		
\$(KTY)	Keep together	Keep together on.		
\$(KTN)	Keep together	off.		
\$(KFY)	Keep following	Keep following <i>on</i> .		
\$(KFN)	Keep following	Keep following off.		
\$(KPY)	Keep prior <i>on</i> .	Keep prior <i>on</i> .		
\$(KPN)	Keep prior off.	Keep prior <i>off.</i>		
\$(BP)	Box paragraph.			
	The box DEF e parameters: \$(scape sequences can represent a number of BPri,rj,rk,rl,c,f,f,m)		
	r	Can be N (none), S (single rule), or D (double rule) The four r values are for the left, right, top and bottom rules, respectively.		
	i	Left rule offset (numeric measurement).		
	j	Right rule offset (numeric measurement).		
	k	Top rule offset (numeric measurement).		
	I	Bottom rule offset (numeric measurement).		
	c	Color. Can be 0 (Black), 1 (Red), 2 (Green) 3 (Blue) 4 (Yellow), 5 (Violet) 6 (Orange)		
	f	Can be N (none), Q (quarter-tone), H (half-tone) or S (solid).		
		The two <i>f</i> values are for the box and the double ruling, respectively.		
	m	Rule separation (numeric measurement).		

Table 4-3. DEF Paragraph Escape Sequences (cont.)

Page Escape Sequences

Page escape sequences do not go into effect immediately when encountered. Instead, their actions are saved until a New Page escape sequence is encountered. (See "Special Character Escape Sequences," later in this section.) This allows several formatting commands to go into effect at one time. All OFIS Document Designer page formats have corresponding escape sequence representations. (See Table 4-4.) Whenever numeric values are required, they are represented in ASCII rather than in binary.

Note that if the Use form named by style field in the Paper and Forms menu is set to Yes, the DEF escape sequence \$(PGSw,h,F) appears in the DEF file. If the *Define form named by style* field is set to Yes, the DEF escape sequence \$(PGSw,h,M) appears in the DEF file. If both of these fields are set to No, then \$(PGSw,h) is generated.

For a detailed discussion on escape sequences, see "DEF Escape Sequences," earlier in this section.

Escape Sequence	Format Action	
\$(PGli)	Set column number. Subsequent text resides in column number i.	
\$(PGSw,h)	Set page width, represented by w , and height, represented by h . Both entries are required. Units can be either 240ths of an inch or 1440ths of an inch, as explained in "Units of Measurement," earlier in this section.	
\$(PGMI,r,t,b)	Set the page margins. These are represented by I (left margin), r (right margin), t (top margin), and b (bottom margin). All four entries are required.	
\$(PGHh,f)	Set the page header and footer margins. The header margin is represented by h , and the footer margin is represented by f . The header margin is measured relative to the top edge of the paper, and the footer margin to the bottom edge of the paper. Units can be either 240ths of an inch or 1440ths of an inch, as explained in "Units of Measurement," earlier in this section.	

Table 4-4. DEF Page Escape Sequences

Escape Sequence	Format Action		
\$(PGNfa,fo,n)	Set the page attributes. These will set facing pages (<i>fa</i>), forced pages (<i>fo</i>), and page number (<i>n</i>). The value for facing pages (<i>fa</i>) can be Y or N , where Y means facing pages are true. The value for forced page (<i>fo</i>) can be		
	 Y Static page N Floating page O Odd static page E Even static page C Serpentine column S Synchronized or serpentine area mark 		
	Page number (<i>n</i>) determines the actual page number only if one of the three types of forced page breaks (<i>Y</i> , <i>O</i> , or <i>E</i>) has been set.		
\$(PGAn)	Set current page number to <i>n</i> .		
\$(PGFn)	Set forced footnote number. Subsequent footnotes are numbered starting at number <i>n</i> .		
\$(PGOn)	Set section number for page. <i>n</i> specifies the section number used.		
\$(PGSw,h,F)	Use form of specified width and height with the page style name.		
\$(PGSw,h,M)	Page defines montage of specified width and height of the page style name.		
\$(PGSw,h)	Indicates width and height of the page.		
\$(FHn)	Set the footnote height for the page to <i>n</i> . This is the maximum amount of space that can be occupied by footnotes on this page. Any footnote material exceeding this amount will be contained on subsequent pages.		
\$(FCY)	Footnote continuation text in footnote body on.		
\$(FCN)	Footnote continuation text in footnote body off.		
\$(FTY)	Footnote reference text in footnote body on.		
\$(FTN)	Footnote reference text in footnote body off.		
\$(Bln)	Set sheet feeder bin number equal to n. Valid numbers are 1, 2, and 3.		

Table 4-4. DEF Page Escape Sequences (cont.)

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Escape Sequence	Format Action Set headers for odd pages to the <i>n</i> th additional text definition. The number <i>n</i> indexes into the set of all additional text for the document as defined by the \$(DH) format escape sequence. (See "Additional Text Escape Sequences," later in this section.)		
\$(HOn)			
\$(PGCsyn,c,fr<,fr>)	Set column attributes. These set the type of columns (synchronized or serpentine), the total number of columns, the column widths, and distances between columns. Synchronized/serpentine value (<i>syn</i>) is either:		
	 Y Synchronized columns N Full page serpentine columns M Partial page serpentine columns 		
	The total number of columns (<i>c</i>) is the actual number of columns, with a maximum of 10.		
	The fr values specify the margins of each column, where the first fr value is the right margin of the first column, the second fr value is the left margin of the second column, the third fr value is the right margin of the second column, and so on until the left margin of the last column. The total number of fr values is $(c-1)^{2}$; there must be an even number of fr values.		
	The fr value represents a fraction of the text width, given in the current unit of measure.		
	Example: If a page has three synchronized columns, and the first column ends 1 inch from the left edge of the paper, the second begins at 2 inches and ends at 3 inches, and the third begins at 4 inches and ends at 5 inches, the escape sequence would read \$(PGCy,3,240,480,720,960)		
	(assuming the unit of measure is 240ths of an inch).		
\$(PGCN,1)	Sets the number of columns to one.		

Table 4-4. DEF Page Escape Sequences (cont.)

Escape Sequence	Format Action		
\$(PGPp,s)	Set page and section numbering systems for page. <i>p and s</i> specify the type of numbering system for page and section numbers, respectively, with the following values:		
	 Arabic Uppercase roman Lowercase roman Uppercase alphabetic Lowercase alphabetic 		
\$(QJL)	Set job stacking left.		
\$(QJR)	Set job stacking right.		
\$(QL)	Set landscape printing.		
\$(QN)	Set portrait printing.		
\$(HEn)	Set headers for even pages to the <i>n</i> th additional text definition. The number <i>n</i> indexes into the set of all additional text for the document as defined by the \$(DH) format escape sequence. (See "Additional Text Escape Sequences," later in this section.)		
\$(HBn)	Set headers for both odd and even pages to the <i>n</i> th additional text definition. The number <i>n</i> indexes into the set of all additional text for the document as defined by the DH format escape sequence. (See "Additional Text Escape Sequences," later in this section.)		
\$(FEn)	Set footers for even pages to the <i>n</i> th additional text definition. The number n indexes into the set of all additional text for the document as defined by the \$(DH) format escape sequence. (See "Additional Text Escape Sequences," later in this section.)		
\$(TMn)	Set table of contents template. <i>n</i> is additional text location of template description.		
\$(FOn)	Set footers for odd pages to the <i>n</i> th additional text definition. The number n indexes into the set of all additional text for the document as defined by the (DH) format escape sequence. (See "Additional Text Escape Sequences," later in this section.)		

