



OV/Fax

Version 2 Release 4.2

Installation and Customization Guide

OV/Fax Installation and Customization Guide

Copyright

© Copyright 1995-2021 by TBS Software Inc.
All Rights Reserved.

The software described in this publication is furnished under license and may be used or copied only in accordance with the terms of the license agreement.

Trademarks

Product names may be trademarks or registered trademarks of their respective owners.

OS/390® and z/OS® are registered trademarks of IBM Corporation.

Other company, product, and service names may be trademarks or service marks of others.

Edition Information

September 2021

This edition applies to Version 2 Release 4.2 of OV/Fax. It also applies to subsequent releases until otherwise indicated in new editions.

Inquiries may be directed to:

TBS Software Inc.

2201-278 Bloor St E.
Toronto, ON
Canada
M4W 3M4

Phone: 905 940-9373

Fax: 905 940-9376

Web: www.tbssoft.com

eMail: support@tbssoft.com

Page Break

Table Of Contents

TABLE OF CONTENTS	IV
FIGURES	XI
INTRODUCTION	1
Purpose of this Guide	1
Audience for this Guide	1
Prerequisite Environment.....	1
Host Software.....	1
PC Software	1
PC Hardware	2
How this Guide is Organised	2
Other Manuals you may need	3
SYSTEM OVERVIEW.....	5
ABOUT THIS RELEASE	6
Change History	6
Version 2.4.1	6
Version 2.4.0.....	6
Version 2.3.0.....	7
Version 2.2.1	7
Version 2.2.....	8
Version 2.1.0.....	8
UPGRADING FROM PREVIOUS RELEASES.....	11
Unload the New Libraries.....	11
Update the CICS tables.....	11
Update the CICS PPT	11
Update the CICS PCT.....	13
Update the CICS FCT.....	14
Update the Control File.....	14
Upgrading from Version 2.3.0	14
Upgrading from Version 2.2.0 and below	15
Migrating the Outbound Request File.....	17
Migrating the Address Book File.....	18
Migrating the Server File	20
Redefining the Log File	21
Installing and customising the Utility Programs.....	22
OV/Fax Version 2.3.0 Program Temporary Fixes.....	22
OV/MVS Fastpath Amendments	23

PART ONE - INSTALLATION.....	25
UNLOADING OV/FAX.....	25
Unloading the INSTALL library	25
Unloading remaining datasets.....	26
Tailoring the JCL library	27
CREATING THE OV/FAX SYSTEM FILES.....	29
FAXOUTP - The Out-tray file.....	30
FAXOUTC - The Inbound confirmations out-tray.....	31
FAXLOGS - The Log File.....	32
FAXOT - The Outbound request file.....	33
FAXSCOD - The Fax Nickname file.....	34
FAXSERV - The Server file.....	35
FAXIN - The Inbound Request File	36
FAXCNTL - The Control File	37
UPDATING CICS FOR OV/FAX.....	38
COBOL Language Support.....	39
CICS Table Updates	39
File Control Table (FCT).....	39
Program Control Table (PCT)	41
Program Processing Table (PPT).....	44
Post-initialisation Table (PLTPI).....	47
Job Control Language (JCL).....	47
Resource Control Table (RCT).....	47
Terminal Control Table (TCT)	48
DEFINING THE OFFICEPATH INTERFACE REQUIREMENTS.....	49
Outbound fax definitions for OfficePath	50
Inbound fax definitions for OfficePath.....	53
Setting up OfficePath for inbound confirmations.....	53
Setting multiple OfficePath out-trays	54
DEFINING THE RAPID INTERFACE REQUIREMENTS	56
DISOSS HUP definitions.....	56
The RAPID Control File.....	59
Inbound fax definitions for RAPID	62
UPDATING THE UTILITY PROGRAM FOR OV/FAX.....	64
INSTALLATION CHECKLIST	64
INSTALLATION VERIFICATION	65

Defining a fax server.....	65
Sending a test fax	68
PART TWO - CUSTOMIZATION.....	71
CONTROL FILE MAINTENANCE	71
Parameter Data Types	72
RECORD PARAMETER DEFINITIONS	73
CONFIGURATION DEFINITION RECORDS	75
CONF0 - PF Key Usage	75
CONF1 - OV/MVS Option Numbers	75
CONF2 - Status Text	76
CONF3 - Commands	77
CONF4 - Operating Parameters.....	78
CONF5 - Fax Number Defaults and Scheduling	83
CONF6 - EAB Parameters.....	84
CONF7 - Document Scanning.....	86
CONF8 - Signature and 'To:' Strings	86
CONF9 - OV/MVS Dataset Definitions.....	87
EBASC - EBCDIC to ASCII Conversion.....	88
PRESENTATION CONTROL RECORDS	89
MAP1 - OV/Fax Menu	89
MAP2 - CICS Sign-On	89
MAP3 - User Profile Maintenance	89
MAP4 - Address Books	90
MAP5 - Status Selection.....	91
MAP7 - Status of Fax Requests	91
MAP8 - Result of Send Request	92
MAP9 - Fax Status Information Selection.....	92
MAPA - Server Status List	93
MAPB - Server Information	93
MAPC - List Server	94
MAPD - Fax Information.....	95
MAPE - Inbound Status	96
MAPG - Status of Fax Address	96
MAPH - Help.....	97
MAPM - Inbound Status.....	98
MAPN - Inbound Recipient Status	98
KEYS - Function key text.....	99
HELP - Help text	99
MESSAGE RECORDS	102

MSG - Screen Messages	102
DMSG - Status Messages	103
OMSG - Transmission Messages.....	103
EMSG - Error Messages	103
USER ACCESS CONTROL	104
USER Record.....	104
DID - Direct Inbound Dialling.....	104
DEFER.....	105
SETTING UP THE NUMBER ROUTING ENTRIES.....	106
Structure of numbers in OV/Fax.....	106
Setting up Number Routing Records	107
Catering for long-distance calls (US)	110
Using a Wide Area Telephone System (WATS or PABX)	111
Actions taken when servers are unavailable	112
STD.....	112
REPORT HEADINGS	115
RMSG - Report Headings.....	115
INSTALLING USER EXITS FOR OV/FAX	115
Installing the user-exit for PS/CICS	115
Linking the user-exit to PS/CICS	115
Modifying the PS/CICS Dialog Processor Table.....	116
Changing the main-menu to show the user-exit description.....	117
Changing the PS/CICS Help Panels	117
Configuration of the fax user exit	117
Installation with OfficeVision/MVS.....	119
RECEIVING FAXES FROM OV/FAX	119
The role of the spill-operators.....	119
Viewing inbound faxes in DisplayWrite/370	120
PART THREE - CUSTOMER REPLACEABLE MODULES.....	123
ACCESSING YOUR OWN DIRECTORY FILES	123
THE PASSWORD VALIDATION EXIT.....	125
PART FOUR - OTHER CONSIDERATIONS.....	129
CUSTOMISING CICS NAMES	129

NATIONAL LANGUAGE SUPPORT.....	129
MRO/ISC CONSIDERATIONS	130
OV/Fax in a different region from OfficePath or RAPID	130
Using the on-line system in a remote region	131
Using OV/Fax with multiple Personal Services families	132
Using OV/Fax with the Enterprise Address Book.....	133
ACCESSING ON-LINE FACILITIES FROM ANOTHER APPLICATION	133
Using the SIB Interface.....	134
APPENDICES.....	135
APPENDIX A. INSTALLING THE UTILITY PROGRAMS	135
Introduction.....	135
Step 1. Unload the libraries.....	135
Step 2. Check the release of IMIPSDET	137
Step 3. Define the Utility Programs System File.....	137
Step 4. Update CICS for Utility Programs.....	138
PPT Entries	138
PCT Entries.....	138
FCT Entries.....	138
CICS JCL.....	138
Step 5. Initialise the Utility Programs System File.....	138
APPENDIX B. CUSTOMISING UTILITY PROGRAMS	140
Changing the CICS table entries.....	140
Updating the Utility Programs configuration records in batch.....	140
Control Mode	142
Supplied Configurations	142
Record Parameter Definitions.....	142
Parameter Data Types.....	142
/GCID.....	143
/UPPER.....	143
/SYSTEM.....	144
GCID table names.....	144
Maintaining the Utility Programs configuration records in CICS	145
Record Types	145
Invoking The Maintenance Program	146
Maintaining System Records	146
Maintaining Product Records	147
Maintaining Security Code Records.....	149
APPENDIX C. OV/FAX MODULES WHICH USE UTILITY PROGRAMS.....	151

APPENDIX D. CODE PAGE 500 CHARACTERS.....	153
APPENDIX E. LANGUAGE CODES	155
Personal Services Language Codes	155

Figures

1. [Sample JCL for the migration of the outbound request file](#)
2. [Sample JCL for the migration of the address book file](#)
3. [Sample JCL for the migration of the server file](#)
4. [Contents of the distribution tape](#)
5. [Example JCL to unload the INSTALL library from tape](#)
6. [Example JCL to unload the OV/Fax Libraries](#)
7. [JCL to tailor the JCL Library](#)
8. [JCL to initialise the Out-tray file](#)
9. [JCL to initialise the confirmations out-tray file](#)
10. [JCL to initialise the Log file](#)
11. [JCL to initialise the request file.](#)
12. [JCL to initialise the shortcode file](#)
13. [JCL to initialise FAXSERV](#)
14. [JCL to initialise FAXIN](#)
15. [JCL to run control file utility program](#)
16. [FCT Updates](#)
17. [FCT Updates in RDO Format](#)
18. [PCT Updates](#)
19. [PCT Updates in RDO Format](#)
20. [PPT Updates](#)
21. [PPT Updates in RDO Format](#)
22. [Start-up Table Updates](#)
23. [CICS DD statements for OV/Fax](#)
24. [RCT Table Updates](#)
25. [Sample HUP user definitions for OV/Fax](#)
26. [Sample HUP userset definition for OV/Fax](#)
27. [Interface record definition in RAPID for OV/Fax](#)
28. [User record definition in RAPID for OV/Fax](#)
29. [Interface record definition in RAPID for OV/Fax confirmations](#)
30. [User record definition in RAPID for OV/Fax confirmation](#)
31. [Destination record definition in OfficePath for OV/Fax](#)
32. [User record definition in OfficePath for OV/Fax](#)
33. [Userset record definition in OfficePath for OV/Fax](#)
34. [Destination record definition in OfficePath for OV/Fax confirmations](#)
35. [Intray record definition in OfficePath for OV/Fax](#)
36. [The OV/Fax Sign on panel](#)
37. [The administration suite main menu](#)
38. [The server list panel](#)
39. [The server information panel](#)
40. [Number routing configuration](#)
41. [Routing results with configuration](#)

42. [Number routing configuration](#)
43. [Routing results with configuration](#)
44. [Number routing configuration](#)
45. [Routing results with configuration](#)
46. [Number routing configuration](#)
47. [Routing results with configuration](#)
48. [Number routing configuration](#)
49. [A sample number routing record for WATS numbers](#)
50. [CONF1 record as supplied in FAXCTL2](#)
51. [User CLIST for viewing inbound faxes](#)
52. [The user sign-on panel](#)
53. [The password validation commarea.](#)
54. [OV/Fax installed remotely from OfficePath](#)
55. [OV/Fax used with two Personal Services transaction families \(1\)](#)
56. [Contents of the distribution tape](#)
57. [Example JCL to unload the libraries from tape](#)
58. [JCL to define the IMIPSFIL file](#)
59. [Example JCL for the IMIPSCTL program](#)
60. [ZAP to rename the IMIPSDET module](#)
61. [Example JCL for the IMIPSCTL program](#)
62. [Panel showing list of records available](#)
63. [Panel showing a system record](#)
64. [Panel showing a product record](#)
65. [Panel showing products with authorisation codes](#)
66. [Panel showing a product's authorisation codes](#)

Introduction

Purpose of this Guide

This guide contains the information required to install, initialize and tailor OV/Fax from the distribution tape or data cartridge.

Audience for this Guide

This guide is designed for use by the systems programmer responsible for the installation and support of CICS-based application software. It assumes a prior knowledge of CICS table administration procedures and VSAM file creation.

Prerequisite Environment

Host Software

The successful implementation of OV/Fax requires the prior installation of the following host software products:

- CICS/ESA Version 3.2.1 or above
- VS COBOL II Run Time Library Rerlease 3 (5668-958) or later
- Either

DISOSS Version 3.3 or later

TOGETHER WITH

- or
 - RAPID Version 3.3 or later
- or
 - OfficePath version 1.1 or later
- or
 - OfficePath/SMTP-Send Release 3 or later

PC Software

The server components of OV/Fax require the following minimum levels of software:

Server version 2.4.0

- IBM PC DOS Version 3.3 or MS-DOS equivalent
- GammaFax Version 4.2.2, as supplied with the board

- 3270 emulation software such as IBM Personal Communications/3270 Version 1.1 supporting EHLLAPI (together with the IBM LAN Support Program, if a Token-Ring connection is being used)

Server version 3.2.0

- Windows NT 3.5
- GammaLink GDK Release 5
- 3270 emulation software such as IBM Personal Communications supporting EHLLAPI.

PC Hardware

The OV/Fax server requires the following hardware:

- Intel Architecture PC capable of running MS-DOS or PC-DOS or Windows NT 3.5 or later
- Either
 - ◆ Ethernet or
 - ◆ a Token-Ring card (if that type of connection to the host is being used)

one or more GammaFax boards (CP-type, such as CP, CPi, or DTI)

If Direct Inward Dialing is being used, a GammaFax CPD board will be required (together with CP-type boards for outbound capability).

How this Guide is Organised

This guide is divided into five parts:

Installation	shows you how to install OV/Fax and to check that the installation has been successful. It deals with only the mainframe component of OV/Fax. The <i>OV/Fax Server Guide</i> gives all the necessary details for the installation and customisation of the PC element of the product.
Customisation	provides information on those facilities which may be customised, and how to customise them.
Customer Replaceable Modules	explains how to replace some of the OV/Fax modules with your own code.
Other Considerations	describes National Language Support and Multi-Region Operation.

Appendices describe the Utility Programs, and provide additional useful information about the product.

Other Manuals you may need

There are five volumes that accompany the OV/Fax system software:

- The *OV/Fax Installation and Customisation Guide*, which explains how to install and customise the host components of the OV/Fax system.
- The *OV/Fax Administration Guide*, which gives details of the on-line system available to fax administrators. These allow administrators to maintain the shared fax address book, view the system logs, monitor server queues, and authorise users to send faxes. The manual also includes details on the periodic cleandown jobs provided.
- The *OV/Fax User Guide*, which gives details of the on-line system available to the ordinary fax user. It describes the fax address books, and gives instructions on how to monitor the log of faxes which have been sent. The manual also gives guidance on how to create and address documents and notes which are to be sent as faxes.
- The *OV/Fax Server Guide*, which describes the installation of OV/Fax software on the fax server(s). Full details are given concerning the administrative functions available on the server, including status monitoring and the creation of cover sheets and images to be imbedded in outbound faxes.
- The *OV/Fax Reference and Problem Determination Guide*, which provides additional information on how OV/Fax works, including program descriptions and transaction flows. Information for determining the cause of problems is also provided.

System Overview

OV/Fax allows faxes to be sent and received by users on an IBM mainframe. It increases their efficiency by cutting out the time traditionally spent in printing a document, walking over to the fax machine, operating the machine, and so forth.

OV/Fax also ensures that the user has a consistent method for the creation and sending of documents, regardless of whether the documents are distributed internally or sent as faxes.

The link between the user and OV/Fax is provided either by DISOSS with Keane Ltd's RAPID, or by Keane Ltd's OfficePath product.

The user can create notes, documents and messages in the usual way, and then send them to OV/Fax, which completes the link between the user and the GammaFax card. The transmission of the fax is carried out by the GammaFax card, which is installed in an IBM PC. The PC uses standard 3270 emulation software to communicate with the host. OV/Fax therefore has two software components, one of which resides on the mainframe. The other component can be installed on each PC that is to be used as a fax server.

Documents created on a PC may also be sent as faxes if the optional Keyword PostFAX software is installed on the servers. This supports many popular word processor formats.

Inbound faxes are collected by the GammaFax card, and passed up to the host as RFT documents with embedded images. Once on the host, the fax will be delivered to the in-basket of up to four 'spill-operators', who will be responsible for viewing the fax, and then forwarding it to the correct recipients. Each fax server in the system may have its own spill-operators, or a single default spill-operator may be used.

If Direct Inward Dialing (DID) is being used in conjunction with a GammaFax CPD board, faxes are mailed direct to the intended recipient on the basis of the extension number dialed.

OV/Fax has two components:

- Outbound fax facility
- Inbound fax facility

The outbound facility may be installed without the inbound facility.

About this Release

If you are installing OV/Fax for the first time, you may skip this chapter and proceed to the next. This chapter is for the guidance of those who are upgrading to the latest release from an older one.

Change History

Version 2.4.1

This release incorporates changes necessary for OV/Fax to function correctly in the year 2000 and onwards. Internally, dates are stored as 7 digits, including a century indicator (previously always 0). Dates on panels are treated as having years in the range 1985-2084. Modifications have been included to allow OV/Fax to be used in conjunction with IBM's Application Support Facility, which replaces the Application Services component of OV/MVS. In order for OV/Fax to detect the century CICS/ESA V3.2.1 or later is required.

Note: When migrating from Application Services to ASF, ensure that the CONF9 record on the OV/Fax control file is correctly updated.

In addition a modification has been made to avoid the possibility of CICS going short on storage when a large number of faxes are requeued from one server to another.

The COBOL II run time library (release 3 or later) is now required by OV/Fax in order to interface with the utility programs.

Note: The changes made in this release do not affect the server, therefore the Server manual remains at version 2.4.0.

Version 2.4.0

This section outlines the changes introduced in this modification of OV/Fax.

1. Support for the OV/MVS GIL has been reintroduced, for user authorisation, cover sheet and CSID details.
2. The OV/Fax Address Books now support the use of an alternate number when the primary number fails all its retries.
3. Servers may be set to a paused status, allowing existing faxes to be processed but no new ones will be added to the server's queue.
4. Full multi-lingual support for the SIGNATURE string is now provided.
5. A 'find' function has been added to the Fax Status List, allowing searches for specific fax requests.
6. The cleandown programs now support additional parameters to control the cleandown process and select the type of report produced.

7. The protocol used between the host and server has been improved to reduce the 3270 traffic and time spent checking the requests on the server.
8. Commands may be placed within fax numbers to override the baud rate used to transmit the fax, and to specify if a standard resolution fax is to be generated.
9. Up to 10 search strings may now be specified for use in the document scanning modules, to identify fax recipients.
10. Cover sheets may now be selected from within the fax.
11. PC Files containing word-processor format documents are now supported, if the optional Keyword PostFAX software is installed on the servers.

Significant changes have also been made to the server software. These are documented in the *OV/Fax Server Guide*. The most important change is the replacement of the conversion software used to generate the faxes. OV/Fax now includes its own conversion software, improving the quality of the faxes and providing many new formatting features.

Version 2.3.0

This section outlines the differences between this release of OV/Fax and its predecessor, Version 2.2.1

1. The parameter table has been replaced by a number of records on the control file.
2. Confirmation and rejections can now be sent to the originator as notes, documents or messages.
3. OV/Fax now uses the Utility Programs to obtain details for the office system. Such details as date format, language, RAPID/OfficePath program names, and error log names are obtained from this utility.
4. An on-line user profile maintenance option has been added.
5. The use of function keys to add and delete items has been changed to commands entered on the command lines.
6. Multi-lingual support has been added.
7. The document scanning routines have been enhanced.
8. OV/Fax now support multiple administrators.

Version 2.2.1

This section outlines the differences between this release of OV/Fax and its predecessor, Version 2.2.0

1. In order to assist with verification of installation when OV/Fax is not used in conjunction with an Office System, a test transaction (FAXT) has been added.
2. The JCL required to submit a test fax from batch has been added.
3. Sample source code and JCL has been added to assist users coding applications to send faxes.
4. Outbound faxes may be sent without cover sheets, to reduce the conversion and transmission times.

Version 2.2

This section outlines the differences between this release of OV/Fax and its predecessor, Version 2.1.0

1. Two new scanning modules have been added to the system, which perform a similar function to the note-scanning module FAXNOTSC. These two modules are used to scan the first lines of RFT or print-image documents respectively, in order to store information on the sender's name, the fax number being sent to, and the recipient name.
2. An inbound fax may be routed to between one and four different recipients. These recipients are defined on the FAXSERV record for the fax server which received the fax. They will be ignored if Direct Inward Dialling is being used (see below).
3. The inbound side of the system now requests confirmation of delivery from DISOSS or OfficePath when mailing an inbound fax.
4. The inbound log-file browse panels have been expanded to show the delivery status of each of the recipients of the fax.
5. Support is provided for the GammaFax CPD board (available only in the USA) when connected to a DID trunk line (Direct Inbound Dialling). DID ordinarily provides a facility whereby telephone calls can be routed directly to an extension without switchboard intervention. If a GammaFax CPD board is used with a DID line, it is capable of passing the unique addressing digits to OV/Fax, which will use a table stored on the mainframe FAXCNTL file to decide which user should receive the fax.
6. Some minor enhancements have been made to the Number Routing system to reduce the number of control file records required.
7. It is now possible to re-send a fax. In other words, if a fax has been sent to the wrong number, it is possible to amend the name and number fields on-line, and to send the result out as a new fax. The original fax may then be cancelled. The same facility may be used to send copies of the original fax to additional addresses.
8. The system will format the date on 'background' messages according to the format used by the CICS system (US or European). All dates displayed on terminals will continue to be formatted according to the US Date format flag on the OV/Fax control record for the terminal.
9. The PLT program FAXL010 is now an assembler program. This has been done to ease customisation.