Table 4-4. DEF Page Escape Sequences (cont.)

Escape Sequence	Format Acti	on		
\$(FBn)	Set footers for definition.	Set footers for both odd and even pages to the <i>n</i> th header or footer tex definition.		
	The number <i>n</i> document as c "Additional Te	indexes into the set of all additional text for the defined by the \$(DH) format escape sequence. (See xt Escape Sequences," later in this section.)		
\$(VRN)	No rule betwee	en columns.		
\$(VRS)	Single rule bet	Single rule between columns.		
\$(VRD)	Double rule be	Double rule between columns.		
\$(PBY)	Box page.	Box page.		
\$(PBN)	Box column ar	Box column area.		
\$(BA)	Box page or column area.			
	The box DEF of parameters: \$	The box DEF escape sequences can represent a number of parameters: \$(BAri,rj,rk,rl,c,f,f,m)		
	r	Can be <i>N</i> (none), <i>S</i> (single rule), or <i>D</i> (double rule) The four <i>r</i> values are for the left, right, top, and bottom rules, respectively.		
	i	Left rule offset (numeric measurement).		
	j -	Right rule offset (numeric measurement).		
	k	Top rule offset (numeric measurement).		
	I	Bottom rule offset (numeric measurement).		
	С	Color. Can be 0 (Black), 1 (Red), 2 (Green) 3 (Blue) 4 (Yellow), 5 (Violet) 6 (Orange)		
	f	Can be N (none), Q (quarter-tone), H (half-tone) or S (solid). The two f values are for the box and the double ruling, respectively.		
	m	Rule separation (numeric measurement).		

Table 4-4. DEF Page Escape Sequences (cont.)

Document Escape Sequences

All OFIS Document Designer document formats have corresponding escape sequence representations. (See Table 4-5.) Whenever numeric values are required, they are represented in ASCII rather than in binary. For a detailed discussion on escape sequences, see "DEF Escape Sequences," earlier in this section.

Escape Sequence	Format Action		
\$(PFY)	Print footnote on each page.		
\$(PFN)	Don't print footnote on each page.		
\$(KSY)	Keep unreferenced styles.		
\$(KSN)	Don't keep unreferenced styles.		
\$(WY)	Start widow/orphan control. Indicates that widows have been eliminated during pagination of this document.		
\$(WN)	Stop widow/orphan control.		

Table 4–5. DEF Document Escape Sequences

Additional Text Escape Sequences

Additional Text escape sequences are distinct from other format specifications. These specify the array at the end of the document that contains the text for headers, footers, objects, and footnotes. The same characteristics apply to headers, footnotes, and footer text. (See Table 4-6.) This escape sequence specifies the beginning of a piece of additional text that appears within the headers, footers, or footnotes as defined per page. (See "Page Escape Sequences," earlier in this section.) The text contained within a header specification begins after the Define Header escape sequence and continues until the next Define Header escape sequence (or the end of the file). The first occurrence of a Define Header escape sequence signifies the end of the body text portion of a document. All Define Header escape sequences must be contiguous. The text within a header text definition can itself contain DEF escape sequences. These can be either character escape sequences, paragraph escape sequences, or special escape sequences. Page escape sequences are allowed in footnotes only; header escape sequences delimit header text.

Escape Sequence	Format Action
\$(DH)	Define additional header/footer text. The text includes that which follows the header escape sequence up to, but not inclusive of, the next header escape sequence (or the end of the file).

Table 4-6. DEF Additional Text Escape Sequences

Special Character Escape Sequences

Special character codes represent characters not easily interpreted by normal text. Included among the special character codes are New Paragraph and New Page. These special escape sequences signify the start of a new paragraph or page and also apply any new paragraph or page formats as defined by the paragraph or page escape sequences. (See Table 4–7.)

Note that the \$(SOn) DEF escape sequence is used to represent text characters outside the ASCII range in DEF. This DEF escape sequence is not recognized by the Word Processor or OFIS Writer, so if it is selected as the target, text characters outside the ASCII range are output literally. This may make DEF output incompatible with certain transmission media.

For more information, see "Escape Sequences for Special Characters," earlier in this section.

Escape Sequence	upe Jence Format Action	
\$(CPn)	Cross-reference to paragraph number. [The target paragraph is indicated by DEF escape sequence \$(CR4,n); \$(CR0,0) turns this off.]	
\$(SA)	\$ Since the \$ character indicates an escape sequence, it is indicated by the escape sequence \$(SA) when it occurs in text.	
\$(SB)	<i>New paragraph</i> . Begin a new paragraph and set any new paragraph format attributes defined for a new paragraph.	
\$(SC)	<i>New page</i> . Begin a new page and set any new page format attributes defined for a new page.	
\$(SD)	Page number symbol (#). Arabic is the default format.	
\$(SE)	Discretionary line break.	
\$(SF)	Nondiscretionary space. (Also known as a required space.)	
\$(SG)	Discretionary hyphen (optional hyphen).	
\$(SH)	Discretionary Return.	
	There is no such character as a discretionary Return in OFIS Document Designer. This is included for compatibility with other word processing systems.	
\$(SI)	Nonbreaking hyphen (also known as a required hyphen).	
\$(SJ)	Roman page number symbol (i).	
\$(SK)	New area mark. Begin synchronized or serpentine text and set any format attributes defined for a new area mark.	
\$(SS)	Section number symbol.	
\$(SOn)	Character with high-order bit on. n is an ASCII character.	
\$(OB)	Begin object.	
\$(IOn)	Index of the object associated with the current header. This must appear immediately after a DH code.	
\$(SP)	Stop code.	
\$(SQ)	Next page number symbol.	
\$(UMn)	Sets the unit of measurement for subsequent DEF escapes to <i>n</i> . Supported values for <i>n</i> are 240 and 1440. The value 240 is assumed initially.	

Table 4-7. DEF Special Character Code Sequences

Style Control Escape Sequences

The DEF escape sequences in Table 4–8 define or apply styles. A Define Style DEF escape sequence indicates that the current DEF attributes (defined by prior DEF codes) defines the format attributes of a named page, paragraph, and/or character style. An Apply Style DEF escape sequence indicates that the text that follows has a named page, paragraph, and/or character style.

For a detailed discussion on how DEF interacts with style control, see "DEF Escape Sequences and Style Control," earlier this section.

Escape Sequence	Format Action
\$(DSAN)	Don't apply DEF styles.
\$(DSAY)	Apply DEF styles.
\$(DSCx)	Define character style named x.
\$(ASCx)	Apply character style named x.
\$(DSPx)	Define page style named x.
\$(ASPx)	Apply page style named x.
\$(DSRx)	Define paragraph style named x.
\$(ASRx)	Apply paragraph style named x.

Table 4-8. DEF Style Control Sequences

Translating Documents to and from DCA Format

The OFIS DCA/DEF translation package is a document exchange utility that converts a native document (a document created in OFIS Document Designer or other word processing programs) into Document Content Architecture (DCA) format. DCA format allows these documents to be viewed and edited using Unisys PCs, OFIS Manager, and OFIS Link 1100. This utility translates only text portions of word processed documents to and from DCA format.

Notes:

- 1. The OFIS/DCA DEF translation package is a separate utility that must be installed on your system. For more information, see the DCA documentation.
- 2. Some types of formatting can be lost during the translation process due to the differences in Word Processor formats.

OFIS Document Designer automatically converts a word processed document into DEF format before converting it to DCA format. Conversely, when you translate a document from DCA, OFIS Document Designer automatically unDEFs the document. (The OFIS DCA/DEF translation package accessed from the Executive command line does not automatically DEF the document.)

Because the translation process occurs in foreground memory, you must wait until the translation is complete before continuing to work with the document. To translate a document to or from DCA format within OFIS Document Designer, follow the steps below:

1. If you have the Softkey interface, press **Home (F1)**, if necessary. Then, press **Files (F5)**, and **DCA (F9)**. The DCA Translation menu is displayed, as shown below.

If you have the Menu interface, press **CODE-F7**; then, press **R** for DCA RFT Translation. The DCA Translation menu is displayed, as shown below.

DCA Translation___

Press GO to	execute, NEXI	for next item, CANC	EL to dismiss
Document name:			
[DCA file name]			
Direction:	To DCA	From DCA	(Press T or F)
DCA form:	Final form	<u>Revisable form</u>	(Press F or R)

Figure 4–3. DCA Translation Menu

2. In the Document name field, type the name of the document.

When translating to DCA, you can specify native documents or DEF documents in the *Document name* field.

- 3. In the DCA file name field, type the DCA file name.
- 4. In the *Direction* field, accept the default (press **T**, if necessary) if you are translating to DCA. If you are translating from DCA, press **F**.

Note that when translating from DCA, the output will be in the native form.

Only the text portions of a document can be translated.

5. In the DCA form field, press \mathbf{F} if you want the document to be translated to or from DCA in a read-only or noneditable form. (In this form, the document can only be viewed or printed.)

Accept the default (press \mathbf{R} , if necessary) if you want the document to be translated to or from DCA and remain editable.

6. Press GO.

Section 5 Troubleshooting

Problems Starting OFIS Document Designer

As a system administrator, you are responsible for identifying and correcting OFIS Document Designer problems that may arise. This section describes some possible problem situations and their potential solutions.

Cannot Start OFIS Document Designer

After installing OFIS Document Designer, you can't access it. The problem may be that you haven't installed the Generic Print System (GPS), version 2.0 or higher. This software contains the Font Service, which you must have to run OFIS Document Designer.

After installing GPS, reboot the system.

Can't Start OFIS Document Designer Because Directory X Does Not Exist (Error 204)

You try to open OFIS Document Designer and get a message saying that directory x does not exist. First, you should create a <\$> directory from the Executive. OFIS Document Designer stores temporary files in <\$> directories.

Then, if you are using a pre-CTOS/VM version of the operating system, you should check to see if the existing <\$> directories are contiguous (numbered sequentially). Issue a Volume Status command in the Executive and specify Y in the *Include temporary directories* field. If the <\$> directories skip a number, create that <\$> directory. For example, if the directories are \$001, \$002, \$004, and \$005, you would create the directory \$003.

Next, you need to create the missing directory. For example, if the <Dd> directory was deleted from a user's system, you would get the following error message when you give the **d d** command from the Executive:

Unable to open file [SCR]<dd>user.ts

Application error: No such directory (Error 204)

If it is clear which directory is missing, create that directory. If it is not clear, verify that all the directories required by OFIS Document Designer are present on the user's workstation.

Directory Full (Error 202)

Error code 202, *Directory Full*, is displayed when a user signs on to OFIS Document Designer. If this occurs, there are probably too many files in a <\$> directory. When OFIS Document Designer is installed, it needs to create some temporary files in a <\$> directory.

Use the Delete command to delete files in the user's <\$> directories. See "Cleaning Up," in Section 3, for more information on deleting temporary files.

OFIS Document Designer and Temp. Filter

If you set up OFIS Document Designer to run from an SRP server workstation that is running CTOS version 3.2 or earlier and *Temp.filter*, you must do either of these two procedures:

- Install *Temp.filter* so that the *temp*. directory is on the [Sys] volume, or
- Sysgen so that the [Scr] volume is the volume where the *temp*. files are directed.

Problems Using The Dictionary Commands

When trying to use a Dictionary command in OFIS Document Designer, the following problems may arise.

Not Enough Memory to Run the Spelling Checker

If this is the problem, try the following:

- 1. Close some documents and/or perform a Save or Finish and try again; this may free enough memory to use the Spelling Checker.
- 2. If the user is using Context Manager, increase the partition size.
- 3. Increase the amount of memory (RAM) on the workstation, if possible.
- 4. Increase available memory by deinstalling some system services.

Thesaurus Feature Will Not Load

This problem usually occurs when the software required to use the Thesaurus is not in the *Wp.CorrectS* dictionary run file.

To correct this problem, you can do the following:

- 1. Make sure either the Wp.CorrectM or the Wp.CorrectL run file is loaded in the [Sys]<Sys> directory or in the directory specified by the :OFDDDictionary: entry in a user's user file. (For more information on the :OFDDDictionary: entry, see "Description of User File Entries," in Section 1.)
- 2. Close all documents but one; issue a Save or Finish command, and try to use the Thesaurus again.
- 3. If one of the larger dictionary run files is loaded in the user's dictionary directory and he or she is using Context Manager, use the CM Config File Editor to allocate more memory to the OFIS Document Designer partition.
- 4. If one of the larger run files is loaded in the user's directory and he or she is not using Context Manager, increase the amount of memory (RAM) on the workstation, if possible.

Problems Integrating Objects

When attempting to integrate objects into a document, the following problems may arise.

Can't Integrate Objects Into OFIS Document Designer

Create a *DdConfig.sys* file or edit the *CmConfig.sys* file. See "Using Cooperating Programs," in Section 1, and the *CTOS Context Manager Manual* for procedural information.

No Object, No Error Message

After returning from another application program to OFIS Document Designer, there is no object and no error message. There are three possible explanations:

- 1. The application program terminated abnormally or exited due to an error.
- 2. The user mistakenly deleted the object before exiting.
- 3. The user indicated that he or she wanted nothing returned to OFIS Document Designer.

Multicontext Mode Functions Like Chaining Mode

If you set up the Context Manager Configuration file for multicontext mode, but OFIS Document Designer functions as if in chaining mode, either the Inter-Context Message Server (ICMS) is not installed, or the Context Manager or loadable request file is configured incorrectly. This causes OFIS Document Designer to default to the Chaining Configuration file. If the Chaining Configuration file is set up correctly, OFIS Document Designer performs a Save before a user enters the application. To resolve this problem, determine if ICMS and Context Manager are running. Both must be installed and running in memory for OFIS Document Designer to operate in multicontext mode. The Partition Status command in the Executive shows you which programs are currently running in memory. Also, confirm the following:

- 1. The Context Manager request file (*Request7.sys*) was installed in the [Sys]<Sys> directory.
- 2. On a CTOS/VM system, make sure the request file was merged with [Sys]<Sys>request.sys.
- 3. The workstation in question has been booted since the request file was installed in that directory.

For information on how to install ICMS and the Context Manager Configuration file, see "Setting Up Multicontext Mode," in Section 1, or see the current release documentation for the Context Manager.