Version 2.1.0

The following section outlines the differences between Version 2.1.0 of OV/Fax and its predecessor, Version 1.4.0.

1. Contains a new version of the note scanning routine. This is performed by means of a new module, FAXNOTSC, which loads in the Personal Services Note customisation table. This means that all the old note scanning fields which were present on the parameter table for Version 1.4.0 are no longer necessary.

2. Allows messages to be sent from the Office System, resulting in one-page faxes.
3. A new panel has been provided which gives the user more information about the status of his current faxes. This panel includes:
 - Cover sheet and CSID used
 - Fax reference number
 - Number of times the fax has been re-scheduled
 - Error messages and codes that may have been generated.
4. A slight modification has been made to the least-cost routing. In Version 1.4.0, a fax may have been routed to, let us say, one particular server, based on the country code and area code of the fax number to be dialled. If this chosen server was closed, then the fax would automatically be routed to any other available server: this could cause problems if the substitute server were in a different country from the one originally chosen. Version 2.1.0 allows you to suppress this automatic re-routing, so that the fax stays queued to the chosen server until it becomes available again.
5. The new version allows the user to specify font and line-pitch changes within his document. This is achieved by inclusion of a simple command between the familiar @/...@/ symbols.
6. This version allows the user to send his faxes in landscape format. This is achieved by inclusion of a simple command between the familiar @/...@/ symbols.
7. Support is given to the Enterprise Address Book

Upgrading from Previous Releases

There are a number of steps required to upgrade from a previous release:

1. Unload the new libraries.
2. Update the CICS tables, if necessary.
3. Update the OV/Fax control file.
4. Migrate the OV/Fax Outbound Request file.
5. Migrate the OV/Fax Address Book file.
6. Possible migration of the OV/Fax Server file.
7. Possible redefinition of the OV/Fax Log file.
8. Installation and customisation of the Utility Programs.
9. Review the list of program temporary fixes incorporated into this release from Version 2.3.0, if appropriate.
10. Possible amendment of the OV/MVS fastpath definitions.

These are described in the following sections.

Unload the New Libraries

Begin your upgrade by unloading the libraries from the distribution tape, taking care not to over-write the libraries which are currently in use. See ["Unloading OV/Fax"](#) for information about unloading the OV/Fax libraries.

Update the CICS tables

The updates to the CICS tables required depend on the version you are migrating from.

No changes are required when migrating from Version 2.4.0.

Update the CICS PPT

- For all versions remove the FAXPTABL entry.
- When upgrading from Version 2.3.0 add the following entry
 - - DFHPPT TYPE=ENTRY, PROGRAM=FAXPCSC, PGMLANG=COBOL
 -
- When upgrading from Version 2.2.0 add the following entries
 - - DFHPPT TYPE=ENTRY, PROGRAM=FAXPCSC, PGMLANG=COBOL
 -
 - DFHPPT TYPE=ENTRY, PROGRAM=FAXT010, PGMLANG=COBOL
 -

- When upgrading from Version 2.1.0 add the following entries
 -
 - DFHPPT TYPE=ENTRY, PROGRAM=FAXPCSC, PGMLANG=COBOL
 -
 - DFHPPT TYPE=ENTRY, PROGRAM=FAXPRISC, PGMLANG=COBOL
 -
 - DFHPPT TYPE=ENTRY, PROGRAM=FAXRFTSC, PGMLANG=COBOL
 -
 - DFHPPT TYPE=ENTRY, PROGRAM=FAXT010, PGMLANG=COBOL
 -

and modify the following entry

- DFHPPT TYPE=ENTRY, PROGRAM=FAXL010, PGMLANG=ASSEMBLER
-

- When upgrading from Version 1.4.0 add the following entries
 -
 - DFHPPT TYPE=ENTRY, PROGRAM=FAXCTIME, PGMLANG=COBOL
 -
 - DFHPPT TYPE=ENTRY, PROGRAM=FAXEAB, PGMLANG=COBOL
 -
 - DFHPPT TYPE=ENTRY, PROGRAM=FAXG010, PGMLANG=COBOL
 -
 - DFHPPT TYPE=ENTRY, PROGRAM=FAXNOTSC, PGMLANG=COBOL
 -
 - DFHPPT TYPE=ENTRY, PROGRAM=FAXPCSC, PGMLANG=COBOL
 -
 - DFHPPT TYPE=ENTRY, PROGRAM=FAXPRISC, PGMLANG=COBOL
 -
 - DFHPPT TYPE=ENTRY, PROGRAM=FAXQ010, PGMLANG=COBOL
 -
 - DFHPPT TYPE=ENTRY, PROGRAM=FAXRFTSC, PGMLANG=COBOL
 -
 - DFHPPT TYPE=ENTRY, PROGRAM=FAXT010, PGMLANG=COBOL
 -
 - DFHPPT TYPE=ENTRY, PROGRAM=FAXX010, PGMLANG=COBOL
 -
 - DFHPPT TYPE=ENTRY, PROGRAM=FAXG01A, USAGE=MAP
 -

and modify the following entry

- DFHPPT TYPE=ENTRY, PROGRAM=FAXL010, PGMLANG=ASSEMBLER
-

and remove the following entry

- DFHPPT TYPE=ENTRY, PROGRAM=FAXREQUE, PGMLANG=COBOL
-
- If you are upgrading and you use the inbound capabilities of OV/Fax, then ensure that the following entries are present in table:
 -
 - DFHPPT TYPE=ENTRY, PROGRAM=FAXK010, PGMLANG=COBOL
 -
 - DFHPPT TYPE=ENTRY, PROGRAM=FAXM010, PGMLANG=COBOL
 -
 - DFHPPT TYPE=ENTRY, PROGRAM=FAXN010, PGMLANG=COBOL
 -
 - DFHPPT TYPE=ENTRY, PROGRAM=FAXM01A, USAGE=MAP
 -
 - DFHPPT TYPE=ENTRY, PROGRAM=FAXN01A, USAGE=MAP
 -

Update the CICS PCT

- When upgrading from Version 2.2.0 add the following entry
 -
 - DFHPCT
TYPE=ENTRY, TRANSID=FAXT, PROGRAM=FAXT010, TRANSEC=001,
:br. SPURGE=YES, TPURGE=NO, DTB=YES
 -
- When upgrading from Version 2.1.0 add the following entry
 -
 - DFHPCT
TYPE=ENTRY, TRANSID=FAXT, PROGRAM=FAXT010, TRANSEC=001,
:br. SPURGE=YES, TPURGE=NO, DTB=YES
 -
- When upgrading from Version 1.4.0 add the following entry
 -
 - DFHPCT
TYPE=ENTRY, TRANSID=FAXG, PROGRAM=FAXG010, TRANSEC=001,
:br. SPURGE=YES, TPURGE=NO, DTB=YES
 -
 - DFHPCT
TYPE=ENTRY, TRANSID=FAXT, PROGRAM=FAXT010, TRANSEC=001,
:br. SPURGE=YES, TPURGE=NO, DTB=YES
 -
 - DFHPCT
TYPE=ENTRY, TRANSID=FAXX, PROGRAM=FAXX010, TRANSEC=001,
:br. SPURGE=YES, TPURGE=NO, DTB=YES
 - and modify the following entry
 -
 - DFHPCT
TYPE=ENTRY, TRANSID=FAXQ, PROGRAM=FAXQ010, TRANSEC=001,
○
- If you are using the inbound capability of OV/Fax, ensure that you have the following entries in the table.
 -

- DFHPCT
TYPE=ENTRY, TRANSID=FAXK, PROGRAM=FAXK010, TRANSEC=001,
- :br. SPURGE=YES, TPURGE=NO, DTB=YES
-
- DFHPCT
TYPE=ENTRY, TRANSID=FAXM, PROGRAM=FAXM010, TRANSEC=001,
- :br. SPURGE=YES, TPURGE=NO, DTB=YES
-
- DFHPCT
TYPE=ENTRY, TRANSID=FAXN, PROGRAM=FAXN010, TRANSEC=001,
- :br. SPURGE=YES, TPURGE=NO, DTB=YES
-

Update the CICS FCT

- If you are using the inbound capability of OV/Fax, ensure that you have the following entry in the table.
 -
 - DFHFCT TYPE=DATASET, DATASET=FAXOUTC, ACCMETH=VSAM,
 - :br. SERVREQ=(READ, UPDATE, ADD, DELETE, BROWSE),
 - :br.
 - BUFND=5, BUFNI=4, STRNO=4, RECFORM=(VARIABLE, BLOCKED),
 - :br. LOG=YES
 -

Update the Control File

The control file does not require updating when migrating from version 2.4.0. unless migration from Application Services to Application Support Facility is also being carried out in which case the CONF9 record (in FAXCTL2) must be updated.

Upgrading from Version 2.3.0

A number of record layouts have changed, particularly the configuration records. The control file maintenance program should be run with the REPLACE option for the following JCL members:

FAXCTL2 Configuration records. Please review the contents of the Version 2.3.0 records before making changes. The CONF2 record has a new PAUSED parameter; the CONF4 record has new parameters ACTCANC, BSYSRCH, USEGIL, TOSERV and POSTFAX, but the SIGNAT parameter has been removed; the CONF8 and CONF9 records are new.

FAXCTL3 PF key text for the on-line transactions.

FAXCTL4 Map text for the on-line transactions.

FAXCTL5 Help text for the on-line transactions.

FAXCTL6 System error message text.

FAXCTL7 Transmission error messages and rescheduling actions. A new message has been added.

FAXCTL8 Message text for the on-line transactions.

FAXCTL9 Text for the batch cleandown reports. A new record has been added.

Upgrading from Version 2.2.0 and below

The layout of all the records on the OV/Fax control file have been changed. The file should be deleted and redefined, after customising the records to match the previous configuration. See ["FAXCNTL - The Control File"](#) and ["Control File Maintenance"](#) for further details.

Many of the control file configuration values are taken from existing parameter table entries:

- ***FAXCTL2.CONF4***

DELTX	PADELTX
SUBJECT	PASUBWIL
FAXJ	PAFAXJT
DISTRIB	PINBTIME
DELSTAT	PADELST
LCROVER	PLCDISP
USEGIL	PAGILFL
FAXID	PAFAXID
INFAX	PAINNODE and PAINUSER
WILDFAX	PAFAXW
NORMFAX	PAFAXN
ERROR	PERRSERV
REQUEUE	PARQSERV
MAXSIZE	PMAXFAX
MAXSCH	PMAXSHD
INTERV	PALERTTM
ENQID	PENQNAME
CHKSTAT	PSTATCHK
REPLY	PAFAXCOD

POLLTIM PPOLLINT
POLLINT PPOLLCHK
DISTINT PAINBCHK

-
- ***FAXCTL2.CONF5***

HOST PDEFCCOD
AREA PHSTAREA
DELAY PAWAIT1 to PAWAIT10

-
- ***FAXCTL2.CONF6***

TGGD PATGGD
TGPD PATGPD
UGGD PAUGGD
UGPD PAUGPD
NODE PENJNODE
LANG PENJLANG
EXPD PENJEXPD
MODULE PEABAPIP

-
- ***FAXCTL2.CONF8***

SIGNAT PASIGSTR
TO PATO

-
- ***FAXCTL2.CONF9***

URRPARM PAURRPRM
GILDD PAGILDD1 to PAGILDD6

-
- ***FAXCTL2.CONF10***

DEFER PAFXD1 to PAFXD10B

The following parameter table entries are now held on the Utility Programs System Record:

PAMALSK

PADSVHUP

PAALERTQ

PASYSTEM

The following parameter table entries are now held in OfficeVision/MVS (if this is installed) or a Utility Programs Family Record:

PAFROM

PACOPY

Migrating the Outbound Request File

The outbound request file does not require updating when migrating from version 2.4.0.

The OV/Fax Outbound Request file has had its record layout changed to support multilingual signature strings and alternate fax numbers. A migration utility is provided which allows you to migrate your existing file. This utility is called FAXMIG1J and is kept on the JCL library. It is supplied as shown below:

Figure 1. Sample JCL for the migration of the outbound request file

```
//JOBNAMEY JOB (ACCOUNT), 'PROGNAME',
//          MSGCLASS=A, CLASS=0, NOTIFY=XXXXXXX
//*
//* *****
//* * THIS JOB MIGRATES THE OV/FAX FAXOT FILE FROM V2.3.0 *
//* * TO V2.4.0 FORMAT - ONLY THE TYPE-1 RECORDS ARE *
//* * UPDATED TO INCLUDE THE NLS SIGNATURE TOKEN STRING *
//* * AND FAX NUMBER INDICATOR AT THE END OF EACH RECORD. *
//* * THE RECORD SIZE DOES NOT CHANGE. *
//* * *
//* * THE SIGNATURE TOKEN STRING IS A PARAMETER TO THE *
//* * PROGRAM. THIS SHOULD BE TAKEN FROM THE CONF4 *
//* * 'SIGNAT' FIELD (FOR V2.3.0 INSTALLATIONS) OR THE *
//* * PARAMETER TABLE 'PASIGSTR' FIELD (FOR V2.2.0 OR *
//* * BELOW INSTALLATIONS). *
//* * *****
//*
//MIGRATE   EXEC PGM=FAXMIG1
//STEPLIB  DD DSN=FAX.LOAD, DISP=SHR
//FAXOUT   DD DSN=FAX.VSAM.FAXOT, DISP=SHR
//SYSOUT   DD SYSOUT=*
//SYSIN    DD *
SIGNATURE
/*
//*
```

Alter the JCL to suit your installation standards before running it. Remember also to deallocate the FAXOT file from CICS.

Migrating the Address Book File

The address book file does not require updating when migrating from version 2.4.0.

The OV/Fax Address Book file has increased in length to allow alternate numbers to be specified. A migration utility is provided which allows you to migrate your existing file. This utility is called FAXMIG2J and is kept on the JCL library. It is supplied as shown below:

Figure 2. Sample JCL for the migration of the address book file

```
//JOBNAMEZ JOB (ACCOUNT), 'PROGNAME',
//          MSGCLASS=A, CLASS=0, NOTIFY=XXXXXXX
//*
//* *****
//* * THIS JOB MIGRATES OV/FAX FAXSCOD FILE FROM V2.3.0 TO *
//* * V2.4.0 FORMAT - TO ALLOW FOR SECONDARY FAX NUMBERS. *
//* * *****
//*
```

```

//*****
//* STEP 10 DEFINES A NEW DATASET INTO WHICH THE EXISTING *
//* FAXSCOD FILE WILL BE COPIED, WITH THE NEW RECORD LAYOUT. *
//* THE KEY FIELD NOW INCLUDES A PRIMARY/ALTERNATE INDICATOR. *
//*****
//*
//STEP10 EXEC PGM=IDCAMS
//SYSPRINT DD SYSOUT=*
//DD1 DD UNIT=DASD, <== CHANGE TO STANDARDS
// VOL=SER=VOLSER,DISP=SHR <== CHANGE TO VOLSER
//SYSIN DD *
DEFINE CLUSTER (NAME (FAX.VSAM.FAXSCOD2) -
VOL (VOLSER) -
FILE (DD1) -
FREESPACE (25 25) -
TRACK (10 5) -
SHAREOPTIONS (2 3) -
UNIQUE) -
DATA (NAME (FAX.VSAM.FAXSCOD2.DATA) -
RECORDSIZE (85 85) -
KEYS (25 0)) -
INDEX (NAME (FAX.VSAM.FAXSCOD2.INDEX))
/*
//*
//*****
//* STEP 20 RUNS THE MIGRATION PROGRAM FAXMIG2 TO EXTEND THE *
//* LENGTH OF THE FAXSCOD FILE, BY COPYING INTO THE NEW FILE. *
//*****
//*
//STEP20 EXEC PGM=FAXMIG2
//STEPLIB DD DSN=FAX.LOAD,DISP=SHR
//FAXSCOD DD DSN=FAX.VSAM.FAXSCOD,DISP=SHR
//FAXMIG2 DD DSN=FAX.VSAM.FAXSCOD2,DISP=OLD
//SYSOUT DD SYSOUT=*
//*
//*****
//* STEP 30 DELETES THE ORIGINAL DATASET. *
//*****
//*
//STEP30 EXEC PGM=IDCAMS
//SYSPRINT DD SYSOUT=*
//SYSIN DD *
DELETE FAX.VSAM.FAXSCOD
//*
//*****
//* STEP 40 RENAMES THE NEW DATASET TO THE ORIGINAL DATASET. *
//*****
//*
//STEP40 EXEC PGM=IDCAMS
//SYSPRINT DD SYSOUT=*
//SYSIN DD *
ALTER FAX.VSAM.FAXSCOD2 -
NEWNAME (FAX.VSAM.FAXSCOD)
ALTER FAX.VSAM.FAXSCOD2.DATA -
NEWNAME (FAX.VSAM.FAXSCOD.DATA)
ALTER FAX.VSAM.FAXSCOD2.INDEX -

```



```

NEWNAME (FAX.VSAM.FAXSCOD.INDEX)
//
//*

```

Alter the JCL to suit your installation standards before running it. Remember also to deallocate the FAXSCOD file from CICS. Please ensure that your live copy of the JCL member 'FAXSCOD', which is used to re-create the address book file, is updated so that the record length is 85 rather than 84, and the keylength is 25 rather than

Migrating the Server File

If you are upgrading from Version 2.1.0 or Version 1.4.0 it will be necessary to migrate the Server File because it has been necessary to increase the size of the records on the FAXSERV file. A migration utility is provided which allows you to migrate your existing file. This utility is called FAXSERVM and is kept on the JCL library. It is supplied as shown below:

[Figure 3. Sample JCL for the migration of the server file](#)

```

//JOBNAMEX JOB (ACCOUNT), 'PROGRAM',
//          CLASS=0,MSGCLASS=A,NOTIFY=XXXXXXXX
//*
//*****
//* THIS JOB MIGRATES THE FAX SERVER FILE FROM VERSION 2.1.0 OR *
//* BELOW TO THE FILE REQUIRED FOR VERSION 2.2.0 OR ABOVE.      *
//*                                                              *
//* STEP 10 DEFINES A NEW DATASET INTO WHICH THE FAXSERV FILE  *
//* WILL BE COPIED. THE NEW DATASET CONTAINS LONGER RECORDS.  *
//* THE CHANGE IN LENGTH IS TO ACCOMMODATE NEW SPILL OPERATOR *
//* FIELDS AND AN INCREASED FILLER FOR FUTURE USE             *
//*****
//STEP10    EXEC PGM=IDCAMS
//SYSPRINT  DD   SYSOUT=*
//DD1      DD   UNIT=DASD,          <== CHANGE TO STANDARDS
//          VOL=SER=VOLSER,DISP=SHR  <== CHANGE TO VOLSER
//SYSIN     DD   *
DEFINE CLUSTER (NAME (FAX.VSAM.FAXSERVM) -
VOL (VOLSER)          -
FILE (DD1)            -
UNIQUE                -
TRK (5 5)             -
SHAREOPTIONS (2 3)) -
DATA (NAME (FAX.VSAM.FAXSERVM.DATA) -
RECORDSIZE (175 175) -
KEYS (9 0))          -
INDEX (NAME (FAX.VSAM.FAXSERVM.INDEX) -
IMBED                -

```

```

REPLICATE)
//*
//*****
//* STEP 20 RUNS THE MIGRATION UTILITY PROGRAM FAXSERVM IN ORDER *
//* TO EXTEND THE LENGTH OF THE FAXSERV RECORDS WITHOUT LOSING *
//* ANY CURRENT DATA *
//*****
//*
//STEP20 EXEC PGM=FAXSERVM
//STEPLIB DD DSN=FAX.LOAD,DISP=SHR
//FAXSERV DD DISP=SHR,DSN=FAX.VSAM.FAXSERV
//FAXSERVM DD DISP=SHR,DSN=FAX.VSAM.FAXSERVM
//SYSOUT DD SYSOUT=*
//SYSUDUMP DD SYSOUT=*
//*
//*****
//* DELETE THE ORIGINAL FILE *
//*****
//*
//STEP30 EXEC PGM=IDCAMS
//SYSPRINT DD SYSOUT=*
//SYSIN DD *
DELETE FAX.VSAM.FAXSERV
//*
//*****
//* RENAME THE COPY FILE TO MATCH THE DSN OF THE ORIGINAL FILE *
//*****
//*
//STEP40 EXEC PGM=IDCAMS
//SYSPRINT DD SYSOUT=*
//SYSIN DD *
ALTER FAX.VSAM.FAXSERVM -
NEWNAME (FAX.VSAM.FAXSERV)
ALTER FAX.VSAM.FAXSERVM.DATA -
NEWNAME (FAX.VSAM.FAXSERV.DATA)
ALTER FAX.VSAM.FAXSERVM.INDEX -
NEWNAME (FAX.VSAM.FAXSERV.INDEX)
//

```

Alter the JCL to suit your installation standards before running it. Remember also to deallocate the FAXSERV file from CICS. Please ensure that your live copy of the JCL member 'FAXSERV', which is used to re-create the server file, is updated so that the record length is rather than

Redefining the Log File

If you are upgrading from Version 2.1.0 or Version 1.4.0 it will be necessary to delete and redefine the OV/Fax Log File to ensure that no entries exist, this is because the layout of the records has changed. In this case, you should wait for all faxes to be

processed before starting the upgrade. See ["FAXLOGS - The Log File"](#) for further details of the file definition.