Unable to Enter An Application

When trying to enter a particular application, the following error message may be displayed:

There are no object editors specified in your configuration file

This means one of two possible problems exists:

- One of the following two fields was not specified in the correct configuration file: :OFDObjectEdited: or :DDObjectEdited:
- The system is not in the expected mode (multicontext or chaining).

A system operates in multicontext mode if the Context Manager Request file is installed and the Context Manager and ICMS are running. If any of these conditions is not met, the system is in chaining mode.

When the system is in multicontext mode, OFIS Document Designer looks in the configuration file the Context Manager is using for applications that have either the :OFDObjectEdited: or :DDObjectEdited: field. To determine which configuration file Context Manager is currently using,

- 1. Press ACTION-GO to bring up the Context Manager screen.
- 2. Press CODE-HELP.

The current Context Manager Configuration file is displayed.

When in chaining mode, OFIS Document Designer looks in the Chaining Configuration file for applications that have either the :OFDObjectEdited: or :DDObjectEdited: field. The Chaining Configuration file is whatever file is named in the :OFDDConfigFile: entry in a user file. If there is no :OFDDConfigFile: entry, the Chaining Configuration file defaults to [Sys]<Sys>DdConfig.sys.

When you start OFIS Document Designer, it looks for the :OFDObjectEdited: or :DDObjectEdited: field in the appropriate configuration file for the mode (chaining or multicontext) in which it is operating. If this field is not present (because the system is not in the expected mode), if the entry in the field is misspelled, or if the :OFDObjectEdited: or :DDObjectEdited: entry is in the wrong file, OFIS Document Designer displays an error message that includes the name of the file where it looked for the entry.

Swap File Not Large Enough

If the system is running in multicontext mode and the swap file is not large enough to hold OFIS Document Designer or an application program, the user receives error 12097; an error message is displayed indicating that the swap file is too small. To enlarge the swap file, see the current release documentation for the Context Manager and the *CTOS Context Manager Manual*.

Cannot Access Operator Statistics

If you cannot access a user's operator statistics, check the following,

- 1. Make sure you are specifying the correct file volume, directory, and name of the Operator Statistics file.
- 2. Make sure that the *OpStatsOFD.run* file is in the *[Sys]<Sys>* directory.
- 3. Make sure there is a valid :OFDDStatistics: entry in the user file.
- 4. If all of the above conditions are met, it may be that the Operator Statistics file has just been deleted. If this is the case, wait until the user goes through another OFIS Document Designer session and issues a Save command; then try to access operator statistics again.

Miscellaneous Problems

Also, one or more of the following problems may arise with an OFIS Document Designer installation.

Installed Wrong Interface

If you installed the wrong interface by mistake, you can set up OFIS Document Designer to run with the desired interface by editing the CM Configuration file. For information on how to do this, see "Setting the OFIS Document Designer Interface," in Section 1.

Corrupt Phrase Files

If phrases do not execute because they are corrupt, you must restore the phrase file from the backup tape or floppy disk. If one phrase is corrupt, the other phrases do not work properly either.

Accidental File Deletion

If a file is accidentally deleted during an OFIS Document Designer session, press **ACTION-FINISH** to exit OFIS Document Designer; then perform a recovery of the session. (**ACTION-FINISH** does *not* save the work. Otherwise, this would be saving the accidental file deletion.) Cancel the recovery prior to the point where the file was accidentally deleted. Note that any work performed later in the session *is lost*.
If a user accidentally deletes a file while working in the Executive, the -old file can be renamed to the current file name. (Any edits entered subsequent to the last Save operation will not be in the -old file, of course.) For more information on this procedure, see "Recovering," in Section 3, "Maintaining OFIS Document Designer."

Memory Low

The following message may suddenly be displayed on the screen during an OFIS Document Designer session:

Memory low. Please save.

If this message occurs frequently and Context Manager is running, refer to the *CTOS Context Manager Manual* for information on enlarging partitions.

Cannot Print

The Generic Print System (GPS), version 2.0 or higher must be installed on the workstation to print with OFIS Document Designer. The Printer Status display may show the following message on the screen:

Not in Service

If this is the case, see the CTOS Generic Print System Administration Guide for information on GPS.

Cannot Use WYSIWYG Screen Feature

To use the WYSIWYG screen feature, the Screen Font Database software or Scaling Font Service and the correct hardware must be installed. (The Screen Font Database and the Scaling Font Service are separate products from GPS or OFIS Document Designer.)

Make sure that the Font Service has been installed on the workstation with the runtime Screen Font Database or that the Scaling Font Service has been installed with the Scaling Font Database. Refer to the Screen Font Database release documentation and the *CTOS Generic Print System Administration Guide* for more information.

Also, make sure the user has a high resolution monitor.

Glossary

<\$> directories

Directories that store temporary and scratch files during an OFIS Document Designer session. CTOS/VM provides enough <\$> directories for your needs. On a multipartition CTOS system, you may have to create additional directories.

A

active document

The document that contains the cursor.

anchor character

The character or space in a document that identifies the location of an object or a voice annotation.

application

Any program or service used directly by an end user, for example, Enhanced or Extended Multiplan.

application system

Any application configured to run with OFIS Document Designer.

aspect ratio

The relationship between the height and width of an integrated object. If one side of an object is made larger or smaller, the other side is also made larger or smaller to maintain the correct proportion.

attribute

See format attribute.

В

background printing

When you print in background, your document is closed and you can do other work. *See also* foreground printing.

base-to-base spacing

The distance between the bottom of one line of text and the bottom of the next line of text.

box and rule

An OFIS Document Designer feature used to draw lines and boxes around paragraphs, column areas, pages, and objects.

BTOS

A workstation operating system. See also CTOS.

С

centered text

Text that is centered between the right and left margins.

chaining mode

A mode of operation that uses an OFIS Document Designer configuration file to pass objects back and forth between OFIS Document Designer and other applications. If OFIS Document Designer is not set up for multicontext mode, it automatically operates in chaining mode. In chaining mode, a Save operation is performed each time an object is transferred to or from OFIS Document Designer. See also multicontext mode.

change bars

Vertical lines printed at the right margin to indicate changes made to text. Change bars are available through the redlining feature.

character

Any number, letter, or symbol in your text. Any character can be used as an anchor character, voice annotation, record start, field start, or cross-reference target.

character string

A group of contiguous characters. Any characters that can appear on the screen can be included in the string.

column break

A dashed line or a line of colons that indicates the beginning or end of a serpentine column. Column breaks may be floating (moved as necessary by OFIS Document Designer during pagination) or static (associated with that point in the text until you delete the column break).

command menu

The menu that is displayed when OFIS Document Designer requires you to supply information before it executes a command. The menu is made up of fields for which you supply the requested information.

Context Manager

A software product that works with the operating system to allow you to run several applications on your workstation at once. Using Context Manager, you can quickly switch from one application to another.

cooperating programs

Application programs that have the ability to pass objects to and from other application programs.

cross-reference

An entry made in a document to refer a reader to another page. See also page reference; target reference.

CTOS

A workstation operating system. CTOS is also an umbrella term encompassing all varieties of the BTOS, CTOS, and CTOS/XE operating systems.

current document

The document within which the cursor is positioned.

current paragraph

The paragraph where the cursor is positioned.

current version

In redlining, the latest version of a document.

current window

The window that contains the cursor. Editing operations affect the document in the current window.

cursor

A moveable, visual symbol displayed on the screen that indicates where the next operation will occur. *See also* ruler display cursor; shadow cursor.

D

daisy wheel printer

A character printer that uses interchangeable metal and plastic print wheels to print several types and sizes of characters. Daisy wheel printers usually produce letter quality printing.

DCA

See Document Content Architecture.

DEF

See Document Exchange Format.

default value

The value that is assumed when no other value is specified.

deinstallable server

A server program, such as a modem server, that is loaded into and out of memory as needed.

delimiter

A character that is used to separate and organize a string of data, but is never part of the string.

directory

A collection of related files on one volume. A volume is divided into one or more directories. *See also* volume; file.

disk

A magnetic storage unit for computer-readable information. Most workstations have a hard disk permanently installed that can store large amounts of data. You can also use floppy disks to store data.

Document Content Architecture (DCA)

A file translation utility that converts a native document (a document created in OFIS Document Designer or other word processing programs) into DCA format. DCA format allows these documents to be viewed and edited using Unisys PCs, OFIS Manager, and OFIS Link 1100.

Document Exchange Format (DEF)

The program that allows OFIS Document Designer to exchange documents between itself and other systems. The DEF program translates a document or another application file into a format that can be used by OFIS Document Designer; or it translates OFIS Document Designer files into a format that can be used with other word processing systems.

document status line

The line that divides the main text area of the screen and the ruler display. It displays the name of the document, the current page number, and the distance of the cursor from the top of the page.

dollar sign directories

See <\$> directories.

dotted box

A grid of dots that represents a graphic object (or objects) in your document.

down-offset

The distance between the top of an object and the top of the text-at-bay box.

Ε

embedded phrase

A phrase name that has a special attribute assigned to it.

exceptions

Text that has been formatted with style control and then formatted by means other than style control. For example, if you apply italics to a word that has been styled with nonitalic, the italic text is an exception. *See also* partially styled text.

Executive

An application that serves two vital functions on a workstation: (1) It performs a variety of utilities, such as copying, deleting, and renaming files. (2) It is the CTOS command interpreter that passes parameter values to other utilities and applications.

F

facing page attribute

An attribute that causes the margins on even pages to "mirror" the margins on odd pages.

field

A specified area in a menu in which instructions can be given. A field is either a blank (to be filled in) or a choice of options.

In list processing, each field represents a specific item in a record, such as a person's first name, last name, address, and so on.

field start character

Identifies a field within a record. There can be any number of fields in a record. See also records; record start character.

file

A set of related records treated as a unit. All the documents you create are stored on disk as files.

float

The default position for newly-created text-at-bay boxes. The text-at-bay box is placed one line below its assigned anchor character.

floating page break

Page breaks that are automatically inserted as you type at the end of a page or when you paginate (review or print) a document. *See also* static page break.

flush left

See left-flush text.

flush right

See right-flush text.

font

Consists of all characters (uppercase and lowercase) of one size of one particular typeface. (For example, 12 point Times bold.)

Font Database

A set of files that contain the information needed to format, display, or print documents in multiple fonts. *See also* Screen Font Database.

font family

The overall design of type, including all point sizes and type styles of that design.

footer

One or more lines of text that print at the bottom of each page of a document.

footnote

Used for the acknowledgment of borrowed material, for notifying the reader of the source of statements or quotations, for the presentation of explanatory or supplementary material not appropriate to the text, and for cross-references to other parts of a work.

footnote reference

A character inserted into a document to indicate the number and position of a footnote.

forced page number

A page attribute that specifies a number for a particular page. This number is the first in an automatic page numbering sequence for subsequent pages.

forced paragraph number

A specific number applied to an outline or table of contents heading.

foreground printing

When you print in foreground, your document stays open on the screen and you cannot perform any other tasks on your workstation. *See also* background printing.

form document

In form processing, the document that contains the text and stop codes required by the user to complete the form. *See also* form processing; stop codes.

In list processing, the form document contains the structure into which records are entered from the records file.

form processing

An OFIS Document Designer feature that is used to create predefined forms. Other users can copy these forms and customize them according to their needs.

format attribute

A characteristic that can be applied to a character, paragraph, or page of text that changes the shape or appearance of the text. For example, boldface text, fonts, paragraph indents, and page length are all format attributes.

Format Set file

A format file that can set three default formats: one for text processing and two for programming formats.

format status line

The status line at the top of the ruler display on the screen. It shows the current attributes, font style, and point size of the character at the cursor position.

format symbols

Symbols that indicate paragraphs, tabs, spaces, line breaks, cross references, and voice annotations. You can see format symbols by changing the visibility mode of the screen. (Format symbols are not displayed in printed documents.)

full-visible mode

One of the three modes of visibility on the screen. When the screen is in full-visible mode, you can see all the special characters and format symbols that are visible in half-visible mode *plus* tab stops, required backspaces, and other symbols. *See also* half-visible mode; normal-visible mode.

function key

One of the ten keys, labeled F1 to F10, in the top row of the typewriter pad of the keyboard.

function key display

See softkey strip.

G

Generic Print System (GPS)

A set of software programs that provide printing services for applications using the CTOS operating system. GPS manages all communications between your workstation and the printers attached to it.

graphic object

An object created by a graphics-producing application, for example, a pie chart or picture.

Η

half-bright

A characteristic of screen display. When text appears in half-bright intensity it usually means that some format attribute has been applied to text that cannot be shown on the screen. Also, special characters, such as anchor characters and page and target references appear in half-bright intensity.

half-visible mode

One of the three modes of visibility on the screen. When the screen is in half-visible mode, you can see certain special characters and format symbols, such as paragraph symbols, line feeds, anchor characters, and the dots that represent spaces in text. *See also* full-visible mode; normal-visible mode.

hanging indents

A type of indentation where all lines are indented except for the first one. Hanging indents, which are also called other line indents, are handy if you want to set off text or create a list with numbers or special characters.

header

One or more lines of text that can be printed at the top of each page of a document.

heading

A word or phrase within a document that introduces a body of text below it. Also used to refer to a paragraph that has been assigned a heading level attribute.

heading level attribute

A paragraph attribute assigned to a document heading. The table of contents template generates a completed table of contents based on the heading level attributes assigned to the headings in a document.

high-speed graphics

A visibility mode where graphics are visible in medium resolution.

high-quality graphics

A visibility mode where graphics are visible in their highest resolution.

highlight

See selection.

I

ICMS

See Inter-Context Message Server.

indent

The setting for the left, right, first line, or other line margin of each paragraph. Indentation is a paragraph format attribute. When you indent text, you make the paragraph margins narrower or wider; your actual page margins are still in the same position. Indents are not the same as margins and are stored by OFIS Document Designer internally

Index Builder

An OFIS Document Designer feature that is used to build an index automatically.

index term list

The list of terms for which the Index Builder finds document occurrences and page numbers.

input statistics file

A system-generated file that contains operator statistics.

insert mode

The mode in which characters typed from the typewriter pad of the keyboard are inserted into a document. The characters are inserted just before the cursor. The cursor, and any characters on the line to the right of it, move to the right. OFIS Document Designer is in insert mode when the light on the **OVERTYPE** key is off. See also overtype mode.

integrated object

See object.

Inter-Context Message Server

The server that facilitates communication between application systems configured to run with OFIS Document Designer.

J

justified text

Text that is aligned at both the right and left margins.