Installing and customising the Utility Programs

The Utility Programs are now used by OV/Fax to obtain details from the office system. The latest version of these programs must be installed. Details of how to install and customise these programs are contained in [Appendix A, "Installing The Utility Programs"](#) and [Appendix B, "Customising Utility Programs"](#).

OV/Fax Version 2.3.0 Program Temporary Fixes

The temporary fixes produced for OV/Fax Version 2.3.0 have been incorporated into this release of the product as follows:

- ZAP230A** (Incorrect DD statement in FAXCNTL JCL). JCL corrected.
- ZAP230B** (Incorrect FAXCTLn members). FAXCTL1 and FAXCTLA JCL members corrected.
- ZAP230C** (Faxes requeued to the ERROR server). FAXQUE program corrected.
- ZAP230D** (FAXS abend adding a new server). FAXS010 program corrected.
- ZAP230E** (Incorrect national language characters in status messages). FAX6010 program corrected to supply a PROF GCID parameter.
- ZAP230F** (Incorrect national language characters on the fax address panel). FAXG010 program corrected to perform the required GCID translation.
- ZAP230G** (Date validation incorrect on fax status selection panel). FAX5010 program corrected.
- ZAP230H** (RFT documents larger than 9Kb get corrupted). FAXO010 program corrected.
- ZAP230I** ('AT' character translated incorrectly in AUTOFAX program). New CNTLCHAR parameter allowed in the job to specify the character in the local GCID.
- ZAP230J** Superseded by ZAP230K.
- ZAP230K** (Closing the REQUEUE server schedules faxes with an incorrect schedule count, causing FAXS to abend). FAXB010 program corrected.
- ZAP230L** (Faxes on closed servers get requeued, causing multiple copies to be sent). The new BSYRSCH parameter on the CONF4 record controls the rescheduling of busy faxes.
- ZAP230M** (Cancelling an active fax may cause the server to hang). The new ACTCANC parameter on the CONF4 record controls whether cancellations are allowed.

This release also includes full support for the OV/MVS GIL again, for the purpose of authorising users. The new USEGIL parameter on the CONF4 record determines if the GIL is to be used. The new CONF9 record defines the GIL datasets and URR parameter to be used.

OV/MVS Fastpath Amendments

If you are upgrading from Version 2.2.0 of OV/Fax, you will need to change the fastpath definitions within OV/MVS. These now use Application Services ATDs to define the transaction to start and the parameters to pass. Please refer to "[Installing User Exits for OV/Fax](#)" for details on how to configure the fastpaths.

PART ONE - INSTALLATION

Unloading OV/Fax

OV/Fax is supplied on a standard label cartridge, whose serial number is PDNxxx. The value of xxx is given on the installation tape. The tape or cartridge holds six datasets. A short description of each dataset is given in [Figure 4](#).

WARNING The IMI.JCL and IMI.LOAD libraries contain utility programs which are used by a number of products. The installation of these programs is described in [Appendix A, "Installing The Utility Programs"](#). These programs **MUST** be installed before continuing with the installation of OV/Fax.

[Figure 4. Contents of the distribution tape](#)

FILE	DSN	DESCRIPTION
====	===	=====
1.	FAX.INSTALL	JCL Library for unloading the tape and updating the CICS tables
2.	FAX.JCL	JCL Library for OV/Fax file creation, batch jobs and utilities
3.	FAX.LOAD	Load library for OV/Fax
4.	FAX.SOURCE	System source (configurable modules) only.
5.	IMI.JCL	Utility programs JCL
6.	IMI.LOAD	Utility programs load library

The JCL library holds set-up data for the VSAM files used by OV/Fax. The data contains hexadecimal characters; when editing this data take care to invoke options which preserve these special characters. All JCL provided is sample JCL only and will require tailoring to meet your own installation standards. All disc space parameters are based on IBM 3380 (single density) devices and may need to be altered for different equipment.

Unloading the INSTALL library

The first dataset on the tape contains JCL to assist the unload process. It should be unloaded first. Sample JCL to do this is shown in [Figure 5](#).

Figure 5. Example JCL to unload the INSTALL library from tape

```
//INSTALL JOB
//LOAD PROC OUTC='*',TAPE='PDNXXX',
// WORK=SYSDA, <== WORK AREA
// UNITT='TAPE', <== ENSURE UNIT TYPES
// UNITD='DASD', < ARE COMPATIBLE
// DISK='VOLSER', <== INSERT DISK VOLSER
// PREFIXO='FAX', <== INSERT LIB PREFIX NAME
// INSO='INSTALL' <== INSERT REQUIRED
//LOADA EXEC PGM=IEBCOPY
//SYSPRINT DD SYSOUT=&OUTC
//SYSUT3 DD UNIT=&WORK,SPACE=(80,(100,100))
//INSO DD DSN=&PREFIXO..&INSO,DISP=(,CATLG),
// VOL=SER=&DISK,UNIT=&UNITD,
// SPACE=(CYL,(2,1,60)),
// DCB=(LRECL=80,RECFM=FB,BLKSIZE=6080)
//INSI DD DSN=FAX.INSTALL,
// DISP=(OLD,PASS),LABEL=(1,SL),
// UNIT=&UNITT,VOL=SER=&TAPE
// PEND
//LOAD EXEC LOAD
//SYSIN DD *
COPY INDD=INSI,OUTDD=INSO
S M=(LOAD)
//
```

Unloading remaining datasets

The **INSTALL** library contains members which:

1. Unload the remaining datasets from the tape.
2. Give details of the CICS table changes required by OV/Fax.
3. Modify the unloaded JCL.

In order to unload the remaining datasets from the tape it is necessary to modify and submit the **LOAD** job in the **INSTALL** library. The JCL contained in the **LOAD** member is shown in [Figure 6](#).

Figure 6. Example JCL to unload the OV/Fax Libraries

```
//LOAD      JOB
//LOAD      PROC  OUTC='*',TAPE='PDNXXX',
//          WORK=SYSDA,                <== WORK AREA
//          UNITT='TAPE',              <== ENSURE UNIT TYPES
//          UNITD='DASD',              <  ARE COMPATIBLE
//          DISK='VOLSER',            <== INSERT DISK VOLSER
//          PREFIXO='FAX',            <== INSERT PREFIX NAME
//          JCLO='JCL',               <== INSERT REQUIRED
//          LOADO='LOAD',             <
//          SOURCEO='SOURCE'         <
//STEP10    EXEC PGM=IEBCOPY
//SYSPRINT  DD  SYSOUT=&OUTC
//SYSUT3    DD  UNIT=&WORK,SPACE=(80,(100,100))
//JCLI      DD  DSN=FAX.JCL,
//          DISP=(OLD,PASS),LABEL=(2,SL),
//          UNIT=&UNITT,VOL=SER=&TAPE
//JCLO      DD  DSN=&PREFIXO..&JCLO,DISP=(,CATLG),
//          VOL=SER=&DISK,UNIT=&UNITD,
//          SPACE=(6080,(30,3,60)),
//          DCB=(LRECL=80,RECFM=FB,BLKSIZE=6080)
//LOADI     DD  DSN=FAX.LOAD,
//          DISP=(OLD,PASS),LABEL=(3,SL),
//          UNIT=&UNITT,VOL=SER=&TAPE
//LOADO     DD  DSN=&PREFIXO..&LOADO,DISP=(,CATLG),
//          VOL=SER=&DISK,UNIT=&UNITD,
//          SPACE=(6144,(30,3,60)),
//          DCB=(RECFM=U,BLKSIZE=6144)
//SOURCEI   DD  DSN=FAX.SOURCE,
//          DISP=(OLD,PASS),LABEL=(4,SL),
//          UNIT=&UNITT,VOL=SER=&TAPE
//SOURCEO   DD  DSN=&PREFIXO..&SOURCEO,DISP=(,CATLG),
//          VOL=SER=&DISK,UNIT=&UNITD,
//          SPACE=(6080,(30,3,60)),
//          DCB=(LRECL=80,RECFM=FB,BLKSIZE=6080)
// PENDING
//LOAD      EXEC LOAD
//SYSIN DD *
COPY      INDD=JCLI,OUTDD=JCLO
COPY      INDD=LOADI,OUTDD=LOADO
COPY      INDD=SOURCEI,OUTDD=SOURCEO
//
```

Tailoring the JCL library

Once all the datasets have been unloaded from the tape, the members within the **JCL** library should be tailored for your installation by executing member **IMIUTIL1** of the **INSTALL**. Once this has been done, the subsequent installation steps should be easier, since few changes, if any, will be required. **IMIUTIL1** is shown in [Figure 7](#).

Figure 7. JCL to tailor the JCL Library

```
//IMIUTIL JOB
//*
//* THIS JOB IS USED TO CUSTOMISE THE JCL LIBRARY
//* THE PROGRAM SCANS THROUGH THE JCL LIBRARY AND PERFORMS ALL THE
//* CHANGE REQUESTS INDICATED BY THE INPUT DATASTREAM.
//*
//* M=XXXX
//*     SELECT MEMBER THAT CHANGES APPLY TO
//*     OR 'ALL' IF CHANGES APPLY TO ALL MEMBERS
//*
//* /FROM/TO/
//*     THE CHARACTERS 'FROM' ARE REPLACED BY THE 'TO' CHARACTERS
//*     THE FROM/TO STRING MUST NOT CONTAIN A '/' CHARACTER
//*     YOU MAY ADD MORE STRINGS IF YOU WISH
//*
//*
//CHANGE     EXEC PGM=IMIUTIL1
//STEPLIB   DD     DISP=SHR,DSN=FAX.LOAD      <=== INSERT LOAD LIB NAME
//REPORT    DD     SYSOUT=*
//INPDS     DD     DISP=SHR,DSN=FAX.JCL      <= INSERT JCL LIB NAME
//SYSIN     DD     *
M=ALL                CHANGE ALL MEMBERS
/JOBNAME/JOBNAME/    7 CHARACTER JOB PREFIX
/ACCOUNT/ACCOUNT/    ACCOUNT INFORMATION (EXCLUDING () )
/PROGNAME/PROGNAME/  PROGRAMMER NAME      (EXCLUDING '' )
/NOTIFY=XXXXXXXX/NOTIFY=XXXXXXXX/  NOTIFY=
/CLASS=0/CLASS=0/    CLASS=
/MSGCLASS=A/MSGCLASS=A/  MSGCLASS=
/FAX.LOAD/FAX.LOAD/    LOAD LIBRARY
/FAX.JCL/FAX.JCL/     JCL LIBRARY
/FAX.VSAM/FAX.VSAM/    VSAM DATASET PREFIX
/FAX.NVSAM/FAX.NVSAM/  NON-VSAM DATASET PREFIX
/VOLSER/VOLSER/       VOLUME USED FOR VSAM DATASETS
/DASD/DASD/           UNIT TYPE
/DSVHOST/DSVHOST/    DISOSS HOST NODE NAME
//
```

The *Tostrings* should be altered, before the job is executed, so that they meet your installation standards.

When **IMIUTIL** is executed, it scans through the members in the **JCL** library and replaces every occurrence of the specified *Fromstring* with the value specified for the *To*

The '/' character before the *Fromstring* indicates that the next character is the first of the *From*. The end of the *Fromstring* is indicated by a '/' which is followed immediately by the first character of the *To*. The end of the *Tostring* is marked by another '/'.

Note: It is not possible for either the *From* or the *Tostrings* to contain an embedded '/', since this is used as a delimiter to mark the beginning and ending of these strings.

Creating the OV/Fax System Files

This section describes the steps involved in the creation and initialisation of the OV/Fax files. The **JCL** dataset on the installation tape contains members which are used to create the required files. For each file that is to be created, there is a member in the JCL library whose name matches the relevant dataset's DD name.

Each of the jobs that can be used to create the VSAM files includes DELETE statements as part of the first IDCAMS step. This allows the JCL to be used to re-create the file, for example during file maintenance. Note that this will cause a non-zero return code if the file does not already exist.

Note: If any of the jobs are to be executed after OV/Fax has been installed, the OV/Fax system must first be shut down and the files closed in CICS. It is recommended that, after installation, the log files are cleaned down only by means of the special batch job provided. This will ensure that file integrity is maintained.

FAXOUTP - The Out-tray file

All data passed to OV/Fax by RAPID or by OfficePath arrives on a file called the 'out-tray'. This file is a VSAM KSDS which contains a profile record and text records for each request. Member FAXOUTP in the JCL library contains JCL to create and initialise the out-tray file and is shown in [Figure 8](#).

Figure 8. JCL to initialise the Out-tray file

```
//JOBNAMEP JOB (ACCOUNT), 'PROGRAM',
//          MSGCLASS=A, CLASS=0, NOTIFY=XXXXXXX
//*****
//* THIS JOB CREATES AND INITIALISES THE FAX OUT TRAY FAXOUTP *
//*****
//STEP10   EXEC PGM=IDCAMS
//SYSPRINT DD  SYSOUT=*
//DD1     DD  UNIT=DASD,
//          VOL=SER=VOLSER, DISP=SHR
//SYSIN   DD  *
          DELETE FAX.VSAM.FAXOUTP
          DEFINE CLUSTER (NAME (FAX.VSAM.FAXOUTP) -
                          VOL (VOLSER) -
                          FILE (DD1) -
                          UNIQUE -
                          TRK (5 5) -
                          SHAREOPTIONS (2 3) -
                          DATA (NAME (FAX.VSAM.FAXOUTP.DATA) -
                                  RECORDSIZE (2000 8192) -
                                  KEYS (12 0) -
                                  INDEX (NAME (FAX.VSAM.FAXOUTP.INDEX) )
//*
//*
//STEP20   EXEC PGM=APISETUP, TIME=(0, 5)
//STEPLIB DD  DISP=SHR, DSN=FAX.LOAD
//INCARDFL DD DISP=SHR, DSN=FAX.JCL (FAXOUTP1)
//OUTPUTFL DD DISP=(, PASS), UNIT=SYSDA,
//          DSN=&&APISET,
//          SPACE=(TRK, (1, 1) ),
//          DCB=(RECFM=VB, LRECL=4100, BLKSIZE=6144)
//SYSUDUMP DD  SYSOUT=*
//*
//STEP30   EXEC PGM=IDCAMS
//SYSPRINT DD  SYSOUT=*
//INPUT   DD  DISP=(OLD, DELETE), DSN=&&APISET
//OUTPUT  DD  DISP=SHR, DSN=FAX.VSAM.FAXOUTP
//SYSIN   DD  *
          REPRO INFILE (INPUT) OUTFILE (OUTPUT)
          PRINT INFILE (OUTPUT)
//*
//
```

FAXOUTC - The Inbound confirmations out-tray

This file is required only if you are installing the OV/Fax inbound component. When an inbound fax is passed to RAPID or to OfficePath, OV/Fax requires confirmation of delivery, so that the status information on the inbound log file can be updated to 'Delivered'. This information is written to the confirmations out-tray.

All data passed to OV/Fax by RAPID or by OfficePath arrives on a file called the 'out-tray'. This file is a VSAM KSDS which contains a profile record and text records for each request. Member FAXOUTC in the JCL library contains JCL to create and initialise the out-tray file and is shown in [Figure 9](#).

Figure 9. JCL to initialise the confirmations out-tray file

```
//JOBNAME JOB (ACCOUNT), 'PROGRAM',
//          MSGCLASS=A, CLASS=0, NOTIFY=XXXXXXX
//*****
//* THIS JOB CREATES AND INITIALISES THE FAX OUT TRAY FAXOUTP          *
//*****
//STEP10   EXEC PGM=IDCAMS
//SYSPRINT DD  SYSOUT=*
//DD1     DD   UNIT=DASD,
//         VOL=SER=VOLSER, DISP=SHR
//SYSIN   DD   *
          DELETE FAX.VSAM.FAXOUTC
          DEFINE CLUSTER (NAME (FAX.VSAM.FAXOUTC)          -
                          VOL (VOLSER)                    -
                          FILE (DD1)                      -
                          UNIQUE                          -
                          TRK (5 5)                       -
                          SHAREOPTIONS (2 3)              -
                          DATA (NAME (FAX.VSAM.FAXOUTC.DATA) -
                                  RECORDSIZE (2000 8192)  -
                                  KEYS (12 0))             -
                          INDEX (NAME (FAX.VSAM.FAXOUTC.INDEX) )
//*
//*
//STEP20   EXEC PGM=APISETUP, TIME=(0, 5)
//STEPLIB DD  DISP=SHR, DSN=FAX.LOAD
//INCARDFL DD  DISP=SHR, DSN=FAX.JCL (FAXOUTC1)
//OUTPUTFL DD  DISP=(, PASS), UNIT=SYSDA,
//          DSN=&&APISET,
//          SPACE=(TRK, (1, 1)),
//          DCB=(RECFM=VB, LRECL=4100, BLKSIZE=6144)
//SYSUDUMP DD  SYSOUT=*
//*
//STEP30   EXEC PGM=IDCAMS
//SYSPRINT DD  SYSOUT=*
//INPUT   DD  DISP=(OLD, DELETE), DSN=&&APISET
//OUTPUT  DD  DISP=SHR, DSN=FAX.VSAM.FAXOUTC
//SYSIN   DD   *
          REPRO INFILE (INPUT) OUTFILE (OUTPUT)
          PRINT INFILE (OUTPUT)
//*
//
```

FAXLOGS - The Log File

The Log File is a VSAM KSDS which contains information relating to requests passed to OV/Fax. The file is used as an audit trail for both inbound (if configured) and outbound faxes. Member FAXLOGS in the JCL library contains JCL to create and initialise the Log file and is shown in [Figure 10](#).

[Figure 10. JCL to initialise the Log file](#)

```
//JOBNAMEL JOB (ACCOUNT), 'PROGRAM',
//          MSGCLASS=A, CLASS=0, NOTIFY=XXXXXXX
//*****
//* THIS JOB IS USED TO CREATE AND INITIALISE THE FAXLOGS FILE          *
//*****
//STEP1    EXEC PGM=IDCAMS
//SYSPRINT DD  SYSOUT=*
//DD1      DD  UNIT=DASD,
//          VOL=SER=VOLSER, DISP=SHR
//SYSIN    DD  *
          DELETE FAX.VSAM.FAXLOGS
          DEFINE CLUSTER (NAME (FAX.VSAM.FAXLOGS)           -
                        VOL (VOLSER)                       -
                        FILE (DD1)                          -
                        FREESPACE (40 40)                   -
                        CYL (1 1)                          -
                        SHAREOPTIONS (2 3)                  -
                        UNIQUE)                             -
          DATA (NAME (FAX.VSAM.FAXLOGS.DATA)              -
                RECORDSIZE (449 449)                       -
                KEYS (13 0))                                -
          INDEX (NAME (FAX.VSAM.FAXLOGS.INDEX)              )
//*
//STEP2    EXEC PGM=APISETUP, TIME=(0, 5)
//STEPLIB DD  DISP=SHR, DSN=FAX.LOAD
//INCARDFL DD DISP=SHR, DSN=FAX.JCL (FAXLOGS1)
//OUTPUTFL DD DISP=(, PASS), UNIT=SYSDA,
//          DSN=&&APISET,
//          SPACE=(TRK, (1, 1)),
//          DCB=(RECFM=VB, LRECL=4100, BLKSIZE=6144)
//SYSUDUMP DD  SYSOUT=*
//*
//STEP3    EXEC PGM=IDCAMS
//SYSPRINT DD  SYSOUT=*
//INPUT    DD  DISP=(OLD, DELETE), DSN=&&APISET
//OUTPUT    DD  DISP=SHR, DSN=FAX.VSAM.FAXLOGS
//SYSIN    DD  *
          REPRO INFILE (INPUT) OUTFILE (OUTPUT)
          PRINT INFILE (OUTPUT)
//*
//
```

FAXOT - The Outbound request file

This file contains a record for each active fax request in the system. The file forms a series of queues representing requests which are waiting to be passed to a fax server, or have been passed and are being processed. Items are removed from the active queue as soon as they have been sent, cancelled, or cannot be sent. The text of each request is also stored on the file. Member FAXOT in the JCLlibrary contains JCL to create and initialise the FAXOT file and is shown in [Figure 11](#).

Figure 11. JCL to initialise the request file.

```
//JOBNAMEO JOB (ACCOUNT), 'PROGRAM',
//          MSGCLASS=A, CLASS=0, NOTIFY=XXXXXXXX
//*****
//* THIS JOB IS USED TO CREATE AND INITIALISE THE FAXOT FILE          *
//*****
//STEP1     EXEC PGM=IDCAMS
//SYSPRINT  DD  SYSOUT=*
//DD1       DD  UNIT=DASD,                                     <== CHANGE TO STANDARDS
//          VOL=SER=VOLSER, DISP=SHR                         <== CHANGE TO VOLSER
//SYSIN     DD  *
            DELETE FAX.VSAM.FAXOT
            DEFINE CLUSTER (NAME (FAX.VSAM.FAXOT)             -
                            VOL (VOLSER)                     -
                            FILE (DD1)                       -
                            FREESPACE (25 25)                 -
                            TRACK (5 5)                       -
                            SHAREOPTIONS (2 3)                 -
                            UNIQUE)                           -
            DATA (NAME (FAX.VSAM.FAXOT.DATA)                 -
                  RECORDSIZE (1 9025)                         -
                  KEYS (21 0))                                 -
            INDEX (NAME (FAX.VSAM.FAXOT.INDEX)
//*
//STEP2     EXEC PGM=APISETUP, TIME=(0,5)
//STEPLIB  DD  DISP=SHR, DSN=FAX.LOAD
//INCARDFL  DD  DISP=SHR, DSN=FAX.JCL (FAXOT1)
//OUTPUTFL  DD  DISP=(, PASS), UNIT=SYSDA,
//          DSN=&&APISET,
//          SPACE=(TRK,(1,1)),
//          DCB=(RECFM=VB, LRECL=4100, BLKSIZE=6144)
//SYSUDUMP  DD  SYSOUT=*
//*
//STEP3     EXEC PGM=IDCAMS
//SYSPRINT  DD  SYSOUT=*
//INPUT     DD  DISP=(OLD,DELETE), DSN=&&APISET
//OUTPUT    DD  DISP=SHR, DSN=FAX.VSAM.FAXOT
//SYSIN     DD  *
            REPRO INFILE (INPUT) OUTFILE (OUTPUT)
            PRINT INFILE (OUTPUT)
//*
//
```

FAXSCOD - The Fax Nickname file

The fax nickname file is a VSAM KSDS which contains the OV/Fax shared and personal address books. Member FAXSCOD in the JCL library contains JCL to create and initialise the fax nickname file and is shown in [Figure 12](#).