Κ

Keep Together

A paragraph attribute that keeps text selections together during pagination to avoid bad page breaks.

keyword

In list processing, the symbolic field name (defined in the template record of the records file) that represents the actual data to be merged into the form document. A keyword cannot have embedded spaces. A keyword used in a form document must also have the merge keyword format attribute applied to it.

In a user file, the keyword is the name of a user file option.

L

landscape page

A page that is wider than it is long.

laser printer

A non-impact printer that produces high-resolution output.

leader dots

A series of dots that precede text. Leader dots are generally used in tables of contents and are set from the Tabs menu.

leading

The white space between lines in a paragraph.

left-flush text

Text is aligned at the left margin. (Left-flush text is also known as "ragged right.")

left-offset

The distance between the left side of an object and the left side of the text-at-bay box.

lexicon file

A dictionary file containing most standard entries provided with OFIS Document Designer software.

line spacing

Determines the number of blank lines between and within paragraphs.

list processing

An OFIS Document Designer feature that is used to perform merge and sort/select operations. With the merge operation, you can automatically merge personalized records, such as names and addresses for a mailing list, into a standard form letter. With the sort/select operation, you can select and/or sort records alphabetically or numerically.

literal keystroke

An ASCII character that can be inserted into text in place of the key it represents. For more information, see the CTOS Procedural Interface Reference Manual, Volume 4.

loadable request files

Files that come with a system service that must be installed for the system service to work with OFIS Document Designer.

locked

Refers to the state of being "locked in" to OFIS Document Designer and denotes an application system that is started by OFIS Document Designer and put on hold until OFIS Document Designer returns to it.

Μ

macro

A series of keystrokes that are stored for later recall.

macro commands

Commands created specifically for use in macros.

macro file

A machine-readable file that stores all macros.

margins

The distance between the text and the edges of the paper.

mark

When you mark a character or block or characters, it is highlighted in reverse video. Certain operations can be performed on marked text, such as formatting, moving, copying, and deleting.

menu

A list of various command options, from which you can make a choice. When you select an option, OFIS Document Designer may display an additional form for you to complete, or it may execute the command immediately.

Menu interface

An OFIS Document Designer interface in which commands are chosen from menus. The menus are displayed by pressing set key combinations.

merge document

In list processing, the document into which data from a records file is merged during a merge operation. *See also* records file.

mnemonics

In form processing, the single letters or numbers that are used to identify text when filling in the Form Fill Choices menu.

monospaced font

A font in which all the characters (letters, numbers, punctuation, and so on) are the same width.

multichoice stop codes

See stop codes.

multicontext mode

A mode of operation that uses the Context Manager to pass objects back and forth between OFIS Document Designer and other applications. Transfers are made via a swap file or an enlarged memory partition. See also chaining mode.

Ν

Name.user file

See User Configuration file.

nonbreaking hyphen

A hyphen used to keep text that contains hyphens together on a line.

nonbreaking space

A space used to keep words together on the same line or to keep spaces from changing when you align text.

normal-visible mode (also called normal mode)

On of the three modes of visibility on the screen. When the screen is in normal-visible mode, no formatting attributes or format symbols are visible. The screen is always in normal mode when you begin each session. *See also* half-visible mode; full-visible mode.

0

object

Anything created in another application and inserted into an OFIS Document Designer document. An object can be a spreadsheet, a graph, or a picture. *See also* graphic object; text object.

object boundary

The box that touches an integrated object.

object number

A unique identifying number assigned to every type of object passed to and from OFIS Document Designer. Each application system set up in a configuration file has an object number associated with it. When a transfer between OFIS Document Designer and an application takes place, the object number informs OFIS Document Designer of the type of object to pass and the type of object to receive.

object type

See object number.

OEM dictionary

See optional shared dictionary.

OFIS Document Writer

A word processing application that is functionally equivalent to OFIS Document Designer in all respects except display. OFIS Document Writer cannot display graphical objects or WYSIWYG fonts.

operator statistics

Operator statistics is an optional OFIS Document Designer feature that records information about a user's activities during an OFIS Document Designer session.

optional hyphen

The hyphen used to hyphenate words at the end of a line. If at a later time text is edited and the break is no longer required at the end of the line, the optional hyphen doesn't appear.

optional shared dictionary

An optional dictionary (also known as an OEM dictionary) that is created by a user and shared by other users in the cluster. The optional shared dictionary contains words that do not appear in the standard OFIS Document Designer dictionary.

optional space

The space used at the end of a line to split words that normally wouldn't split, such as *and/or*. If at a later time text is edited and the space is no longer required at the end of the line, the optional space doesn't appear.

orientation

The position of a text-at-bay box on the left or right side of the page is referred to as its orientation.

other line indents

See hanging indents.

outline level attribute

A paragraph attribute assigned to a heading that is part of an outline. It is used in outline processing to collapse and expand outlines.

outline processing

An OFIS Document Designer feature that is used to automatically create outlines.

output statistics file

An optional editable file that contains the results of the Operator Statistics operation.

overtype mode

The mode in which characters typed from the typewriter pad of the keyboard replace (rather than insert) characters in a document. You can move the cursor and type characters exactly as you do in insert mode, but every character typed replaces the existing one (if any) at the cursor position. OFIS Document Designer is in overtype mode when the light on the **OVERTYPE** key is on. See also insert mode.

Ρ

page break

A dashed or double dashed line displayed on the screen that indicates the end of a page when it is printed. Page breaks may be floating (moved as necessary by OFIS Document Designer during pagination) or static (associated with that point in the text until you delete the page break).

page number symbol

The symbol that is displayed as a half-bright number sign (#) on the screen; it is replaced with the appropriate page number when the document is printed.

page reference

In cross-referencing, the place where the reference to related information is made. *See also* target reference.

paragraph

Any group of characters after and including a paragraph symbol.

paragraph numbers

Outline numbers applied to paragraphs with the Heading Level menu. *See also* forced paragraph number.

partially styled text

Text that has been formatted with style control and then formatted by means other than style control. For example, if you apply italics to a word that has been styled with nonitalic, the italic text is partially styled text. See also exceptions.

partition

A reserved portion of workstation memory. Context Manager creates a partition large enough to hold each application program when one application is passing objects to another.

pattern

A combination of wild card characters that are used in certain command parameters of OFIS Document Designer to designate file specifications. OFIS Document Designer acts on all files that match the pattern. *See also* wild card character.

personal dictionary

An optional dictionary that is created by a user. The personal dictionary contains words that do not appear in the standard OFIS Document Designer dictionary.

phrase

A group of characters and the associated formatting that are stored together and that can be recalled later into other documents.

pitch

The width of a character (in characters per inch) of a font.

point

A measurement of 1/72 inch. The height of type is measured in points, for example, 10 point type.

portrait page

A page that is longer than it is wide.