Figure 12. JCL to initialise the shortcode file

```
//JOBNAMEA JOB (ACCOUNT), 'PROGRAM',
//          MSGCLASS=A, CLASS=0, NOTIFY=XXXXXXXX
//*****
//* THIS JOB IS USED TO CREATE AND INITIALISE THE FAXSCOD FILE *
//*****
//STEP1    EXEC PGM=IDCAMS
//SYSPRINT DD  SYSOUT=*
//DD1      DD  UNIT=DASD,                <== CHANGE TO STANDARDS
//          VOL=SER=VOLSER, DISP=SHR     <== CHANGE TO VOLSER
//SYSIN    DD  *
           DELETE FAX.VSAM.FAXSCOD
           DEFINE CLUSTER (NAME (FAX.VSAM.FAXSCOD)          -
                           VOL (VOLSER)                    -
                           FILE (DD1)                      -
                           FREESPACE (25 25)               -
                           TRACK (2 0)                     -
                           SHAREOPTIONS (2 3)              -
                           UNIQUE)                        -
           DATA (NAME (FAX.VSAM.FAXSCOD.DATA)            -
                 RECORDSIZE (85 85)                       -
                 KEYS (25 0))                              -
           INDEX (NAME (FAX.VSAM.FAXSCOD.INDEX))
//*
//STEP2    EXEC PGM=APISETUP, TIME=(0, 5)
//STEPLIB  DD  DISP=SHR, DSN=FAX.LOAD
//INCARDFL DD  DISP=SHR, DSN=FAX.JCL (FAXSCOD1)
//OUTPUTFL DD  DISP=(, PASS), UNIT=SYSDA,
//          DSN=&&APISET,
//          SPACE=(TRK, (1, 1)),
//          DCB=(RECFM=VB, LRECL=4100, BLKSIZE=6144)
//SYSUDUMP DD  SYSOUT=*
//*
//STEP3    EXEC PGM=IDCAMS
//SYSPRINT DD  SYSOUT=*
//INPUT    DD  DISP=(OLD, DELETE), DSN=&&APISET
//OUTPUT    DD  DISP=SHR, DSN=FAX.VSAM.FAXSCOD
//SYSIN    DD  *
           REPRO INFILE (INPUT) OUTFILE (OUTPUT)
           PRINT INFILE (OUTPUT)
//*
//
```

If you intend to use the EAB in OfficeVision in order to store your fax addressing information, then you do not need to define this file. Likewise, if you are using the fax addressing user exit to obtain information from your own directories, you may omit this file.

FAQSERV - The Server file

Each of the PC's used as fax servers need to be defined on this KSDS. Member FAXSERV in the JCLlibrary contains JCL to create and initialise the FAXSERV file and is shown in [Figure 13](#).

At this stage, the file only needs to be defined. Server definitions can be added later using the on-line facilities, once installation is complete (these are outlined in the *OV/Fax Administration Guide*). Alternatively, you may allow the system to do this automatically when the server polls the mainframe for the first time.

Figure 13. JCL to initialise FAXSERV

```
//JOBNAME JOB (ACCOUNT), 'PROGRAM',
//          MSGCLASS=A, CLASS=0, NOTIFY=XXXXXXX
//*****
//* THIS JOB IS USED TO CREATE AND INITIALISE THE FAXSERV FILE          *
//*****
//STEP1     EXEC PGM=IDCAMS
//SYSPRINT  DD  SYSOUT=*
//DD1       DD  UNIT=DASD,                      <== CHANGE TO STANDARDS
//          VOL=SER=VOLSER, DISP=SHR           <== CHANGE TO VOLSER
//SYSIN     DD  *
           DELETE FAX.VSAM.FAXSERV
           DEFINE CLUSTER (NAME (FAX.VSAM.FAXSERV)          -
                           VOL (VOLSER)                   -
                           FILE (DD1)                     -
                           FREESPACE (25 25)              -
                           TRACK (2 0)                   -
                           SHAREOPTIONS (2 3)             -
                           UNIQUE)                       -
           DATA (NAME (FAX.VSAM.FAXSERV.DATA)           -
                 RECORDSIZE (175 175)                   -
                 KEYS (9 0))                             -
           INDEX (NAME (FAX.VSAM.FAXSERV.INDEX)          )
//*
//STEP2     EXEC PGM=APISETUP, TIME=(0, 5)
//STEPLIB  DD  DISP=SHR, DSN=FAX.LOAD
//INCARDFL DD  DISP=SHR, DSN=FAX.JCL (FAXSERV1)
//OUTPUTFL DD  DISP=(, PASS), UNIT=SYSDA,
//          DSN=&&APISET,
//          SPACE=(TRK, (1, 1)),
//          DCB=(RECFM=VB, LRECL=4100, BLKSIZE=6144)
//SYSUDUMP DD  SYSOUT=*
//*
//STEP3     EXEC PGM=IDCAMS
//SYSPRINT DD  SYSOUT=*
//INPUT     DD  DISP=(OLD, DELETE), DSN=&&APISET
//OUTPUT    DD  DISP=SHR, DSN=FAX.VSAM.FAXSERV
//SYSIN     DD  *
           REPRO INFILE (INPUT) OUTFILE (OUTPUT)
           PRINT INFILE (OUTPUT)
//*
//
```


FAXIN - The Inbound Request File

The FAXIN file is a VSAM KSDS which is only required if you are to use OV/Fax to receive faxes into the system. Member FAXIN in the JCL library contains JCL to create and initialise the FAXIN file and is shown in [Figure 14](#).

[Figure 14. JCL to initialise FAXIN](#)

```
//JOBNAMEI JOB (ACCOUNT), 'PROGRAM',
//          MSGCLASS=A, CLASS=0, NOTIFY=XXXXXXX
//*****
//* THIS JOB IS USED TO CREATE AND INITIALISE THE FAXIN FILE *
//*****
//STEP1    EXEC PGM=IDCAMS
//SYSPRINT DD  SYSOUT=*
//DD1      DD  UNIT=DASD,
//          VOL=SER=VOLSER, DISP=SHR
//SYSIN    DD  *
           DELETE FAX.VSAM.FAXIN
           DEFINE CLUSTER (NAME (FAX.VSAM.FAXIN)           -
                           VOL (VOLSER)                   -
                           FILE (DD1)                     -
                           FREESPACE (25 25)               -
                           TRACK (5 5)                    -
                           SHAREOPTIONS (2 3)              -
                           UNIQUE)                        -
           DATA (NAME (FAX.VSAM.FAXIN.DATA)              -
                  RECORDSIZE (9001 9999)                  -
                  KEYS (13 0))                             -
           INDEX (NAME (FAX.VSAM.FAXIN.INDEX)              )
//*
//STEP2    EXEC PGM=APISETUP, TIME=(0, 5)
//STEPLIB DD  DISP=SHR, DSN=FAX.LOAD
//INCARDFL DD  DISP=SHR, DSN=FAX.JCL (FAXIN1)
//OUTPUTFL DD  DISP=(, PASS), UNIT=SYSDA,
//          DSN=&&APISET,
//          SPACE=(TRK, (1, 1)),
//          DCB=(RECFM=VB, LRECL=4100, BLKSIZE=6144)
//SYSUDUMP DD  SYSOUT=*
//*
//STEP3    EXEC PGM=IDCAMS
//SYSPRINT DD  SYSOUT=*
//INPUT    DD  DISP=(OLD, DELETE), DSN=&&APISET
//OUTPUT    DD  DISP=SHR, DSN=FAX.VSAM.FAXIN
//SYSIN    DD  *
           REPRO INFILE (INPUT) OUTFILE (OUTPUT)
           PRINT INFILE (OUTPUT)
//*
//
```

FAXCNTL - The Control File

The FAXCNTL file is a VSAM KSDS which contains customisable information to control the use of OV/Fax.

In order to place the control records used by the OV/Fax modules onto the control file it is necessary to execute program FAXCNTL. Member FAXCNTL in the JCLlibrary executes program FAXCNTL and is shown in [Figure 15](#).

[Figure 15. JCL to run control file utility program](#)

```
//JOBNAMEC JOB (ACCOUNT), 'PROGNAME',
//          MSGCLASS=A, CLASS=0, NOTIFY=XXXXXXXX
//*
//*****
//* IF YOU ARE ONLY UPDATING THE CONTROL FILE THEN RESTART AT STEP30 *
//*****
//*
//*****
//* THIS JOB IS USED TO CREATE AND INITIALISE THE CONTROL FILE      *
//* ALTER VOLUME AND DATASET NAMES ACCORDINGLY                      *
//*****
//STEP10    EXEC PGM=IDCAMS
//SYSPRINT  DD  SYSOUT=*
//DD1      DD  UNIT=DASD,                                     <== CHANGE TO STANDARDS
//          VOL=SER=VOLSER, DISP=SHR                         <== CHANGE TO VOLSER
//SYSIN     DD  *
           DELETE FAX.VSAM.FAXCNTL
           DEFINE CLUSTER (NAME (FAX.VSAM.FAXCNTL)            -
                           VOL (VOLSER)                     -
                           FILE (DD1)                       -
                           FREESPACE (25 25)                 -
                           TRACK (5 2)                      -
                           SHAREOPTIONS (2 3)                -
                           UNIQUE)                          -
           DATA (NAME (FAX.VSAM.FAXCNTL.DATA)              -
                 RECORDSIZE (128 2048)                     -
                 KEYS (17 0))                               -
           INDEX (NAME (FAX.VSAM.FAXCNTL.INDEX)
//*
//STEP20    EXEC PGM=IDCAMS
//SYSPRINT  DD  SYSOUT=*
//INPUT     DD  *
           <--- LOW VALUES RECORD
//*
//OUTPUT    DD  DISP=SHR, DSN=FAX.VSAM.FAXCNTL
//SYSIN     DD  *
           REPRO INFILE (INPUT)  OUTFILE (OUTPUT)
//*
//STEP30    EXEC PGM=FAXCNTL, PARM=' '
//STEPLIB   DD  DISP=SHR, DSN=FAX.LOAD
//CARDFILE  DD  DISP=SHR, DSN=FAX.JCL (FAXCTL1)             <== EBCDIC TABLES
//          DD  DISP=SHR, DSN=FAX.JCL (FAXCTL2)             <== CONFIG PARMS
//          DD  DISP=SHR, DSN=FAX.JCL (FAXCTL3)             <== PF KEYS
//          DD  DISP=SHR, DSN=FAX.JCL (FAXCTL4)             <== PANELS
```

```

//          DD  DISP=SHR, DSN=FAX.JCL (FAXCTL5)          <== HELP PANELS
//          DD  DISP=SHR, DSN=FAX.JCL (FAXCTL6)          <== SYSTEM MSGS
//          DD  DISP=SHR, DSN=FAX.JCL (FAXCTL7)          <== STATUS MSGS
//          DD  DISP=SHR, DSN=FAX.JCL (FAXCTL8)          <== PANEL MSGS
//          DD  DISP=SHR, DSN=FAX.JCL (FAXCTL9)          <== REPORTS
//          DD  DISP=SHR, DSN=FAX.JCL (FAXCTLA)          <== ROUTING TABLE
//          DD  DISP=SHR, DSN=FAX.JCL (FAXCTLB)          <== USERS / DID
//          DD  DISP=SHR, DSN=FAX.JCL (FAXCTLC)          <== DEFERRED USERS
//FAXCNTL DD  DISP=OLD, DSN=FAX.VSAM.FAXCNTL
//SYSOUT DD  SYSOUT=*
//SYSUDUMP DD  SYSOUT=*
//

```

The PARM for program FAXCNTL is the default language code. Control file records specifying the same language code will be added to the file with a language code of 'space' (the default code). All other records will use the language code they specify. Please refer to ["National Language Support"](#) for further details on adding records for other language codes.

The JCL supplied in member FAXCNTL will install the control file records in English as the default language. Within the JCL dataset there are a number of additional members containing sample configuration records in German; the member names have the format FAXCTLn1, where n is the record group and 1 is the language code.

Please refer to ["Control File Maintenance"](#) for further details on how to customise the control file.

Updating CICS for OV/Fax

The following CICS tables must be updated in the CICS system where OV/Fax is to be installed:

- File Control Table (FCT)
- Program Control Table (PCT)
- Program Processing Table (PPT)
- Job Control Language
- Post-initialisation Table (PLTPI)

The procedures in force at your installation should be followed when making these changes.

Note: You can customise the CICS dataset, transaction and program names if required (refer to ["Customising CICS Names"](#)).

COBOL Language Support

Most of the programs used in OV/Fax are written in COBOL. Consequently, the OV/Fax CICS System will require access to the COBOL run-time libraries. These must be available in the STEPLIB or LINKLIB concatenation.

CICS Table Updates

The **INSTALL** library contains members that are used to update CICS tables. A description of each member follows.

Note: The member **RDO** contains sample JCL to run the RDO off-line update utility DFHCSDUP.

File Control Table (FCT)

The member **FCT** contains the CICS FCT updates and is shown in [Figure 16](#).

Figure 16. FCT Updates

```
*****
* FCT ENTRIES FOR OV/FAX
* *****
    DFHFCT TYPE=DATASET, DATASET=FAXCNTL, ACCMETH=VSAM,           C
          SERVREQ= (READ, UPDATE, ADD, DELETE, BROWSE) ,         C
          BUFND=5, BUFNI=4, STRNO=4, RECFORM= (VARIABLE, BLOCKED) , C
          LOG=YES, DISP=SHR, DSNNAME=FAX.VSAM.FAXCNTL
    DFHFCT TYPE=DATASET, DATASET=FAXSERV, ACCMETH=VSAM,           C
          SERVREQ= (READ, UPDATE, ADD, DELETE, BROWSE) ,         C
          BUFND=5, BUFNI=4, STRNO=4, RECFORM= (VARIABLE, BLOCKED) , C
          LOG=YES, DISP=SHR, DSNNAME=FAX.VSAM.FAXSERV
    DFHFCT TYPE=DATASET, DATASET=FAXSCOD, ACCMETH=VSAM,           C
          SERVREQ= (READ, UPDATE, ADD, DELETE, BROWSE) ,         C
          BUFND=5, BUFNI=4, STRNO=4, RECFORM= (VARIABLE, BLOCKED) , C
          LOG=YES, DISP=SHR, DSNNAME=FAX.VSAM.FAXSCOD
    DFHFCT TYPE=DATASET, DATASET=FAXOUTP, ACCMETH=VSAM,           C
          SERVREQ= (READ, UPDATE, ADD, DELETE, BROWSE) ,         C
          BUFND=5, BUFNI=4, STRNO=4, RECFORM= (VARIABLE, BLOCKED) , C
          LOG=YES, DISP=SHR, DSNNAME=FAX.VSAM.FAXOUTP
    DFHFCT TYPE=DATASET, DATASET=FAXLOGS, ACCMETH=VSAM,           C
          SERVREQ= (READ, UPDATE, ADD, DELETE, BROWSE) ,         C
          BUFND=5, BUFNI=4, STRNO=4, RECFORM= (VARIABLE, BLOCKED) , C
          LOG=YES, DISP=SHR, DSNNAME=FAX.VSAM.FAXLOGS
    DFHFCT TYPE=DATASET, DATASET=FAXOT, ACCMETH=VSAM,             C
          SERVREQ= (READ, UPDATE, ADD, DELETE, BROWSE) ,         C
          BUFND=5, BUFNI=4, STRNO=4, RECFORM= (VARIABLE, BLOCKED) , C
          LOG=YES, DISP=SHR, DSNNAME=FAX.VSAM.FAXOT
    DFHFCT TYPE=DATASET, DATASET=FAXIN, ACCMETH=VSAM,             C
          SERVREQ= (READ, UPDATE, ADD, DELETE, BROWSE) ,         C
          BUFND=5, BUFNI=4, STRNO=4, RECFORM= (VARIABLE, BLOCKED) , C
          LOG=YES, DISP=SHR, DSNNAME=FAX.VSAM.FAXIN
    DFHFCT TYPE=DATASET, DATASET=FAXOUTC, ACCMETH=VSAM,           C
          SERVREQ= (READ, UPDATE, ADD, DELETE, BROWSE) ,         C
          BUFND=5, BUFNI=4, STRNO=4, RECFORM= (VARIABLE, BLOCKED) , C
          LOG=YES, DISP=SHR, DSNNAME=FAX.VSAM.FAXOUTC
```

The member **FCTRDO** contains the CICS FCT updates in RDO format and is shown in [Figure 17](#).

Figure 17. FCT Updates in RDO Format

```
*=====*
```

```
* OV/FAX 2.4.2 RDO DEFINITIONS FOR CICS 3.3.0 OR ABOVE *
```

```
*=====*
```

```
*  
* DEFINE FILES  
*  
DEFINE FILE (FAXCNTL) GROUP (FAX01)  
    ADD (YES) BROWSE (YES) DELETE (YES) READ (YES) UPDATE (YES)  
    RECORDFORMAT (V) STRINGS (4) RECOVERY (BACKOUTONLY)  
    DSNAME (FAX.VSAM.FAXCNTL)  
DEFINE FILE (FAXSERV) GROUP (FAX01)  
    ADD (YES) BROWSE (YES) DELETE (YES) READ (YES) UPDATE (YES)  
    RECORDFORMAT (V) STRINGS (4) RECOVERY (BACKOUTONLY)  
    DSNAME (FAX.VSAM.FAXSERV)  
DEFINE FILE (FAXSCOD) GROUP (FAX01)  
    ADD (YES) BROWSE (YES) DELETE (YES) READ (YES) UPDATE (YES)  
    RECORDFORMAT (V) STRINGS (4) RECOVERY (BACKOUTONLY)  
    DSNAME (FAX.VSAM.FAXSCOD)  
DEFINE FILE (FAXOUTP) GROUP (FAX01)  
    ADD (YES) BROWSE (YES) DELETE (YES) READ (YES) UPDATE (YES)  
    RECORDFORMAT (V) STRINGS (4) RECOVERY (BACKOUTONLY)  
    DSNAME (FAX.VSAM.FAXOUTP)  
DEFINE FILE (FAXLOGS) GROUP (FAX01)  
    ADD (YES) BROWSE (YES) DELETE (YES) READ (YES) UPDATE (YES)  
    RECORDFORMAT (V) STRINGS (4) RECOVERY (BACKOUTONLY)  
    DSNAME (FAX.VSAM.FAXLOGS)  
DEFINE FILE (FAXOT) GROUP (FAX01)  
    ADD (YES) BROWSE (YES) DELETE (YES) READ (YES) UPDATE (YES)  
    RECORDFORMAT (V) STRINGS (4) RECOVERY (BACKOUTONLY)  
    DSNAME (FAX.VSAM.FAXOT)  
DEFINE FILE (FAXIN) GROUP (FAX01)  
    ADD (YES) BROWSE (YES) DELETE (YES) READ (YES) UPDATE (YES)  
    RECORDFORMAT (V) STRINGS (4) RECOVERY (BACKOUTONLY)  
    DSNAME (FAX.VSAM.FAXIN)  
DEFINE FILE (FAXOUTC) GROUP (FAX01)  
    ADD (YES) BROWSE (YES) DELETE (YES) READ (YES) UPDATE (YES)  
    RECORDFORMAT (V) STRINGS (4) RECOVERY (BACKOUTONLY)  
    DSNAME (FAX.VSAM.FAXOUTC)
```

The FAXIN and FAXOUTC files do not need to be defined if the inbound fax facility is not required.

The FAXSCOD file does not need to be defined if the Enterprise Address Book is being used to resolve fax nicknames, or if a directory of your own is being used for that purpose.

Program Control Table (PCT)

The member **PCT** contains the CICS PCT updates and is shown in [Figure 18](#).

Figure 18. PCT Updates

```

*****
* PCT ENTRIES
*   ALTER FOR ADDITIONAL TRANSACTION SECURITY AS REQUIRED
*****
    DFHPCT TYPE=ENTRY, TRANSID=FAXA, PROGRAM=FAXA010, TRANSEC=001, C
SPURGE=YES, TPURGE=NO, DTB=YES
    DFHPCT TYPE=ENTRY, TRANSID=FAXB, PROGRAM=FAXB010, TRANSEC=001, C
SPURGE=YES, TPURGE=NO, DTB=YES
    DFHPCT TYPE=ENTRY, TRANSID=FAXC, PROGRAM=FAXC010, TRANSEC=001, C
SPURGE=YES, TPURGE=NO, DTB=YES
    DFHPCT TYPE=ENTRY, TRANSID=FAXD, PROGRAM=FAXD010, TRANSEC=001, C
SPURGE=YES, TPURGE=NO, DTB=YES
    DFHPCT TYPE=ENTRY, TRANSID=FAXE, PROGRAM=FAXE010, TRANSEC=001, C
SPURGE=YES, TPURGE=NO, DTB=YES
    DFHPCT TYPE=ENTRY, TRANSID=FAXG, PROGRAM=FAXG010, TRANSEC=001, C
SPURGE=YES, TPURGE=NO, DTB=YES
    DFHPCT TYPE=ENTRY, TRANSID=FAXH, PROGRAM=FAXHELP, TRANSEC=001, C
SPURGE=YES, TPURGE=NO, DTB=YES
    DFHPCT TYPE=ENTRY, TRANSID=FAXI, PROGRAM=FAXI010, TRANSEC=001, C
SPURGE=YES, TPURGE=NO, DTB=YES
    DFHPCT TYPE=ENTRY, TRANSID=FAXJ, PROGRAM=FAXJ010, TRANSEC=001, C
SPURGE=YES, TPURGE=NO, DTB=YES
    DFHPCT TYPE=ENTRY, TRANSID=FAXK, PROGRAM=FAXK010, TRANSEC=001, C
SPURGE=YES, TPURGE=NO, DTB=YES
    DFHPCT TYPE=ENTRY, TRANSID=FAXL, PROGRAM=FAXL020, TRANSEC=001, C
SPURGE=YES, TPURGE=NO, DTB=YES
    DFHPCT TYPE=ENTRY, TRANSID=FAXM, PROGRAM=FAXM010, TRANSEC=001, C
SPURGE=YES, TPURGE=NO, DTB=YES
    DFHPCT TYPE=ENTRY, TRANSID=FAXN, PROGRAM=FAXN010, TRANSEC=001, C
SPURGE=YES, TPURGE=NO, DTB=YES
    DFHPCT TYPE=ENTRY, TRANSID=FAXO, PROGRAM=FAXO010, TRANSEC=001, C
SPURGE=YES, TPURGE=NO, DTB=YES
    DFHPCT TYPE=ENTRY, TRANSID=FAXP, PROGRAM=FAXP010, TRANSEC=001, C
SPURGE=YES, TPURGE=NO, DTB=YES
    DFHPCT TYPE=ENTRY, TRANSID=FAXQ, PROGRAM=FAXQ010, TRANSEC=001, C
SPURGE=YES, TPURGE=NO, DTB=YES
    DFHPCT TYPE=ENTRY, TRANSID=FAXR, PROGRAM=FAXR010, TRANSEC=001, C
SPURGE=YES, TPURGE=NO, DTB=YES, RTIMOUT=300
    DFHPCT TYPE=ENTRY, TRANSID=FAXS, PROGRAM=FAXS010, TRANSEC=001, C
SPURGE=YES, TPURGE=NO, DTB=YES, RTIMOUT=300
    DFHPCT TYPE=ENTRY, TRANSID=FAXT, PROGRAM=FAXT010, TRANSEC=001, C
SPURGE=YES, TPURGE=NO, DTB=YES
    DFHPCT TYPE=ENTRY, TRANSID=FAXU, PROGRAM=FAXU010, TRANSEC=001, C
SPURGE=YES, TPURGE=NO, DTB=YES
    DFHPCT TYPE=ENTRY, TRANSID=FAXX, PROGRAM=FAXX010, TRANSEC=001, C
SPURGE=YES, TPURGE=NO, DTB=YES
    DFHPCT TYPE=ENTRY, TRANSID=FAX0, PROGRAM=FAX0010, TRANSEC=001, C
SPURGE=YES, TPURGE=NO, DTB=YES
    DFHPCT TYPE=ENTRY, TRANSID=FAX1, PROGRAM=FAX1010, TRANSEC=001, C
SPURGE=YES, TPURGE=NO, DTB=YES
    DFHPCT TYPE=ENTRY, TRANSID=FAX2, PROGRAM=FAX2010, TRANSEC=001, C
SPURGE=YES, TPURGE=NO, DTB=YES
    DFHPCT TYPE=ENTRY, TRANSID=FAX3, PROGRAM=FAX3010, TRANSEC=001, C
SPURGE=YES, TPURGE=NO, DTB=YES
    DFHPCT TYPE=ENTRY, TRANSID=FAX4, PROGRAM=FAX4010, TRANSEC=001, C
SPURGE=YES, TPURGE=NO, DTB=YES

```

```

DFHPCT TYPE=ENTRY, TRANSID=FAX5, PROGRAM=FAX5010, TRANSEC=001, C
SPURGE=YES, TPURGE=NO, DTB=YES
DFHPCT TYPE=ENTRY, TRANSID=FAX6, PROGRAM=FAX6010, TRANSEC=001, C
SPURGE=YES, TPURGE=NO, DTB=YES
DFHPCT TYPE=ENTRY, TRANSID=FAX7, PROGRAM=FAX7010, TRANSEC=001, C
SPURGE=YES, TPURGE=NO, DTB=YES
DFHPCT TYPE=ENTRY, TRANSID=FAX8, PROGRAM=FAX8010, TRANSEC=001, C
SPURGE=YES, TPURGE=NO, DTB=YES
DFHPCT TYPE=ENTRY, TRANSID=FAX9, PROGRAM=FAX9010, TRANSEC=001, C
SPURGE=YES, TPURGE=NO, DTB=YES

```

The member **PCTRDO** contains the CICS PCT updates in RDO format and is shown in [Figure 19](#).

Figure 19. PCT Updates in RDO Format

```

*-----*
* OV/FAX 2.4.1 RDO DEFINITIONS FOR CICS 3.3.0 OR ABOVE *
*-----*
*
* DEFINE PROFILE
*
DEFINE PROFILE (FAXRTIM) GROUP (FAX01) RTIMOUT (300)
*
* DEFINE TRANSACTIONS
*
DEFINE TRAN (FAXA) GROUP (FAX01) PROG (FAXA010) SPURGE (YES)
DEFINE TRAN (FAXB) GROUP (FAX01) PROG (FAXB010) SPURGE (YES)
DEFINE TRAN (FAXC) GROUP (FAX01) PROG (FAXC010) SPURGE (YES)
DEFINE TRAN (FAXD) GROUP (FAX01) PROG (FAXD010) SPURGE (YES)
DEFINE TRAN (FAXE) GROUP (FAX01) PROG (FAXE010) SPURGE (YES)
DEFINE TRAN (FAXG) GROUP (FAX01) PROG (FAXG010) SPURGE (YES)
DEFINE TRAN (FAXH) GROUP (FAX01) PROG (FAXHELP) SPURGE (YES)
DEFINE TRAN (FAXI) GROUP (FAX01) PROG (FAXI010) SPURGE (YES)
DEFINE TRAN (FAXJ) GROUP (FAX01) PROG (FAXJ010) SPURGE (YES)
DEFINE TRAN (FAXK) GROUP (FAX01) PROG (FAXK010) SPURGE (YES)
DEFINE TRAN (FAXL) GROUP (FAX01) PROG (FAXL020) SPURGE (YES)
DEFINE TRAN (FAXM) GROUP (FAX01) PROG (FAXM010) SPURGE (YES)
DEFINE TRAN (FAXN) GROUP (FAX01) PROG (FAXN010) SPURGE (YES)
DEFINE TRAN (FAXO) GROUP (FAX01) PROG (FAXO010) SPURGE (YES)
DEFINE TRAN (FAXP) GROUP (FAX01) PROG (FAXP010) SPURGE (YES)
DEFINE TRAN (FAXQ) GROUP (FAX01) PROG (FAXQ010) SPURGE (YES)
DEFINE TRAN (FAXR) GROUP (FAX01) PROG (FAXR010) PROF (FAXRTIM) SPURGE (YES)
DEFINE TRAN (FAXS) GROUP (FAX01) PROG (FAXS010) PROF (FAXRTIM) SPURGE (YES)
DEFINE TRAN (FAXT) GROUP (FAX01) PROG (FAXT010) SPURGE (YES)
DEFINE TRAN (FAXU) GROUP (FAX01) PROG (FAXU010) SPURGE (YES)
DEFINE TRAN (FAXX) GROUP (FAX01) PROG (FAXX010) SPURGE (YES)
DEFINE TRAN (FAX0) GROUP (FAX01) PROG (FAX0010) SPURGE (YES)
DEFINE TRAN (FAX1) GROUP (FAX01) PROG (FAX1010) SPURGE (YES)
DEFINE TRAN (FAX2) GROUP (FAX01) PROG (FAX2010) SPURGE (YES)
DEFINE TRAN (FAX3) GROUP (FAX01) PROG (FAX3010) SPURGE (YES)
DEFINE TRAN (FAX4) GROUP (FAX01) PROG (FAX4010) SPURGE (YES)
DEFINE TRAN (FAX5) GROUP (FAX01) PROG (FAX5010) SPURGE (YES)
DEFINE TRAN (FAX6) GROUP (FAX01) PROG (FAX6010) SPURGE (YES)
DEFINE TRAN (FAX7) GROUP (FAX01) PROG (FAX7010) SPURGE (YES)
DEFINE TRAN (FAX8) GROUP (FAX01) PROG (FAX8010) SPURGE (YES)

```



```

DEFINE TRAN (FAX9) GROUP (FAX01) PROG (FAX9010) SPURGE (YES)
*
* ADD OV/FAX GROUP TO CICS GRPLIST
*
ADD GROUP (FAX01) LIST (CICSGRPS)

```

The transactions FAXE, FAXI, FAXK, FAXM, FAXN and FAXR do not need to be defined if the OV/Fax inbound component is not being installed.

Program Processing Table (PPT)

The member **PPT** contains the CICS PPT updates and is shown in [Figure 20](#).

Figure 20. PPT Updates

```

* *****
* PPT ENTRIES
* *****
      DFHPPT TYPE=ENTRY, PROGRAM=FAXA010, PGMLANG=COBOL
      DFHPPT TYPE=ENTRY, PROGRAM=FAXB010, PGMLANG=COBOL
      DFHPPT TYPE=ENTRY, PROGRAM=FAXC010, PGMLANG=COBOL
      DFHPPT TYPE=ENTRY, PROGRAM=FAXCDATE, PGMLANG=COBOL
      DFHPPT TYPE=ENTRY, PROGRAM=FAXCTIME, PGMLANG=COBOL
      DFHPPT TYPE=ENTRY, PROGRAM=FAXCODEX, PGMLANG=COBOL
      DFHPPT TYPE=ENTRY, PROGRAM=FAXD010, PGMLANG=COBOL
      DFHPPT TYPE=ENTRY, PROGRAM=FAXEAB, PGMLANG=COBOL
      DFHPPT TYPE=ENTRY, PROGRAM=FAXE010, PGMLANG=COBOL
      DFHPPT TYPE=ENTRY, PROGRAM=FAXG010, PGMLANG=COBOL
      DFHPPT TYPE=ENTRY, PROGRAM=FAXHELP, PGMLANG=COBOL
      DFHPPT TYPE=ENTRY, PROGRAM=FAXI010, PGMLANG=COBOL
      DFHPPT TYPE=ENTRY, PROGRAM=FAXJ010, PGMLANG=COBOL
      DFHPPT TYPE=ENTRY, PROGRAM=FAXK010, PGMLANG=COBOL
      DFHPPT TYPE=ENTRY, PROGRAM=FAXL010, PGMLANG=ASSEMBLER
      DFHPPT TYPE=ENTRY, PROGRAM=FAXL020, PGMLANG=COBOL
      DFHPPT TYPE=ENTRY, PROGRAM=FAXMSG, PGMLANG=COBOL
      DFHPPT TYPE=ENTRY, PROGRAM=FAXM010, PGMLANG=COBOL
      DFHPPT TYPE=ENTRY, PROGRAM=FAXNOTSC, PGMLANG=COBOL
      DFHPPT TYPE=ENTRY, PROGRAM=FAXN010, PGMLANG=COBOL
      DFHPPT TYPE=ENTRY, PROGRAM=FAXO010, PGMLANG=COBOL
      DFHPPT TYPE=ENTRY, PROGRAM=FAXPCSC, PGMLANG=COBOL
      DFHPPT TYPE=ENTRY, PROGRAM=FAXPRISC, PGMLANG=COBOL
      DFHPPT TYPE=ENTRY, PROGRAM=FAXP010, PGMLANG=COBOL
      DFHPPT TYPE=ENTRY, PROGRAM=FAXQ010, PGMLANG=COBOL
      DFHPPT TYPE=ENTRY, PROGRAM=FAXQUE, PGMLANG=COBOL
      DFHPPT TYPE=ENTRY, PROGRAM=FAXRFTSC, PGMLANG=COBOL
      DFHPPT TYPE=ENTRY, PROGRAM=FAXR010, PGMLANG=COBOL
      DFHPPT TYPE=ENTRY, PROGRAM=FAXS010, PGMLANG=COBOL
      DFHPPT TYPE=ENTRY, PROGRAM=FAXT010, PGMLANG=COBOL
      DFHPPT TYPE=ENTRY, PROGRAM=FAXU010, PGMLANG=COBOL
      DFHPPT TYPE=ENTRY, PROGRAM=FAXVAL, PGMLANG=COBOL
      DFHPPT TYPE=ENTRY, PROGRAM=FAXX010, PGMLANG=COBOL
      DFHPPT TYPE=ENTRY, PROGRAM=FAX0010, PGMLANG=COBOL
      DFHPPT TYPE=ENTRY, PROGRAM=FAX1010, PGMLANG=COBOL
      DFHPPT TYPE=ENTRY, PROGRAM=FAX2010, PGMLANG=COBOL
      DFHPPT TYPE=ENTRY, PROGRAM=FAX2EXIT, PGMLANG=COBOL

```

```

DFHPPT TYPE=ENTRY, PROGRAM=FAX3010, PGMLANG=COBOL
DFHPPT TYPE=ENTRY, PROGRAM=FAX4010, PGMLANG=COBOL
DFHPPT TYPE=ENTRY, PROGRAM=FAX5010, PGMLANG=COBOL
DFHPPT TYPE=ENTRY, PROGRAM=FAX6010, PGMLANG=COBOL
DFHPPT TYPE=ENTRY, PROGRAM=FAX7010, PGMLANG=COBOL
DFHPPT TYPE=ENTRY, PROGRAM=FAX8010, PGMLANG=COBOL
DFHPPT TYPE=ENTRY, PROGRAM=FAX9010, PGMLANG=COBOL
DFHPPT TYPE=ENTRY, PROGRAM=FAXA01A, USAGE=MAP
DFHPPT TYPE=ENTRY, PROGRAM=FAXB01A, USAGE=MAP
DFHPPT TYPE=ENTRY, PROGRAM=FAXC01A, USAGE=MAP
DFHPPT TYPE=ENTRY, PROGRAM=FAXD01A, USAGE=MAP
DFHPPT TYPE=ENTRY, PROGRAM=FAXE01A, USAGE=MAP
DFHPPT TYPE=ENTRY, PROGRAM=FAXG01A, USAGE=MAP
DFHPPT TYPE=ENTRY, PROGRAM=FAXH01A, USAGE=MAP
DFHPPT TYPE=ENTRY, PROGRAM=FAXM01A, USAGE=MAP
DFHPPT TYPE=ENTRY, PROGRAM=FAXN01A, USAGE=MAP
DFHPPT TYPE=ENTRY, PROGRAM=FAX101A, USAGE=MAP
DFHPPT TYPE=ENTRY, PROGRAM=FAX201A, USAGE=MAP
DFHPPT TYPE=ENTRY, PROGRAM=FAX301A, USAGE=MAP
DFHPPT TYPE=ENTRY, PROGRAM=FAX401A, USAGE=MAP
DFHPPT TYPE=ENTRY, PROGRAM=FAX501A, USAGE=MAP
DFHPPT TYPE=ENTRY, PROGRAM=FAX701A, USAGE=MAP
DFHPPT TYPE=ENTRY, PROGRAM=FAX801A, USAGE=MAP
DFHPPT TYPE=ENTRY, PROGRAM=FAX901A, USAGE=MAP

```

The member **PPTRDO** contains the CICS PPT updates in RDO format and is shown in [Figure 21](#).

[Figure 21. PPT Updates in RDO Format](#)

```

*=====
* OV/FAX 2.4.1 RDO DEFINITIONS FOR CICS 3.3.0 OR ABOVE
*=====
* DEFINE MAPSETS
DEFINE MAPSET (FAXA01A ) GROUP (FAX01)
DEFINE MAPSET (FAXB01A ) GROUP (FAX01)
DEFINE MAPSET (FAXC01A ) GROUP (FAX01)
DEFINE MAPSET (FAXD01A ) GROUP (FAX01)
DEFINE MAPSET (FAXE01A ) GROUP (FAX01)
DEFINE MAPSET (FAXG01A ) GROUP (FAX01)
DEFINE MAPSET (FAXH01A ) GROUP (FAX01)
DEFINE MAPSET (FAXM01A ) GROUP (FAX01)
DEFINE MAPSET (FAXN01A ) GROUP (FAX01)
DEFINE MAPSET (FAX101A ) GROUP (FAX01)
DEFINE MAPSET (FAX201A ) GROUP (FAX01)
DEFINE MAPSET (FAX301A ) GROUP (FAX01)
DEFINE MAPSET (FAX401A ) GROUP (FAX01)
DEFINE MAPSET (FAX501A ) GROUP (FAX01)
DEFINE MAPSET (FAX701A ) GROUP (FAX01)
DEFINE MAPSET (FAX801A ) GROUP (FAX01)
DEFINE MAPSET (FAX901A ) GROUP (FAX01)
*
* DEFINE PROGRAMS
DEFINE PROG (FAXA010 ) GROUP (FAX01)
DEFINE PROG (FAXB010 ) GROUP (FAX01)
DEFINE PROG (FAXCDATE) GROUP (FAX01)

```

```

DEFINE PROG (FAXCODEX) GROUP (FAX01)
DEFINE PROG (FAXCTIME) GROUP (FAX01)
DEFINE PROG (FAXC010 ) GROUP (FAX01)
DEFINE PROG (FAXD010 ) GROUP (FAX01)
DEFINE PROG (FAXEAB ) GROUP (FAX01)
DEFINE PROG (FAXE010 ) GROUP (FAX01)
DEFINE PROG (FAXG010 ) GROUP (FAX01)
DEFINE PROG (FAXHELP ) GROUP (FAX01)
DEFINE PROG (FAXI010 ) GROUP (FAX01)
DEFINE PROG (FAXJ010 ) GROUP (FAX01)
DEFINE PROG (FAXK010 ) GROUP (FAX01)
DEFINE PROG (FAXL010 ) GROUP (FAX01) LANGUAGE (ASSEMBLER)
DEFINE PROG (FAXL020 ) GROUP (FAX01)
DEFINE PROG (FAXMSG ) GROUP (FAX01)
DEFINE PROG (FAXM010 ) GROUP (FAX01)
DEFINE PROG (FAXNOTSC) GROUP (FAX01)
DEFINE PROG (FAXN010 ) GROUP (FAX01)
DEFINE PROG (FAXO010 ) GROUP (FAX01)
DEFINE PROG (FAXPCSC ) GROUP (FAX01)
DEFINE PROG (FAXPRISC) GROUP (FAX01)
DEFINE PROG (FAXP010 ) GROUP (FAX01)
DEFINE PROG (FAXQUE ) GROUP (FAX01)
DEFINE PROG (FAXQ010 ) GROUP (FAX01)
DEFINE PROG (FAXRFTSC) GROUP (FAX01)
DEFINE PROG (FAXR010 ) GROUP (FAX01)
DEFINE PROG (FAXS010 ) GROUP (FAX01)
DEFINE PROG (FAXT010 ) GROUP (FAX01)
DEFINE PROG (FAXU010 ) GROUP (FAX01)
DEFINE PROG (FAXVAL ) GROUP (FAX01)
DEFINE PROG (FAXX010 ) GROUP (FAX01)
DEFINE PROG (FAX0010 ) GROUP (FAX01)
DEFINE PROG (FAX1010 ) GROUP (FAX01)
DEFINE PROG (FAX2EXIT) GROUP (FAX01)
DEFINE PROG (FAX2010 ) GROUP (FAX01)
DEFINE PROG (FAX3010 ) GROUP (FAX01)
DEFINE PROG (FAX4010 ) GROUP (FAX01)
DEFINE PROG (FAX5010 ) GROUP (FAX01)
DEFINE PROG (FAX6010 ) GROUP (FAX01)
DEFINE PROG (FAX7010 ) GROUP (FAX01)
DEFINE PROG (FAX8010 ) GROUP (FAX01)
DEFINE PROG (FAX9010 ) GROUP (FAX01)

```

The following programs do not need to be defined if the OV/Fax inbound component is not being installed.

- FAXI010
- FAXK010
- FAXM010
- FAXM01A
- FAXN010
- FAXN01A
- FAXR010

Post-initialisation Table (PLTPI)

OV/Fax requires an entry to be made in the PLT, since some of its operations are timer-driven and need to be initiated whenever CICS is brought up.

The member **PLT** contains the CICS PLTPI table update, and is shown in [Figure 22](#).

Figure 22. Start-up Table Updates

```
PRINT ON,NOGEN
ZZGLBL
DFHPLT TYPE=INITIAL,SUFFIX=DI
DFHPLT TYPE=ENTRY,PROGRAM=FAXL010
DFHPLT TYPE=FINAL
END DFHPLTBA
```

Job Control Language (JCL)

The DD cards required in the CICS JCL are described in [Figure 23](#).