R

ragged right

See left-flush text.

record start character

The character that identifies a new record. Each record has one record start character.

records

In list processing, a set of related entries (for example, names and addresses) that are divided into fields. Each new record is identified by a record start character. Each new field is identified with a field start character. See also field start character; record start character.

records file

In list processing, a text document containing a list of records, each of which contains zero or more fields. The contents of a records file can be sorted and/or selected during sort/select operations, and are merged with a form document during a merge operation. *See also* form document.

recovery

An operation that allows the replay of keystrokes from the session that preceded a system failure.

redlining

An OFIS Document Designer feature used to track revisions to a document. You can compare one version of a document with another, or view revisions made by specific authors.

reserved keyword

Words predefined by OFIS Document Designer for specific purposes. They must possess the Keyword attribute. The four reserved keywords, *date, ldate, sdate*, and *time*, when expanded, are replaced with the information they contain.

response text

In form processing, text that a user enters in response to stop code prompts.

review

An OFIS Document Designer operation that paginates a document, verifying and adjusting page breaks and page numbers. It also activates systems functions for hyphenation, footnote placement and numbering, and table of contents generation.

right-flush text

Text that is aligned at the right margin.

ruler display

The display that occupies the top two lines of the screen and is used for setting tabs, indents, and margins. It is divided into units that represent inches on the page. The ruler display may vary according to the pitch of the text displayed.

ruler display cursor

See shadow cursor.

S

Scaling Font Service

A set of files that has all the capabilities of the standard Font Service but provides a wider selection of fonts and sizes. The Scaling Font Service is used in place of the standard Font Service. This means that only one of the two services can be installed on the same system.

Screen Font Database

A font database that includes fonts for screen display. See also Font Database.

section number symbol

A half-bright symbol (§) that is placed in the text to mark a section number. OFIS Document Designer inserts a section number wherever it finds this symbol in the text.

selection

A contiguous block of characters highlighted in reverse video, on which certain operations can be performed (such as formatting, moving, copying, and deleting).

serpentine column

Text that flows from column to column across the page from the bottom of one column to the top of the next.

serpentine column mark

A half-bright line that identifies the width and position of serpentine columns.

server

Describes the workstation or shared resource processor that controls resources within a cluster. It replaces the term *master*, which was used in earlier documentation.

shadow cursor

The cursor in the ruler display that is used to set tabs and indents; it is also used to locate the exact position of the text cursor.

sheetfeeder

A device that feeds single sheets of paper into a printer.

sheetfeeder bin

Refers to a paper supply location on a sheetfeeder or a paper cassette on a laser printer.

single keystroke macro

A macro that can be recalled by pressing the **CODE** key in combination with another key, or another alphabetic key plus the **SHIFT** key. For example, **CODE-SHIFT-X**.

single prompt stop codes

See stop codes.

Softkey interface

An OFIS Document interface in which menus and commands are pathed to by pressing various softkeys.

softkey strip

A group of 10 boxes that show the current softkey name of each function key. The softkey strip is displayed at the bottom of the screen in the Softkey interface.

softkeys

Function keys in the Softkey interface that change functionality depending on the order in which they are pressed. *See also* softkey strip.

sorting

See list processing.

spooled printing

Printing that uses a queue system to transmit the contents of a file to a printer. With spooled printing, workstations in a cluster can print to a locally attached printer or to printers attached to other workstations in the cluster system.

status message

A message that appears at the bottom line of the screen to inform you of a particular occurrence within the system.

stop codes

In form processing, the symbols that OFIS Document Designer uses to prompt the user for information. Single prompt stop codes display only one response; multichoice stop codes display several possible responses.

static page break

Page breaks that you insert manually when you want to start a new page at a specified point. *See also* floating page break.

string

See character string.

style

A collection of formatting commands collected under a single name and applied with the Apply Style command.

style book

A collection of styles stored in the style library. The styles in a style book work together to create a particular type of document, for example, a newsletter.

style control

A method of applying text-formatting commands automatically.

style definition

The particular formatting commands contained in a style. The style definition is independent of the style name. For example, you could have two documents each using the same style names but with different style definitions.

style library

A directory, usually [Sys]<Stylebooks>, containing style books. A style book is a collection of styles that work together to create a particular type of document, such as a newsletter.

style name

The name of a character, paragraph, or page style. By applying a style name to text, you can apply several different formatting commands at once.

subscript

A character format attribute that specifies that characters be printed below the normal line of text.

superscript

A character format attribute that specifies that characters be printed above the normal line of text.

swap

To exchange application systems in memory. See also swap file.

swap file

A file set up through the Context Manager that allows OFIS Document Designer and an application to be "swapped" in memory (if the available memory is not large enough to hold both programs at once).

synchronized columns

Columns that are aligned with each other side by side on the page. Text is kept within the column, despite page breaks, until a new column is started. The new column is aligned with the beginning of the first column.

synchronization mark

A half-bright line that indicates the top and width of each synchronized column and is only visible when the screen is in half-visible or full-visible mode.

Т

tab

A point in the ruler display that you set to hold text at a specified position on the page. You can format text into columns using tabs.

tabular rule

A vertical rule drawn in a paragraph. The tabular rule is applied through the Tabs menu.

target reference

In cross-referencing, the location in a document of related information. *See also* page reference.

template

In OFIS Document Designer, a model used to automatically generate a table of contents from your document. You enter into it the attributes, line spacing, margins, and indentation that you want inserted into the finished table of contents; the template generates a table of contents from the heading level attributes in your text.

template document

A file containing preset format attributes that you specify. These formatting attributes are used for all new documents you create.

template record

In list processing, the first record in a records file. It defines the record.

text cursor

See cursor.

text object

An object created by a text-producing application system, such as a spreadsheet.

text-at-bay box

The box that surrounds an integrated object and keeps the text away from the object.

thesaurus

An OFIS Document Designer feature that finds synonyms for words in your document.

type style

Refers to the appearance of a character. There are four type styles in the OFIS Document Designer: normal (often called roman), bold, italic, and bold italic.

typescript files

Files created during an OFIS Document Designer session that contain a record of all changes made to a document during that session.

U

underlining

A character attribute that affects words only or words and spaces; it can be a single line or a double line under selected text.

uneditable attribute

An attribute that doesn't allow a specified range of text to be edited.

unprintable attribute

An attribute that doesn't allow characters to be printed. Also, except for **SHIFT-RETURNS** and paragraph symbols, characters assigned the unprintable attribute do not take up space when printed.

unstyled text

Text that has had no style applied to it.

User Configuration file

A file used to uniquely identify each user to the system. It contains user-specific parameters used by application programs. The file is [Sys]<Sys>UserName.user, where UserName is a unique name to be used at signon. This file is also referred to as a user file, user profile file, or Name.user file.

user file

See User Configuration file.

user profile file

See User Configuration file.

V

variable function key

See function key.

variable line spacing

Line spacing that is given a specific value in lines, points, or inches when using the Font menu or the Line Spacing menu.

vertical tabs

Tabs used to hold paragraphs to specific lines on a page.

voice annotation

A voice file inserted into a document and linked to an anchor character. Voice annotations are often used to store messages, comments, and verbal corrections to a text. Voice annotations can be saved, replayed, moved, copied, and deleted.

volume

A disk that has been formatted and initialized to store files. It may be a hard disk or a floppy disk.

W

WYSIWYG

Stands for "What You See Is What You Get" and is pronounced "wizzywig." A monitor with the WYSIWYG capability allows you to see how your document will look when it is printed. That is, the monitor displays fonts, point sizes, line spacing, and word spacing.

widow

A line of text that is separated from the rest of a paragraph because it cannot fit on the current page. They also occur when there is room for only the first line of a paragraph on the current page.

wild card character

A character entered into certain command parameters of OFIS Document Designer that instructs it to search for all file specifications that match the entry, except for the wild card character. Where a wild card character appears, all matches are considered valid. OFIS Document Designer recognizes two wild card characters: the asterisk (*), which specifies all matches of zero or more characters, and the question mark (?), which specifies a match of exactly one character.

window

An area of the screen in which one of several documents is displayed.

window tab

The highlighted strip that forms the top boundary of each secondary window. The window tab shows the number of the page being displayed and the distance of the cursor from the top of the page.

wordwrap

Refers to the automatic movement of the cursor to the next line when it reaches the right margin.