Figure 23. CICS DD statements for OV/Fax

DDNAME	DSNAME	Comments
-----	-----	-----
DFHRPL	FAX.LOAD	This dataset should be added to your existing DFHRPL libraries.

Resource Control Table (RCT)

The member **RCT** contains the CICS RCT table updates and is shown in [Figure 24](#).

Figure 24. RCT Table Updates

```
*****
*                               CICS RCT ENTRIES                               *
* SET THE AUTH PARAMETER TO THE OWNER OF THE TABLE                         *
*****
      DSNCRCT TYPE=ENTRY, TXID=FAXO, THRD=5, THRDA=1, PLAN=ENJPENJ0,
X
      TWAIT=POOL, AUTH=(XXXXXXX)
```

This change needs to be made only if you intend to use OV/Fax in conjunction with the Enterprise Address Book facility of OfficeVision/MVS.

Please note the following:

- The 'AUTH' parameter should be set to the user ID of the owner of the Enterprise Address Book tables, i.e. the person who created the tables.

- The 'PLAN' parameter should be set to the same value as that used by the Enterprise Address Book ENJ0 transaction.

Terminal Control Table (TCT)

A TCT entry for the fax server is not supplied with the software. OV/Fax can run without any specific entries for the server (for instance if you are using AUTOINSTALL).

You will probably want to take advantage of the server's ability to log back on to a CICS system that has gone down (without requiring any manual intervention), and this will require a little more work:

- Define a TCT entry for the server. A standard LU type 2 is sufficient, but you need to ensure that GMMSG is set to NO.
- The VTAM LU definition must ensure that the server is bound to the appropriate CICS system by specifying the APPLID of the CICS system in the LOGAPPL parameter.

Defining the OfficePath interface requirements

If you are using the OfficePath product to form the connection between your office system and OV/Fax, then you will need to update the OfficePath control file to reflect the requirements of OV/Fax. This can be done using the OfficePath Control File Maintenance suite of programs, which are described in more detail in the following OfficePath manuals:

- *Installation and Administration Guide*
- *Programming Interfaces Guide*

The records which need to be set up are as follow:

1. At least two user records, each pointing to the fax destination record.
2. The destination record itself.
3. A second destination record for confirmation of delivery of inbound faxes (optional).
4. An intray record (optional).

Outbound fax definitions for OfficePath

The destination record defines the requirements of OV/Fax, and will need to be set up first. It should be defined as follows:

Figure 31. Destination record definition in OfficePath for OV/Fax

```

PIPX                O F F I C E P A T H                DATE: 01/03/92
Function.... INSERT          Control File Maintenance      TIME: 16:03:22
Type..... DEST            Key.....DESTINFX
----- Destination maintenance -----
          Destination type: OUTTRAY

DOCUMENT TYPES                APPLICATION ATTRIBUTES
Accept RF Text..... Y        Accumulate recipients..... Y
Accept FF Text..... N        Can process ASA controls..... Y
Accept PC File..... N        Can process NOTE doctype..... Y
Accept Image..... N          Uses interface program..... Y
Accept Editable..... Y       Returns status information... N
Accept Msg/External... Y     Outtray processed in batch... N
Other document types.        Line-length.....
.....

CHARACTER SET                CICS PARAMETERS
Accept GCID..... MULTI-LINGUAL  Output file name..... FAXOUTP
                                Mail transaction..... FAXO
                                and TERMID.....

-----
PF1=Help          2=          3=          4=Exit      5=          6=
PF7=              8=          9=          10=Prev rec 11=Next rec 12=Quit

```

The contents of this record significantly affect the functioning of OV/Fax. Ensure that you supply the correct values for the fields:

Accept RF Text This should only be set to 'Y' if the OV/Fax servers are to convert the RFT documents into faxes. The servers do not support all RFT tags, such as headers and footers, but will support embedded RFT images. If images are not being used, set the flag to 'N' and ensure 'Can process ASA controls' is 'Y'. The host will then convert RFT documents to print-image before passing to OV/Fax, preserving the formatting tags (but losing any embedded images).

Accept FF Text This parameter must always be set to 'N'. FF Text documents will be converted to print-image before being passed to OV/Fax.

Accept PC File This should only be set to 'Y' if the optional Keyword PostFAX software is installed on the servers. This converts word processor format documents into faxes. The OV/Fax control file will also need configuring to indicate that PC files are supported.

Accept Image	This parameter must always be set to 'N'.
Accept Editable	This should always be set to 'Y', since it specifies whether you wish print-image documents to be passed to OV/Fax.
Accept Msg/External	This should be set to 'Y', since OV/Fax supports four-line messages, which generate single page faxes.
Accept GCID	This field identifies the GCIDs that OV/Fax can process. This must be set to the multilingual GCID.
Accumulate recipients	This processing indicates whether OfficePath will 'split up' the distribution. Imagine that a Personal Services note including 3 fax recipients is sent to OV/Fax. If this flag is set to 'N', these will be split up and will be logged as 3 different send requests by OV/Fax, each with one recipient. If it is set to 'Y', this request is passed to OV/Fax as one request with three recipients. This latter approach more closely resembles what the user feels he has sent, and thus makes the OV/Fax log easier to interpret.
Can process ASA controls	If the value of this field is set to 'Y', all ASA control characters which are used in a print-image document will be preserved when the document is passed to OV/Fax. The original line spacing of documents will be preserved when sent as faxes.
Uses interface program	This parameter must always be set to 'Y'.
Outtray processed in batch	This parameter must always be set to 'N'.
Line-length	This parameter specifies the number of characters per line which OfficePath is to place in the output print image document. The line is truncated at this value.
Output file name	This is the name of the 'out-tray', or VSAM KSDS, to which OfficePath will write all requests bound for OV/Fax. The name you give here must be FAXOUTP (or its customised equivalent).
Mail transaction	This gives the name of the first OV/Fax transaction to be started by OfficePath after writing to the out-tray. If you have customised the transaction names in OV/Fax then you will need to reflect that change here.

You must now define user records to OfficePath for each of the pseudo users set aside for Fax. The names of these users must match the following parameters on the OV/Fax CONF4 record:

NORMFAX User for normal address faxes (default = FAX)

WILDFAX User for wild address faxes (default = FAX)

Also add the deferred FAX users.

Each of these users should be represented on the OfficePath control file by 2 records, each of which points to DESTINFX. Please note that in the example, DSVHOST should be replaced by the actual host node name.

The first record is set up as shown in [Figure 32](#).

[Figure 32. User record definition in OfficePath for OV/Fax](#)

```
PIPX                                     DATE: 01/05/91
Function.... INSERT           Control File Maintenance      TIME: 16:04
Type..... USER             Key.....DSVHOST-FAX
----- User Maintenance -----
                                     -----
                                     Destination.... DESTINFX
                                     -----
-----
PF1=Help           2=           3=           4=Exit           5=           6=
PF7=              8=           9=          10=Prev rec    11=Next rec   12=Quit
```

The second record is set up as shown in [Figure 33](#).

Figure 33. Userset record definition in OfficePath for OV/Fax

```
PIPX                                     DATE: 01/05/91
Function.... INSERT           Control File Maintenance      TIME: 16:04
Type..... USER              Key.....FAX-*
----- User Maintenance -----
                                     -----
                                     Destination.... DESTINFX
                                     -----
-----
PF1=Help      2=              3=              4=Exit      5=              6=
PF7=          8=              9=              10=Prev rec  11=Next rec   12=Quit
```

Inbound fax definitions for OfficePath

Setting up OfficePath for inbound confirmations

This section may be ignored if you are not installing the inbound component of OV/Fax. OfficePath requires additional records in order to pass information back to OV/Fax, indicating whether or not the distribution of inbound faxes has been successful. OfficePath requires only one destination record for this, and it should have the values at [Figure 34](#):

Figure 34. Destination record definition in OfficePath for OV/Fax confirmations

```

PIPX                      O F F I C E P A T H                      DATE: 01/03/92
Function.... INSERT      Control File Maintenance                TIME: 16:03:22
Type..... DEST          Key.....FAXCONF
----- Destination maintenance -----
          Destination type: OUTTRAY

DOCUMENT TYPES                      APPLICATION ATTRIBUTES
Accept RF Text..... N              Accumulate recipients..... N
Accept FF Text..... N              Can process ASA controls.... N
Accept PC File..... N              Can process NOTE doctype.... N
Accept Image..... N                Uses interface program..... Y
Accept Editable..... Y             Returns status information... N
Accept Msg/External... N          Outtray processed in batch... N
Other document types.             Line-length.....
.....

CHARACTER SET                      CICS PARAMETERS
Accept GCID..... MULTI-LINGUAL    Output file name..... FAXOUTC
                                   Mail transaction..... FAXK
                                   and TERMID.....

-----
PF1=Help          2=          3=          4=Exit          5=          6=
PF7=             8=          9=          10=Prev rec    11=Next rec   12=Quit

```

Setting multiple OfficePath out-trays

One of the advantages of OfficePath is that multiple datasets may be used as 'in-trays' for data from applications. An intray, called 'ZPMAILSK' is defined upon installation of OfficePath, and OV/Fax is set up to use this as a default. However, you may define an intray that can be used exclusively by OV/Fax. The advantage is that the processing of messages and inbound faxes from OV/Fax will not be affected by any problems that may arise on other intray datasets used by other applications. Intrays are defined on the control file; the example shown in [Figure 35](#) defines an in-tray called FAXTRAY to OfficePath.

Figure 35. Intray record definition in OfficePath for OV/Fax

```
PIPX                                DATE:
01/05/91
Function.... INSERT          Control File Maintenance      TIME: 16:04
Type..... INTRAY           Key.....FAXTRAY
----- Input File Maintenance -----

Intray processed in batch.....N

-----
PF1=Help      2=          3=          4=Exit      5=          6=
PF7=          8=          9=          10=Prev rec 11=Next rec 12=Quit
```

If you decide to use a separate intray for OV/Fax, please note that you will also need to carry out the following tasks:

- Use the Utility Program to add or modify the system record for OV/Fax.
- Make an FCT entry for FAXTRAY, and a CICS JCL entry if required.
- Create and initialise the VSAM intray file.

Defining the RAPID Interface Requirements

If you are using DISOSS and RAPID in conjunction with OV/Fax, then you will need to amend the DISOSS HUP and RAPID control file definitions in order to send faxes. If you are using OfficePath instead, skip this chapter and go on to the chapter, ["Defining the OfficePath interface requirements"](#).

DISOSS HUP definitions

When a user sends a fax to OV/Fax from the office system, he does so by addressing it to a special API user, normally called 'FAX'. It is also possible to send faxes to a number of 'deferred' users, which will hold the fax on the mainframe, releasing it only when a specific time is reached. There are 10 of these users, each associated with different times. These facilities can only be used if you have set up the correct user and userset definitions in the DISOSS HUP.

Member **FAXHUP** on the **JCL** library contains sample definitions for all the user and userset entries that you will need to add to the HUP. The member contains user and userset definitions as shown in the [Figure 25](#) and [Figure 26](#).

The entries shown assume that you have defined ten deferred users: FAXD1, FAXD2, FAXD3, FAXD4, FAXD5, FAXD6, FAXD7, FAXD8, FAXD9, and FAXD10.

[Figure 25. Sample HUP user definitions for OV/Fax](#)

```
ADD USERTYPE=API,
    DDN=DSVHOST,
    SA=FAX,
    TRANID=ZAPI,
    REQPWD=FAX
ADD USERTYPE=API,
    DDN=DSVHOST,
    SA=FAXD1,
    TRANID=ZAPI,
    REQPWD=FAXD1
ADD USERTYPE=API,
    DDN=DSVHOST,
    SA=FAXD2,
    TRANID=ZAPI,
    REQPWD=FAXD2
ADD USERTYPE=API,
    DDN=DSVHOST,
    SA=FAXD3,
    TRANID=ZAPI,
    REQPWD=FAXD3
```

```

ADD USERTYPE=API,
    DDN=DSVHOST,
    SA=FAXD4,
    TRANID=ZAPI,
    REQPWD=FAXD4
ADD USERTYPE=API,
    DDN=DSVHOST,
    SA=FAXD5,
    TRANID=ZAPI,
    REQPWD=FAXD5
ADD USERTYPE=API,
    DDN=DSVHOST,
    SA=FAXD6,
    TRANID=ZAPI,
    REQPWD=FAXD6
ADD USERTYPE=API,
    DDN=DSVHOST,
    SA=FAXD7,
    TRANID=ZAPI,
    REQPWD=FAXD7
ADD USERTYPE=API,
    DDN=DSVHOST,
    SA=FAXD8,
    TRANID=ZAPI,
    REQPWD=FAXD8
ADD USERTYPE=API,
    DDN=DSVHOST,
    SA=FAXD9,
    TRANID=ZAPI,
    REQPWD=FAXD9
ADD USERTYPE=API,
    DDN=DSVHOST,
    SA=FAXD10,
    TRANID=ZAPI,
    REQPWD=FAXD10

```

Figure 26. Sample HUP user set definition for OV/Fax

```

ADD USERTYPE=USERSET,
    DDN=FAX,
    SA=*,
    OBTAINID=(DSVHOST, FAX)
ADD USERTYPE=USERSET,
    DDN=FAXD1,
    SA=*,
    OBTAINID=(DSVHOST, FAXD1)
ADD USERTYPE=USERSET,
    DDN=FAXD2,
    SA=*,
    OBTAINID=(DSVHOST, FAXD2)
ADD USERTYPE=USERSET,
    DDN=FAXD3,
    SA=*,
    OBTAINID=(DSVHOST, FAXD3)
ADD USERTYPE=USERSET,

```

```

        DDN=FAXD4,
        SA=*,
        OBTAINID= (DSVHOST, FAXD4)
ADD  USERTYPE=USERSET,
        DDN=FAXD5,
        SA=*,
        OBTAINID= (DSVHOST, FAXD5)
ADD  USERTYPE=USERSET,
        DDN=FAXD6,
        SA=*,
        OBTAINID= (DSVHOST, FAXD6)
ADD  USERTYPE=USERSET,
        DDN=FAXD7,
        SA=*,
        OBTAINID= (DSVHOST, FAXD7)
ADD  USERTYPE=USERSET,
        DDN=FAXD8,
        SA=*,
        OBTAINID= (DSVHOST, FAXD8)
ADD  USERTYPE=USERSET,
        DDN=FAXD9,
        SA=*,
        OBTAINID= (DSVHOST, FAXD9)
ADD  USERTYPE=USERSET,
        DDN=FAXD10,
        SA=*,
        OBTAINID= (DSVHOST, FAXD10)

```

Some customisation of this member should already have taken place when you ran the customisation utility IMIUTIL1 (see ["Tailoring the JCL library"](#)). All the occurrences of DSVHOST should have been changed to the name of your host DISOSS node.

Please note:

- If you have customised the RAPID transaction names at installation time, then you should replace ZAPI in the user definitions above with the customised variation.

These extra changes can be carried out by running IMIUTIL1 specifying extra parameters such as /ZAPI/RAPI/, and so on, and changing the 'M=' parameter to 'M=FAXHUP'.

Once the necessary customisation of the FAXHUP member has been performed, run the DISOSS HUP utility using the definitions that have been created.

The RAPID Control File

The RAPID system control file must be updated to reflect the requirements of OV/Fax. This can be done using the RAPID Control File maintenance suite of programs, which is described in more detail in the *RAPID Installation Guide*. The transaction normally used to perform this function is ZAPX.

The records which need to be set up are as follow:

1. One to eleven user records, each pointing to the same interface record. Each user record in RAPID should correspond to one of the user records that you have set up in the HUP.
2. The interface record itself.
3. User and interface records for the confirmation of delivery of inbound faxes (optional).

The interface record defines the requirements of OV/Fax, and will need to be set up first. It should be defined as follows:

Figure 27. Interface record definition in RAPID for OV/Fax

```
ZAP0                                RAPID SYSTEM                                DATE: 08/07/91
FUNCTION: INSERT                     CONTROL FILE MAINTENANCE                   TIME: 16:06:54
TYPE: INTERFACE KEY: DESTINFX                                               QUAL:
----- Destination record maintenance -----
DESTINATION CODE: FX                RDRF PROCESSING: Y                INTERVAL (HH:MM:SS): 00:01:00

SIGN-ON USERID: FAX

TO RECEIVE:-
PRINT IMAGE: Y                LINE WIDTH: 0133                ASA: Y
DCA LEVELS:
                GCIDS: U 00337-00256

ENTER OUTTRAY OR INTERNAL READER DETAILS:

OUTTRAY                FILENAME: FAXOUTP                BATCH: N                TRANSACTION: FAXO
                APIOUT FORMAT: Y                FLAGS:
INTERNAL READER        ASA CONTROLS:                SUPPRESS LOW VALUES:
                FORMATTED:                FLAGS:

-----
PF1=HELP                2=                3=                4=EXIT                5=PREV REC                6=NEXT REC
7=                8=                9=                10=                11=                12=QUIT
```

The contents of this record significantly affect the functioning of OV/Fax. Ensure that you supply the correct values for the fields:

DESTINATION CODE	This two-character code is used internally by RAPID. The value must be unique, and is usually set to 'FX'.
RDRF PROCESSING	This indicates whether RAPID will 'rationalise' the distribution. Imagine that a Personal Services note including 3 fax recipients is sent to OV/Fax. These are split up into 3 separate distributions by DISOSS. If RDRF processing is set to 'N', these will remain split, and will be logged as 3 different requests by OV/Fax, each with one recipient. If RDRF processing is set to 'Y', RAPID waits to accumulate the recipients, and will pass them down to OV/Fax as one request with three recipients. This latter approach more closely resembles what the user feels he has sent, and thus makes the OV/Fax log easier to interpret - it does, however, introduce a processing delay before items are passed to OV/Fax.
INTERVAL	This is the 'wait' interval which RAPID will apply for each send request to OV/Fax, if RDRF processing is set to 'Y'.
SIGN-ON USERID	This is the name of the user which RAPID will use to make requests on behalf of all users of this interface. This user must be defined to RAPID (see Figure 28) and to the DISOSS HUP (see "DISOSS HUP definitions").
PRINT IMAGE	This should always be set to 'Y', since it specifies whether you wish print-image documents to be passed to OV/Fax.
LINE WIDTH	This parameter specifies the maximum number of characters per line which RAPID places in the output print image document. The line is truncated at this value.
ASA	If the value of this field is set to 'Y', all ASA control characters which are used in a print-image document will be preserved when the document is passed to OV/Fax. The original line spacing of documents will be preserved when sent as faxes.
DCA LEVELS	Here you may specify a list of up to 9 DCA levels which OV/Fax can process. In practice, you will only ever need DCA levels 00011 (RFT documents) and 00014 (PC Files). You should only specify 00011 if the OV/Fax servers are to convert the RFT documents into faxes. The servers do not support all RFT tags, such as headers and footers, but will support embedded RFT images. If images are not being used, remove the 00011 value and change ASA to 'Y'. The host will then convert RFT documents to print-image before passing to OV/Fax, preserving the formatting tags (but losing any embedded images). You should only specify DCA level 00014 if the optional Keyword PostFAX software is installed on the servers. This converts word processor format documents into faxes. The OV/Fax control file will

also need configuring to indicate that PC files are supported.

- GCID** This field identifies the GCIDs that OV/Fax can process. This must be set to the multilingual GCID, 00337-00256.
- FILENAME** This is the name of the 'out-tray', or VSAM KSDS, to which RAPID will write all requests bound for OV/Fax. The name you give here must be FAXOUTP (or its customised equivalent).
- BATCH** This parameter must always be set to 'N'.
- TRANSACTION** This gives the name of the first OV/Fax transaction to be started by RAPID after writing to the out-tray. If you have customised the transaction names in OV/Fax, then you will need to reflect that change here.
- APIOUT
FORMAT** This parameter must always be set to 'Y'.

Once the interface record has been set up, the required user records should be inserted, each pointing to the interface record. The example shown in [Figure 28](#) shows the definition for the user 'FAX' - it should be repeated for 'FAXD1', 'FAXD2', and all of the other deferred users that you require.

Figure 28. User record definition in RAPID for OV/Fax

```
ZAP1                                RAPID SYSTEM                                DATE: 08/07/91
FUNCTION: INSERT                     CONTROL FILE MAINTENANCE                    TIME: 16:06:54
TYPE: USER                          KEY: FAX                                    QUAL:
-----                               User record maintenance                    -----

                                INTERFACE ID: DESTINFX

                                LIST INTERVAL: 00:04:00 (HH:MM:SS)

                                CANCEL MAIL: N

                                PASSWORD: FAX

-----
PF1=HELP          2=          3=          4=EXIT          5=PREV REC      6=NEXT REC
 7=              8=          9=         10=            11=            12=QUIT
```

The password specified on the user record must be the same as the password given to that user in the DISOSS HUP (see "[DISOSS HUP definitions](#)", where the shipped HUP definitions are listed).

Once the definitions are complete, re-start RAPID by typing in the transaction code 'ZAPA' (or your customised variant thereof).

Inbound fax definitions for RAPID

This section may be ignored if you are not installing the inbound component of OV/Fax. RAPID requires additional records in order to pass information back to OV/Fax, indicating whether or not the distribution of inbound faxes has been successful. RAPID requires one user record and one interface record for this. The interface record should be set up first, and should have the values at [Figure 29](#):

[Figure 29. Interface record definition in RAPID for OV/Fax confirmations](#)

```
ZAPO                                RAPID SYSTEM                                DATE: 08/07/91
FUNCTION: INSERT                     CONTROL FILE MAINTENANCE                   TIME: 16:06:54
TYPE: INTERFACE KEY: DESTINFC        QUAL:
----- Destination record maintenance -----
DESTINATION CODE: FC                RDRF PROCESSING: N                INTERVAL (HH:MM:SS):

SIGN-ON USERID: FAX

TO RECEIVE:-
PRINT IMAGE: Y                LINE WIDTH: 0133                ASA: Y
DCA LEVELS:
    GCIDS: U 00337-00256

ENTER OUTTRAY OR INTERNAL READER DETAILS:

OUTTRAY                            FILENAME: FAXOUTC                BATCH: N                TRANSACTION: FAXK
                                APIOUT FORMAT: Y                FLAGS:
INTERNAL READER                    ASA CONTROLS:                    SUPPRESS LOW VALUES:
                                FORMATTED:                        FLAGS:

-----
PF1=HELP                2=                3=                4=EXIT                5=PREV REC        6=NEXT REC
 7=                8=                9=                10=                11=                12=QUIT
```

The user record which needs to be set up should have the values shown in [Figure 30](#):

Figure 30. User record definition in RAPID for OV/Fax confirmation

```
ZAP1                      RAPID SYSTEM                      DATE: 08/07/91
FUNCTION: INSERT          CONTROL FILE MAINTENANCE          TIME: 16:06:54
TYPE: USER               KEY: FAXCONF                      QUAL:
-----
                        User record maintenance          -----

                        INTERFACE ID: DESTINFC

LIST INTERVAL: 00:04:00 (HH:MM:SS)

                        CANCEL MAIL: N

                        PASSWORD: FAXCONF

-----
PF1=HELP      2=          3=          4=EXIT      5=PREV REC  6=NEXT REC
7=           8=          9=          10=         11=         12=QUIT
```

The key of this user record may be changed if required, but should always match the field **REPLY** on the CONF4 record (see "[CONF4 - Operating Parameters](#)").

No additional HUP records are required for this function.

Updating The Utility Program for OV/Fax

OV/Fax uses the Utility Program to extract information about the environment in which it is operating. Most of the information is obtained from Personal Services; however there are times when this information will be unavailable: for example some of the background transactions or because you do not use Personal Services. The Utility programs require configuring for OV/Fax. Refer to [Appendix A, "Installing The Utility Programs"](#) and specifically ["Maintaining Product Records"](#) for details on how to do this. The family name (or prefix) should be the same as the transaction prefix used within OV/Fax (**FAX** is the default).

Installation Checklist

The initial installation should now be complete. As a result of carrying out the preceding steps, the following should have been accomplished:

1. Four libraries unloaded from tape:
 - a. FAX.INSTALL
 - b. FAX.JCL
 - c. FAX.LOAD
 - d. FAX.SOURCE
2. Between five and eight VSAM files created and initialised:
 - a. FAXCNTL
 - b. FAXSERV
 - c. FAXSCOD (optional)
 - d. FAXOUTP
 - e. FAXLOGS
 - f. FAXOT
 - g. FAXIN (optional)
 - h. FAXOUTC (optional)
3. The control file initialised with control records by executing program FAXCNTL.
4. The following CICS tables updated with data from the members on the **INSTALL** library:
 - a. FCT with member FCT or FCTRDO
 - b. PCT with member PCT or PCTRDO
 - c. PPT with member PPT or PPTRDO
5. The PLTPI table updated (to start OV/Fax automatically).
6. The CICS JCL deck updated to include the following DD cards:
 - a. DFHRPL (FAX.LOAD library added)
 - b. The VSAM files (unless you have used the DSNAME option in the FCT)
7. If RAPID and DISOSS are being used in conjunction with OV/Fax:

- User and user set definitions set up in the DISOSS HUP.
- User and interface definitions set up on the RAPID control file.
- 8. If OfficePath is being used in conjunction with OV/Fax:
 - User and destination definitions set up on the OfficePath control file.
- 9. The Utility Programs have been optionally upgraded and configured for use by OV/Fax.

Installation Verification

Now that the installation is complete, a few things may be done to verify that it has been carried out successfully. Firstly, bring up the CICS system and examine the CICS log for messages like the following:

```
FAXL005 22/09/95 06:31:26 START UP REQUEST FOR FAXI
FAXL005 22/09/95 06:31:27 START UP REQUEST FOR FAXJ
FAXL005 22/09/95 06:31:27 START UP REQUEST FOR FAXQ
FAXL005 22/09/95 06:31:27 START UP REQUEST FOR FAXP
```

You may see some or all of these messages, depending on whether inbound fax has been installed. These messages are produced by the PLT program when initiating the timer-driven actions within the system. If you see none of these messages, check that the PLT definition for OV/Fax has been made correctly, and that the PCT definition for transaction FAXL points to program FAXL020.

Defining a fax server

The next stage is to insert a server record on the server file. This may be done using the on-line maintenance suite supplied with OV/Fax. The suite is accessed by typing in the transaction code FAX2. The panel shown in [Figure 36](#) appears:

Figure 36. The OV/Fax Sign on panel

FAX2FAX2	
OV/FAX User Sign-On	
Type your logon information below; then press Enter.	
User ID ===>	Address ===>
Password ===>	

```
(C) Copyright Keane Ltd.
```

```
PF1=           2=           3=           4=Exit       5=           6=  
PF7=           8=           9=          10=          11=          12=
```

Enter the user id defined during the control file load and press enter. If your address (node name) is different from the default address then you must enter you address.

Figure 37. The administration suite main menu

```
FAX2FAX1                               OV/FAX Menu  
  
Select an option and type it below; then press ENTER.  
  
1  Create/Change Personal FAX Address Book  
2  View Personal FAX Address Book  
3  Create/Change Shared FAX Address Book  
4  View Shared Fax Address Book  
5  Work With FAX Status Information  
6  Work With FAX Server Information  
7  View Inbound Fax Status  
8  User Profile Maintenance  
  
PF1=Help       2=           3=           4=Exit       5=Cmd Line   6=  
PF7=           8=           9=          10=          11=          12=Quit  
  
===>
```

Select option 6 from this menu. The panel shown in [Figure 38](#) will then appear:

Figure 38. The server list panel

```
FAX2FAXA                                SERVER LIST
Select the item(s) to work with; then press ENTER

  CMD SERVER      ACTIVITY              STATUS

PF1=Help          2=                    3=                    4=Main Menu  5=Cmd Line  6=
PF7=Backward      8=Forward          9=                    10=           11=          12=Quit
===>
```

There is no information displayed on this panel, since no servers have yet been defined. Enter **ADD** on the command line and press enter. The panel shown in [Figure 39](#) is then displayed:

Figure 39. The server information panel

```
FAX2FAXB                                SERVER INFORMATION

Change the information below as desired; then press ENTER

Server.....:                               Inbound recipients:
Activity.....: OPEN                          1 Node.:
Rating.....: 01                             ID...:
Status.....:                                2 Node.:
                                           ID...:
Number Active Faxes.....:                    3 Node.:
Size of Queue (in Kbytes)...:                ID...:
Total Number Faxes Sent....:                 4 Node.:
                                           ID...:

Time Server Last Polled Host....:
Time of Last Alert.....:

Select an option and type it below; then press ENTER.
1 View Queued Faxes                      10 Delete

PF1=Help      2=          3=          4=Main Menu  5=Cmd Line  6=
PF7=          8=          9=          10=         11=         12=Quit

===>
```

On this panel, all you need to do is to type in the name of the server, and press 'Enter'. All other fields will be supplied for you. The name of the server can be whatever you like, but it will need to match the name given to the server when the OV/Fax server software is installed later. Fuller details about the maintenance system are given in the *OV/Fax Administration Guide*.

Sending a test fax

You should now send a test fax to check that faxes can be queued to the new server. There are several ways to do this:

- In Personal Services you can do this by creating a message ready to use as a test fax (fastpath CM). Type the fax number to which you wish to transmit on the first of the Message lines, and the text on the remaining three. Send the message to 'FAX' - the address may be left blank. (Methods of creating and sending faxes are outlined more thoroughly in the *OV/Fax User Guide*).
- If you have OfficePath installed, the OV/Fax transaction FAXT may be used to generate a test fax. This can be run from a blank CICS screen. The test fax is sent from a user of DEMOUSER to a recipient of TESTREC at node FAX. (DEMOUSER will need to be authorised to use OV/Fax). TESTREC is a personal or shared address book entry; a different name can be specified when the transaction is started, for example **FAXT NICKNAME**. Please refer to the

OV/Fax Administration Guide for more details on authorising users and maintaining the address books.

- OfficePath and RAPID supply transactions to generate test requests (depending on the version of the product you have installed). The transactions are PIPT and ZAPT respectively, and both allow you to generate a message, note or document. A message is simplest, in which case you should enter the fax number in the first line of the message and send it to 'FAX' with a blank address. Please refer to the installation documentation for the relevant product for more details on using these facilities.

Allow a short time to elapse for the request to be processed by RAPID/DISOSS or OfficePath. Then sign back on to the administration system by typing in the transaction code FAX2, choosing option 5 this time. When the 'Fax Status Information Selection' panel is displayed, press Enter.

The 'Status of Fax Requests' panel should have one entry on it, with a status of 'PENDING'. Further information about this entry can be viewed by entering an 'x' against the item.

The installation of the mainframe component of OV/Fax has now been verified. Clearly, although the fax is on the status file (FAXLOGS), it will not be transmitted until the installation of the OV/Fax software on the server is complete. The installation and customisation of the server software is described in the *OV/Fax Server Guide*.

PART TWO - CUSTOMIZATION

Control File Maintenance

The OV/Fax control file contains many records that are used to configure OV/Fax. These are created in batch with the control file dataset deallocated from CICS.

FAXCNTL is a batch program for setting up the control file records. This program takes records from an input dataset and interprets them to produce validated control records. The input dataset is a standard character card file, of which the first 72 bytes only are used.

The different type of control file records all have different parameters, and different parameters have different data types.

Records all start with a line containing a '/' as the first character followed by up to six alphanumeric characters indicating the type of record, and possibly some data for the record key, separated from the type by spaces. Data for the record follows with the data type followed by any data. The record type and data type must always be upper case. Comment lines must start with a '*'. All comment lines are ignored. Blank lines may be placed anywhere and are ignored.

This program will operate in four modes: ADD, REPLACE, UPDATE, and DELETE. To swap between modes a special mode change line is used.

The mode change controls are

- /-ADD** Add records, do not overwrite existing records. This is the default mode.
- /-REPL** Replace existing records (deleting the original). New records will be added if they do not already exist.
- /-UPDT** Update records, reads record, makes changes and rewrites it.
- /-DEL** Delete record from control file.

Within the JCL dataset there are a number of members containing sample configuration records; the member names have the format FAXCTLn1, where n is record group and 1 is the language code. The default UK English files are shipped with a language code of space:

- FAXCTL1** EBCDIC to ASCII conversion
- FAXCTL2** Configuration records
- FAXCTL3** Function key records
- FAXCTL4** Panel records
- FAXCTL5** Help records
- FAXCTL6** Error messages
- FAXCTL7** User confirmation/rejection/status messages
- FAXCTL8** On-line messages displayed on OV/Fax panels
- FAXCTL9** Report headings
- FAXCTLA** Sample least cost routing
- FAXCTLB** Sample user profiles
- FAXCTLC** Sample deferred users

Parameter Data Types

The following data types are used for the parameters input to FAXCNTL, which will validate them before writing to the control file.

The parameters are described in ["Record Parameter Definitions"](#).

- decimal(m)** A decimal number in the range 0 to m.
- EDIT (n)** Up to n characters following a '=', '+' or '>' character. These characters are used as follows:
 - = the text is left justified in the field.
 - + the text is centred in the field.
 - > the text is right justified in the field.

Leading spaces after the format control character are not removed.

- TEXT (n)** One to n characters, leading spaces are removed.
- TEXTA (n)** One to n upper case alphabetic characters.
- TEXTA9 (n)** One to n upper case alphanumeric characters.
- TEXTZ (n)** Zero to n characters, leading spaces are removed.
- TEXTZA** Zero to n upper case alphabetic characters.

(n)

TEXTZA9 Zero to n upper case alphanumeric characters.

(n)

locn.user The username and location are each one to eight characters long and are separated by a full stop. They may contain spaces but not a full stop. Leading and trailing spaces are removed from both username and location.

Y/N One character, must be upper case Y or N. If this is an optional parameter and it is omitted, then it will default to N unless described otherwise.

HEX 16 hexadecimal bytes each entered as two characters (for example F1). Imbedded spaces will be ignored.

Record Parameter Definitions

The record definitions below show the different parameters applicable to each record on the OV/Fax control file. This file is updated using the batch program FAXCNTL, as described in ["Control File Maintenance"](#). Some parameters may be repeated, and some are optional, and so the number of times a parameter may occur is shown for each parameter name in the definitions which follow.

The various record types are loosely grouped into six categories depending on the function of the records. Each category is described in a separate chapter.

Configuration Records These records control the functions of each of the OV/Fax programs. They are likely to need customisation during installation and only occasional changes later on.

Presentation Control Records These records control the way OV/Fax is presented to users. All the text of the panels and messages are defined here. These records may need major modification if the OV/Fax system is to be presented in a language that is not supplied.

Message Records These records contain the text of messages and documents sent to users. These records may need major modification if the OV/Fax system is to be presented in a language that is not supplied.

User Access Records These records contain the details defining users to the OV/Fax system, the deferred users, and the DID specifications.

Number Routing Records These records allow faxes to be routed to specific servers depending on their country and area codes.

Report Heading Records These records contain the headings for the batch report.

The details of each record is presented in a five column table, the columns are as follows:

Name	the name of the parameter.
Description	a description of the parameter.
Occurs	the number of times that the parameter may appear within the record.
Format	the parameter data type.
Maximum Size	the maximum size for numeric value and the maximum length for text fields.

Configuration Definition Records

CONF0 - PF Key Usage

This record defines the function keys to be used for various actions within OV/Fax (default values are given in brackets).

Name	Occurs	Description	Format	Maximum size
/CONF0				
PFHELP	1	the key to be used for HELP (1)	decimal	12
PFFILE	1	the key to be used to FILE (3)	decimal	12
PFEXIT	1	the key to be used to return to the menu (4)	decimal	12
PFCLINE	1	the key to be used to move the cursor to the command line (5)	decimal	12
PFBACK	1	the key to be used to scroll backwards (7)	decimal	12
PFFWD	1	the key to be used to scroll forwards (8)	decimal	12
PFQUIT	1	the key to be used to exit the current panel (12)	decimal	12

Note: Translators: these values do not require translation, they may be customised at installation time, for local preferences. There may be multiple occurrences of this record, one for each language installed.

CONF1 - OV/MVS Option Numbers

This contains the 'pointers' from Personal Services options numbers or Application Services parameter values to OV/Fax menu options. Default values are given in brackets.

Name	Occurs	Description	Format	Maximum size
/CONF1				
MENU	1	to display the OV/Fax menu (71)	decimal	9999

Name	Occurs	Description	Format	Maximum size
CPA	1	to edit the personal address book (72)	decimal	9999
VPA	1	to view the personal address book (73)	decimal	9999
CSA	1	to edit the shared address book (74)	decimal	9999
VSA	1	to view the shared address book (75)	decimal	9999
STATUS	1	to view the status of outbound faxes (76)	decimal	9999
SERVER	1	to view the status of servers (77)	decimal	9999
INBOUND	1	to view the status of inbound faxes (78)	decimal	9999
USERS	1	to work with user profile definitions (79)	decimal	9999

Note: Translators: these values do not require translation, they may be customised at installation time, for local preferences. There will only be one occurrence of this record.

CONF2 - Status Text

This record contains the text corresponding to the various statuses of outbound faxes.

Name	Occurs	Description	Format	Maximum size
/CONF2				
PEND	1	"PENDING"	TEXTA9	17
ERROR	1	"ERROR"	TEXTA9	17
COMP	1	"COMPLETE"	TEXTA9	17
REQUE	1	"REQUEUED"	TEXTA9	17
TRANS	1	"TRANSMITTING"	TEXTA9	17
DIAL	1	"DIALLING"	TEXTA9	17
INVREC	1	"INVALID"	TEXTA9	17
QUEUED	1	"QUEUED"	TEXTA9	17
OPEN	1	"OPEN"	TEXTA9	17
CLOSED	1	"CLOSED"	TEXTA9	17
PAUSED	1	"PAUSED"	TEXTA9	17
RECV	1	"RECEIVED"	TEXTA9	17

Name	Occurs	Description	Format	Maximum size
WAIT	1	"WAITING"	TEXTA9	17
SCHED	1	"SCHEDULED"	TEXTA9	17
CANC	1	"CANCELLED"	TEXTA9	17
UNDEL	1	"UNDELIVERED"	TEXTA9	17

Note: Translators: these values require translation. Ensure that the "OPEN", "CLOSED" and "PAUSED" strings each begin with a different two character sequence. The strings should be in upper-case. There may be multiple occurrences of this record, one for each language installed.

CONF3 - Commands

On a number of the OV/Fax panels it is possible to enter commands; this record contains the command strings.

Name	Occurs	Description	Format	Maximum size
/CONF3				
SCRFWD	1	scroll forward	TEXTA	3
SCRBACK	1	scroll backwards	TEXTA	3
SEL	1	select	TEXTA	3
DEL	1	delete	TEXTA	3
VIEW	1	view	TEXTA	3
CAN	1	cancel	TEXTA	3
RESEND	1	resend	TEXTA	3
LOCATE	1	locate	TEXTA	3
ADD	1	add	TEXTA	3
FINDFOR	1	find forwards	TEXTA	3
FINDBAC	1	find backwards	TEXTA	3

Note: Translators: these values require translation. Ensure that the strings are all different. The strings should be in upper-case. There may be multiple occurrences of this record, one for each language installed.

CONF4 - Operating Parameters

This record contains various parameters which control the way in which OV/Fax works.

Name	Occurs	Description	Format	Maximum size
/CONF4				
DELTXT	1	determines whether the text should be deleted after an outbound fax has been sent. If this parameter is set to 'N', the text will be retained until the next cleandown is performed, allowing faxes to be resent from the on-line facilities.	Y/N	
SUBJECT	1	determines whether the document subject field should be scanned for the fax number. If this parameter is set to 'N', the attached message will be scanned instead.	Y/N	
FAXJ	1	determines whether transaction FAXJ should be run on a timer. FAXJ updates the log file with the status of outbound faxes, reporting completion or error information back to the fax originator. If this parameter is set to 'N', FAXJ will run each time a fax status changes. If the parameter is set to 'Y', FAXJ will only run periodically; the CHKSTAT parameter defines how often this is.	Y/N	
DISTRIB	1	determines whether transaction FAXI should be run on a timer. FAXI checks for inbound faxes and distributes them as necessary. If this parameter is set to 'N', FAXI will run each time an inbound fax is received. If the parameter is set to 'Y', FAXI will only run periodically; the DISTINT parameter defines how often this is.	Y/N	

Name	Occurs	Description	Format	Maximum size
DELSTAT	1	if this flag is set to 'Y', items on the log file will be removed from the originator's display once their status is COMPLETE. The items can still be viewed by an administrator.	Y/N	
LCROVER	1	determines whether the least cost routing should be overridden if no available server can be found. If this parameter is set to 'Y', the fax will be sent by any available server (unless the fax has been sent to a specific server). If the parameter is 'N', the fax will only be sent by one of the servers configured to send to that number.	Y/N	
NOTES	1	determines whether confirmation/status information should be sent back to the originator as editable documents (D), as messages (M) or as Personal Services notes (N). Messages only allow 4 lines of text to be sent.	TEXT	1
ACTCANC	1	determines whether active faxes (those with a transmitting or dialling status, which the server is currently trying to transmit) may be cancelled by the originator or an administrator. If this parameter is set to 'Y', such faxes may be cancelled (which may cause the server to stop if it is currently processing the fax). If the parameter is 'N', the cancellation will be prevented.	Y/N	

Name	Occurs	Description	Format	Maximum size
BSYRSCH	1	determines whether busy faxes (those with a transmitting or dialling status) may be rescheduled to another server if their own server becomes unavailable. If this parameter is set to 'Y', busy faxes will be rescheduled, which may result in more than one copy of the fax being sent, together with inconsistent statuses on the log file. If the parameter is 'N', faxes will only be sent when their server becomes available again.	Y/N	
POSTFAX	1	indicates whether the optional Keyword PostFAX software is installed on the servers. If this parameter is set to 'Y' OV/Fax will accept PC Files, obtaining the fax number from a shortcode or from the subject line. If this parameter is set to 'N', OV/Fax will reject all PC files.	Y/N	
USEGIL	1	determines whether OV/MVS is to be used to authorise users. The OV/MVS file used is the GIL if Application Services is installed or the UPL if ASF is installed. The value may be: <ol style="list-style-type: none"> 1 only the OV/Fax control file is to be used to authorise users. 2 OV/MVS may be used but the OV/Fax control file takes precedence. 3 OV/MVS may be used and takes precedence over records on the OV/Fax control file. 	Decimal	3

Name	Occurs	Description	Format	Maximum size
FAXID	1	the "name" of the local FAX user/node; it is used by OV/Fax as the originator when status information is sent back to the sender of the fax, and as the originator for inbound faxes.	locn.user	
INFAX	1	the "spill operator" for inbound faxes; it is used when a server has no inbound recipients defined or the DID user cannot be determined.	locn.user	
WILDFAX	1	the name of the OV/Fax recipient placed in the "send to" field when sending a fax using wild addressing (the fax number will be obtained from the subject, attached message, or from within the document itself). Recipients for deferred faxes are defined elsewhere.	TEXTA9	8
NORMFAX	1	the OV/Fax recipient address to use when sending a fax by means of a fax nickname (the nickname goes in the "send to" field). Recipient addresses for deferred faxes are defined elsewhere.	TEXTA9	8
ERROR	1	the name of the "error" server, used temporarily when processing faxes with an error status.	TEXTA9	8
REQUEUE	1	the name of the "requeue" server, used to hold faxes until a suitable real server becomes available.	TEXTA9	8
TOSERV	1	defines the maximum number of new faxes that may be sent to a server each time it polls the host. These faxes will be converted by the server and queued for sending, before the next poll. The number must be between 1 and 15 inclusive.	decimal	15
MAXSIZE	1	the maximum size of outbound fax documents that will be accepted.	decimal	99999999
MAXSCH	1	the maximum number of times that a fax can be re-scheduled.	decimal	10

Name	Occurs	Description	Format	Maximum size
INTERV	1	defines how often (in minutes) that 'Alert for pending fax' messages will be generated and sent to a fax originator, for faxes which remain unsent.	decimal	1440
ENQID	1	defines the name to used for CICS ENQs when OV/Fax needs to single thread some of its processing.	TEXT	4
CHKSTAT	1	defines how often (in minutes) that the FAXJ transaction runs to update the OV/Fax log file, if the FAXJ parameter is set to 'Y'.	decimal	1440
REPLY	1	the name of the destination record within RAPID or OfficePath to be used for sending confirmations for inbound faxes back to OV/Fax.	TEXTA9	8
POLLTIM	1	this field describes the time interval, in minutes, within which each server is expected to poll the host; it is important to ensure that this value is set considerably higher than the "cycle time" defined on the servers. If a server exceeds this value, the FAXP transaction will close the server, rescheduling its faxes where possible.	decimal	1440
POLLINT	1	this field gives the time interval, in minutes, which indicates how often the transaction FAXP is to be run; this transaction checks whether servers have polled the mainframe within the interval described by POLLTIM.	decimal	1440
DISTINT	1	defines how often (in minutes) that the FAXI transaction runs to distribute inbound faxes, if the DISTRIB parameter is set to 'Y'.	decimal	1440

Note: Translators: the two server names can be translated; most of the other parameters do not require translation. The other configuration values should be customised at installation time as required. There will be only one occurrence of this record.