Index

-new files, 3-2 to 3-3, 3-7 -old files, 3-2, 3-6 'CommandName' 1-13 :GPSDefaultPrinter:, 1-12 :OFDDAuthorName:, 1-13 :OFDDConfigFile:, 1-7 :OFDDDefaultPrinter:, 1-12 :OFDDDictionary:, 1-7 :OFDDForceForegroundPrint:, 1-8 :OFDDFtntSeparation:, 1-15 :OFDDLineUnit:, 1-8 to 1-9 :OFDDMacroFile:, 1-9 :OFDDMeasurementUnit:, 1-10 :OFDDMessageFile:, 1-8 :OFDDPersonalDictionary:, 1-11 :OFDDPhraseFile:, 1-12 :OFDDStatistics:, 1-11 :OFDDStyle book:, 1-14 :OFDDStyleDir:, 1-14 :OFDDStyleNode:, 1-14 :OFDDStylVol:, 1-14 :OFDDTemplateDocument:, 1-14 to 1 - 15:OFDDTypescriptFile:, 1-15 :SignOnChainFile:, 1-13 :SignOnExitFile:, 1-13

A

Art Designer object number, 1-26

В

background printing, 1-8 BTOS Draw object number, 1-26

С

chaining configuration file, 1-7 chaining mode, 1-7, 1-20, 1-24 setting up, 1-28 Chart Designer object number, 1-26 codes, DEF (See Document Exchange Format) command case values, 1-2 user file entry, 1-13 Command name field, 1-2 Context Manager CM Config File Editor, 1-1 to 1-2, 1 - 20modifying, 1-26 conventions, xix cooperating programs, 1-20 to 1-21 troubleshooting, 5-4 to 5-6 core lexicon, 1-18 correcting typographic errors, 1-19

D

DCA (See Document Content Architecture) DEF (See Document Exchange Format) default printer, specifying, 1-12 deleting files. 3-7 to 3-9 dictionaries, 1-16 to 1-19 (See also thesaurus) core lexicon, 1-18 correcting typographic errors. 1-19 files, 1-17 run files, 1-18 suffixes, 1-17 OEM, 1-16 to 1-17 optional shared, 1-16 to 1-17 personal, 1-16 user file entry, 1-11 problems, 5-3 shared, 1-16 user file entries, 1-7, 1-11 **Document Content Architecture** (DCA), 4-35 to 4-36 **Document Exchange Format** (DEF), 4-1 to 4-34 escape sequences, 4-10 to 4-34 additional, 4-13 to 4-15, 4-31 to 4-32 character, 4-12, 4-18 to 4-21 document, 4-31 page, 4-12, 4-26 to 4-30 paragraph, 4-12, 4-21 to 4-25 recognized by OFIS Document Designer, 4-17 to 4-18 special characters, 4-13 to 4-15, 4-32 to 4-33 style control, 4-15 to 4-16, 4-34 units of measurement, 4-11 format processing, 4-12 to 4-13 overview. 4-1 to 4-3 translating OFIS Document Designer files, 4-6 to 4-8, 4-9 translating other word processor files, 4-4 to 4-6 using with other applications, 4-9 to 4-10

document files, 3-1 documentation, related, xvii to xviii dollar sign <\$> directory files, 3-3

Ε

Enhanced Multiplan object number, 1-26 errors (*See also* troubleshooting) corrections suggested by dictionary, 1-19 escape sequences, DEF (*See* Document Exchange Format, escape sequences) exchanging documents (*See* Document Exchange Format; Document Content Architecture) Extended Multiplan object number, 1-26

F

features, new, xv files -new, 3-2 to 3-3, 3-7 -old, 3-2, 3-6 <\$> directory, 3-3 cleaning up, 3-7 to 3-9 deleting, 3-7 to 3-9 document, 3-1 macro, 3-3 Operator Statistics, 3-3 personal dictionaries, 3-3 phrases, 3-3 temporary, 3-3 typescript, 3-2 floppy disks caring for, 3-9 to 3-10 using, 3-9, 3-10 footnote separation line file entry, 1-15 foreground printing, 1-8

G

Generic Print System (GPS) default printer, 1-12

Η

Help text file entry, 1-8

ICMS (See Inter-Context Message Server) Image Designer object number, 1-26 integrating objects, troubleshooting, 5-4 to 5-6 Inter-Context Message Server (ICMS), 1-20, 1-25 modifying, 1-26 interface, setting, 1-1 to 1-2 multiple interfaces, 1-2 user file entry, 1-13

Κ

keystrokes, storing, 1-15, 3-2

Μ

macro file entry, 1-9 main lexicon, 1-18 measurement units, specifying, 1-8 to 1-9, 1-10 Menu interface, setting, 1-1 to 1-2 multicontext mode, 1-20, 1-21 to 1-23 setting up, 1-24 to 1-27

Ν

new features, xv

0

object numbers, 1-26 adding object edited entry, 1-27 OEM dictionaries, 1-16 to 1-17 OFIS Graphics object number, 1-26 OFIS Imager object number, 1-26 OFIS Paint object number, 1-26 OFIS Spreadsheet object number, 1 - 26**Operator Statistics**, 2-1 to 2-6 accessing from the Executive, 2-4 to 2-5 from OFIS Document Designer, 2-3 to 2-4 deleting, 2-6 file entry, 1-11 installing, 2-2 troubleshooting, 5-7 optional shared dictionaries, 1-16 to 1 - 17Output field, in Document Exchange menu, 4-8

Ρ

partitions, 1-21 to 1-22 personal dictionaries, 1-16 user file entry, 1-11 phrase file entry, 1-12 prefixes, in user configuration file, 1-4 printing background, 1-8 foreground, 1-8 problems (*See* troubleshooting)

R

recovering, 3-5 to 3-7 using -new files, 3-7 using -old files, 3-6 redlining, file entry, 1-13 related documentation, xvii to xviii

S

saving, 3-4 shared dictionaries, 1-16 signon chain file entry, 1-13 signon exit file entry, 1-13 Softkey interface, setting, 1-1 to 1-2 user file entry, 1-13 style book file entry, 1-14 style control and DEF escape sequences, 4-8, 4-15 to 4-16, 4-34 swapping, 1-22 to 1-23

Т

Target field, in Document Exchange menu. 4-7 template document file entry, 1-14 thesaurus, 1-19 translating documents (See **Document Exchange Format: Document Content** Architecture) troubleshooting, 5-1 to 5-8 dictionary, 5-3 integrating objects, 5-4 to 5-6 miscellaneous problems, 5-7 to 5-8 multicontext and chaining modes, 5-4 to 5-6 OFIS Document Designer, 5-1 to 5-2**Operator Statistics**, 5-7 typescript file entry, 1-15, 3-2 typographic error correction, 1-19

U

User Configuration file (See user file) user file creating, 1-5 entries, 1-3, 1-6 to 1-15 (See also individual listings) prefixes, 1-4 to 1-5 keywords, 1-4 sample, 1-6 user name, 1-3

W

WYSIWYG mode, setting, 1-1 to 1-2

NOTES

NOTES

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