CONF5 - Fax Number Defaults and Scheduling

This records contains the default country and area codes used by OV/Fax (see "[Setting up the Number Routing Entries](#)"). It also contains the time delay between each successive reschedule.

Name	Occurs	Description	Format	Maximum size
/CONF5				
HOST	1	the default dialling code for your country	TEXT	9
AREA	1	the default area code	TEXT	9
DELAY	10	when a server reports to the mainframe element of OV/Fax that it has failed to send a fax because the number was engaged, OV/Fax has to decide how long to pause before asking the server to re-dial; these parameters define the successive intervals in minutes. The MAXSCH parameter on the CONF4 record defines how many of these intervals will be used.	decimal	9999

Note: Translators: these values do not require translation, they may be customised at installation time. There will be only one occurrence of this record.

CONF6 - EAB Parameters

If the Enterprise Address Book is installed this record contains the parameters required to invoke its API.

Name	Occurs	Description	Format	Maximum size
/CONF6				
EAB	1	a 'Y' indicates that the Enterprise Address Book is to be used by OV/Fax.	Y/N	
TGGD	1	reformatted together with TGPL to form the 4-byte graphic code ID of the workstation from which the EAB request is issued; in general these values should not be changed.	TEXT	5
TGPL	1		TEXT	5
UGGD	1	reformatted together with UGPL to form the 4-byte graphic code ID used in calls to the EAB API; in general these value should not be changed.	TEXT	5
UGPL	1		TEXT	5
NODE	1	all addresses stored within the Enterprise Address Book for use by OV/Fax need to be at the same address; this field specifies that address.	TEXTZ	8
LANG	1	the language of the request passed to the EAB API.	TEXTZ	3

Name	Occurs	Description	Format	Maximum size
EXPD	1	<p>the search argument passed to the EAB API to indicate which address book to search, and in which order. The only valid settings are:</p> <ul style="list-style-type: none"> 1 search the Shared Address Book only; 2 search only the Personal Address Book of the person who sent the fax; 12 search the Shared then the Personal Address Book; 21 search the Personal then the Shared Address Book. 	TEXTZ	6
MODULE	1	the name of the EAB API program (ENJ000P).	TEXTZ	8

Note: Translators: these values do not require translation, they may be customised at installation time. There will be only one occurrence of this record.

CONF7 - Document Scanning

Some control is needed when OV/Fax scans a document looking for fax numbers. This record specifies the depth of the search and the number of fax numbers to be searched for.

Name	Occurs	Description	Format	Maximum size
/CONF7				
LINES	1	the maximum number of lines from the top of the document in which to scan for numbers.	decimal	9999
TO	1	the maximum number of "to" recipients.	decimal	9999
CC	1	the maximum number of "cc" recipients.	decimal	9999
WILD	1	a 'Y' indicates that wild addressing is permitted.	Y/N	
REPORT	1	indicates whether invalid recipients should be reported back to the originator, or just ignored.	Y/N	

Note: Translators: these values do not require translation, they may be customised at installation time. There will be only one occurrence of this record.

CONF8 - Signature and 'To:' Strings

This defines the text string to be used to indicate a signature image, and the strings recognised as the start of a 'to:' line in a document. If the document is a PC file, the 'TO' strings are used to identify the start of the fax number in the subject field.

Name	Occurs	Description	Format	Maximum size
/CONF8				
SIGNAT	1	the image name used within the fax to indicate that the signature image for the originator should be imbedded at that point.	TEXTA9	12

Name	Occurs	Description	Format	Maximum size
TO	10	the tag to be used to indicate the start of a 'to:' line to be scanned for a fax number and recipient details.	TEXTA9	14

Note: Translators: these values require translation. Ensure that the 'TO' strings are all different. The strings are not case sensitive - all values will be converted to upper case to do the search. There may be multiple occurrences of this record, one for each language installed.

CONF9 - OV/MVS Dataset Definitions

This defines the names of the OV/MVS datasets to use for user authorisation, together with the parameter value to use. The USEGIL flag on the CONF4 record determines if OV/MVS is to be used.

Name	Occurs	Description	Format	Maximum size
/CONF9				
URRPARM	1	the name of the parameter used for authorising users. This parameter is used in the URR (in Application Services) or UPR (in ASF). The value of the parameter will be the cover sheet name and the CSID of the user.	TEXTA9	10
GILDD	6	the DD name of the dataset to search. If Application Services is installed, the DD names of up to 6 GIL datasets are specified. If ASF is installed, the DD name of the UPL is specified.	TEXTA9	8

Note: Translators: these values do not require translation, they may be customised at installation time. There will be only one occurrence of this record.

EBASC - EBCDIC to ASCII Conversion

The EBCDIC to ASCII conversion of print-image documents is carried out on the host using tables set up on the FAXCNTL file in the FAXCTL1 member of the JCL library. If you are using multiple servers in your system, and they are geographically separated, then they may have different requirements, due to variations in local GCIDs. OV/Fax caters for this by allowing you to have a separate table for each server if you wish. The input into the conversion process is EBCDIC in the multilingual GCID.

Name	Occurs	Description	Format	Maximum size
/EBASC	1	the name of the OV/Fax server	TEXTA9	8
EATAB	16	the hexadecimal translation table	HEX	

Note: Translators: these values do not require translation, they may be customised at installation time. There may be multiple occurrences of this record, one for each server requiring a table.

Presentation Control Records

All of the text on the OV/Fax panels can be customised; the following records contain the fixed text for all panels.

Note: Translators: every parameter value can be changed.

MAP1 - OV/Fax Menu

Name	Occurs	Description	Format	Maximum size
/MAP1				
TITLE	1	the title of the panel displayed on the first line	EDIT	60
PROMPT	1	line of instructional text	EDIT	64
OPT	8	the text for the eight options available	EDIT	64

MAP2 - CICS Sign-On

Name	Occurs	Description	Format	Maximum size
/MAP2				
TITLE	1	the title of the panel displayed on the first line	EDIT	64
PROMPT	1	line of instructional text	EDIT	60
USER	1	the prompt for the user id	EDIT	15
ADDRESS	1	the prompt for the location	EDIT	15
PASSWOR	1	the prompt for the password	EDIT	15

MAP3 - User Profile Maintenance

Name	Occurs	Description	Format	Maximum size
/MAP3				

TITLE	1	the title of the panel displayed on the first line	EDIT	50
LINE	1	the text before the current line number	EDIT	5
OF	1	the text before the total number of lines	EDIT	2
LOCN	1	the column heading for LOCATION	EDIT	8
USER	1	the column heading for USER ID	EDIT	8
COVER	1	the column heading for COVER SHEET name	EDIT	6
CSID	1	the column heading for CSID	EDIT	30
ADMIN	1	the column heading for the ADMINISTRATOR flag	EDIT	5
TRAN	1	the column heading for the transaction name to be used in determining the language code	EDIT	6

MAP4 - Address Books

Name	Occurs	Description	Format	Maximum size
/MAP4				
TITLE	4	the titles of each of the four address book maintenance options	EDIT	46
LINE	1	the text before the current line number	EDIT	8
OF	1	the text before the total number of lines	EDIT	2
NAME	1	the column heading for NICKNAME	EDIT	8
PRTY	1	the column heading for PRIORITY	EDIT	4
NUMBER	1	the column heading for FAX NUMBER	EDIT	30
DESC	1	the column heading for DESCRIPTION	EDIT	30

MAP5 - Status Selection

Name	Occurs	Description	Format	Maximum size
/MAP5				
TITLE	1	the title of the panel to appear on the first line	EDIT	60
PROMPT1	1	information text	EDIT	64
STATUS	1	prompt for the status value	EDIT	26
OPT1	1	text describing option	EDIT	40
OPT2	1	text describing option	EDIT	40
OPT3	1	text describing option	EDIT	40
PROMPT2	1	date and time header	EDIT	50
FROM	1	from prompt	EDIT	12
TO	1	to prompt	EDIT	12
ORIG	1	originator prompt	EDIT	22

MAP7 - Status of Fax Requests

Name	Occurs	Description	Format	Maximum size
/MAP7				
TITLE	1	the title of the panel to appear on the first line	EDIT	60
PROMPT	1	information text	EDIT	50
CMD	1	column heading for the command	EDIT	3
DATE	1	column heading for the date	EDIT	8
TIME	1	column heading for the time	EDIT	7
ADDR1	1	column heading for the first recipient	EDIT	19
IDENT	1	column heading for the document name	EDIT	19
STATUS	1	column heading for the current status	EDIT	17

MAP8 - Result of Send Request

Name	Occurs	Description	Format	Maximum size
/MAP8				
TITLE	1	the title of the panel to appear on the first line	EDIT	44
STATUS	1	information text before the current status	EDIT	7
DOCNAME	1	text for document name	EDIT	18
SUBJECT	1	text for subject	EDIT	18
MESSAGE	4	text for attached message	EDIT	13
SENTTO	4	text for recipient names	EDIT	20
ADDRESS	4	text for recipient addresses	EDIT	20
SENTBY	1	text for originator	EDIT	20
SENT	1	text for sending date and time	EDIT	12
REC	1	text for received date and time	EDIT	20
PROMPT	1	prompt for options available	EDIT	64
OPT1	1	text for option 1 - view status	EDIT	27
RECIPIENT	1	text for number of recipients	EDIT	10
OPT2	1	text for option 10 - delete	EDIT	25

MAP9 - Fax Status Information Selection

Name	Occurs	Description	Format	Maximum size
/MAP9				
TITLE	1	the title of the panel to appear on the first line	EDIT	45
ITEM	1	text for item:	EDIT	8
OF	1	text for of:	EDIT	2
ARRIVED	1	text for number arrived	EDIT	20
CMD	1	column heading for the command	EDIT	3
USER	1	column heading for the user id	EDIT	8

Name	Occurs	Description	Format	Maximum size
ADDRESS	1	column heading for the address	EDIT	8
SERVER	1	column heading for the server	EDIT	8
STATUS	1	column heading for the current status	EDIT	17
NUMBER	1	column heading for fax number	EDIT	29

MAPA - Server Status List

Name	Occurs	Description	Format	Maximum size
/MAPA				
TITLE	1	the title of the panel to appear on the first line	EDIT	60
PROMPT	1	informational text	EDIT	64
CMD	1	column heading for command	EDIT	3
SERVER	1	column heading for server name	EDIT	9
ACTIVIT	1	column heading for the server activity	EDIT	18
STATUS	1	column heading for the server status	EDIT	37

MAPB - Server Information

Name	Occurs	Description	Format	Maximum size
/MAPB				
TITLE	1	the title of the panel to appear on the first line	EDIT	60
PROMPT	1	informational text	EDIT	64
SERVER	1	text for server name	EDIT	17
SPILL	1	text for inbound recipients	EDIT	20
ACTIVIT	1	text for current activity	EDIT	17
RATING	1	text for rating	EDIT	17
STATUS	1	text for current status	EDIT	17

Name	Occurs	Description	Format	Maximum size
NODE	1	text for node of inbound recipients	EDIT	6
USER	1	text for user id of inbound recipients	EDIT	6
NUMBER	1	text for number of active faxes	EDIT	28
SIZE	1	text for size of FAX queue	EDIT	28
TOTAL	1	text for total number of faxes sent	EDIT	28
POLL	1	text for date and time of last poll	EDIT	32
ALERT	1	text for date and time of last alert	EDIT	32
PROMPT2	1	prompt for available options	EDIT	64
OPT1	1	text for option 1 - view queued faxes	EDIT	20
OPT2	1	text for option 10 - delete server	EDIT	39
FAXES	1	text for "faxes" in option 1 text	EDIT	6

MAPC - List Server

Name	Occurs	Description	Format	Maximum size
/MAPC				
TITLE	1	the title of the panel to appear on the first line	EDIT	60
PROMPT	1	informational text	EDIT	64
CMD	1	column heading for command	EDIT	3
DATE	1	column heading for the date	EDIT	8
TIME	1	column heading for the time	EDIT	8
FAXNO	1	column heading for the fax number	EDIT	20
STATUS	1	column heading for the fax status	EDIT	35

MAPD - Fax Information

Name	Occurs	Description	Format	Maximum size
/MAPD				
TITLE	1	the title of the panel to appear on the first line	EDIT	60
STATUS	1	text for the status of the fax	EDIT	14
REF	1	text for the fax reference number	EDIT	14
RECBY	1	text for the date and time of receipt	EDIT	18
DCA	1	text for document type	EDIT	14
SIZE	1	text for the size of the document	EDIT	18
SENTBY	1	text for the originator	EDIT	14
DOCNAME	1	text for the document name	EDIT	14
SUBJECT	1	text for the document subject	EDIT	14
CSID	1	text for the CSID specified	EDIT	14
COVER	1	text for the name of the cover sheet	EDIT	14
SENTTO	1	text for recipient information	EDIT	14
FAXNO	1	text for the fax number	EDIT	14
ATTEMPT	1	text for the number of send attempts	EDIT	14
LAST	1	text for the date and time of the last attempt	EDIT	18
WARNING	1	text for date and time of next warning	EDIT	14
ERROR	1	text for error reason	EDIT	18
PROMPT	1	prompt for available options	EDIT	64
OPT1	1	text for option 19 - Cancel	EDIT	64

MAPE - Inbound Status

Name	Occurs	Description	Format	Maximum size
/MAPE				
TITLE	1	the title of the panel to appear on the first line	EDIT	60
PROMPT	1	informational text	EDIT	64
CMD	1	the column heading for the commands	EDIT	3
DATE	1	the column heading for the arrival date	EDIT	8
TIME	1	the column heading for the arrival time	EDIT	5
DUR	1	the column heading for the duration of the fax transmission	EDIT	8
STATUS	1	the column heading for the status	EDIT	17
CSID	1	the column heading for the CSID of the sending machine	EDIT	30

MAPG - Status of Fax Address

Name	Occurs	Description	Format	Maximum size
/MAPG				
TITLE	1	the title of the panel to appear on the first line	EDIT	60
STATUS	1	text for status	EDIT	7
NAME	1	text originator name	EDIT	20
ID	1	text originator user id	EDIT	20
NODE	1	text for originator node	EDIT	20
SERVER	1	text for the name of the OV/Fax server	EDIT	20
COVER	1	text for the name of the cover sheet	EDIT	20
R-ID	1	text for the recipient user id	EDIT	20
R-NODE	1	text for the recipient node	EDIT	20
CSIDSEN	1	text for the sending CSID	EDIT	14
DTYPE	1	text for the document type	EDIT	20
R-NAME	1	text for the recipient name	EDIT	14

Name	Occurs	Description	Format	Maximum size
DIAL	1	text for the actual number dialled by the server	EDIT	14
FAXNO	1	text for the user specified fax number	EDIT	14
REF	1	text for the OV/Fax reference number	EDIT	20
SENT	1	text for the date and time sent	EDIT	14
PAGES	1	text for the number of pages sent	EDIT	9
SCHED	1	text for the schedule count	EDIT	20
CSIDREC	1	text for the CSID of the receiving machine	EDIT	14
DUR	1	text for the duration of the transmission	EDIT	20
REASON	1	text for the failing reason	EDIT	14
OVFAX	1	text for the OV/Fax return code	EDIT	20
IDURET	1	text for the conversion return code	EDIT	14
IDUPRG	1	text for the conversion program name	EDIT	21
GAMMA	1	text for the GammaFax return code	EDIT	26
IMAGE	1	text for the image name	EDIT	20
PROMPT	1	prompt for the available options	EDIT	64
OPT1	1	text for option 11 - new recipient	EDIT	27
OPT2	1	text for option 19 - cancel recipient	EDIT	25

MAPH - Help

Name	Occurs	Description	Format	Maximum size
/MAPH				
TITLE	1	the title of the panel to appear on the first line	EDIT	58
PAGE	1	text for the page number	EDIT	8

MAPM - Inbound Status

Name	Occurs	Description	Format	Maximum size
/MAPM				
TITLE	1	the title of the panel to appear on the first line	EDIT	60
STATUS	1	text for the status	EDIT	7
DOCNAME	1	text for the document name	EDIT	20
SUBJECT	1	text for the subject	EDIT	17
MESSAGE	4	text for the four lines of attached message	EDIT	13
SENTTO	4	text for the recipient user ids	EDIT	20
ADDRESS	4	text for the recipient nodes	EDIT	20
SENTBY	1	text for the originator	EDIT	20
NAKCODE	1	text for the NAK code	EDIT	20
RECIP	1	text used in the number of recipients	EDIT	15
PROMPT	1	prompt for available options	EDIT	64
OPT1	1	text for option 1 - view recipient status	EDIT	27

MAPN - Inbound Recipient Status

Name	Occurs	Description	Format	Maximum size
/MAPN				
TITLE	1	the title of the panel to appear on the first line	EDIT	50
ITEM	1	text for top item number	EDIT	5
OF	1	text for total number of items	EDIT	3
NUMBER	1	text for number arrived	EDIT	20
USER	1	text for recipient user id	EDIT	8
NODE	1	text for recipient node	EDIT	8
STATUS	1	text for recipient status	EDIT	17
DID	1	text for extension if a DID number was used	EDIT	16

KEYS - Function key text

The text describing the available function keys is displayed at the bottom of each panel. The KEY records contain this text.

Name	Occurs	Description	Format	Maximum size
/KEYS		two characters indicating the panel and option	TEXTA9	2
LINE	4	four "half" lines	EDIT	39

HELP - Help text

Help text is available from every panel within OV/Fax.

Name	Occurs	Description	Format	Maximum size
/HELP		the panel from which help is invoked combined with the page number.	TEXTA9	3
TXT01	1	the first sixty-four characters of the first line	EDIT	64
TXT01A	1	the last fourteen characters of the first line	EDIT	14
TXT02	1	the first sixty-four characters of the second line	EDIT	64
TXT02A	1	the last fourteen characters of the second line	EDIT	14
TXT03	1	the first sixty-four characters of the third line	EDIT	64
TXT03A	1	the last fourteen characters of the third line	EDIT	14
TXT04	1	the first sixty-four characters of the fourth line	EDIT	64
TXT04A	1	the last fourteen characters of the fourth line	EDIT	14

Name	Occurs	Description	Format	Maximum size
TXT05	1	the first sixty-four characters of the fifth line	EDIT	64
TXT05A	1	the last fourteen characters of the fifth line	EDIT	14
TXT06	1	the first sixty-four characters of the sixth line	EDIT	64
TXT06A	1	the last fourteen characters of the sixth line	EDIT	14
TXT07	1	the first sixty-four characters of the seventh line	EDIT	64
TXT07A	1	the last fourteen characters of the seventh line	EDIT	14
TXT08	1	the first sixty-four characters of the eighth line	EDIT	64
TXT08A	1	the last fourteen characters of the eighth line	EDIT	14
TXT09	1	the first sixty-four characters of the ninth line	EDIT	64
TXT09A	1	the last fourteen characters of the ninth line	EDIT	14
TXT10	1	the first sixty-four characters of the tenth line	EDIT	64
TXT10A	1	the last fourteen characters of the tenth line	EDIT	14
TXT11	1	the first sixty-four characters of the eleventh line	EDIT	64
TXT11A	1	the last fourteen characters of the eleventh line	EDIT	14
TXT12	1	the first sixty-four characters of the twelfth line	EDIT	64
TXT12A	1	the last fourteen characters of the twelfth line	EDIT	14
TXT13	1	the first sixty-four characters of the thirteenth line	EDIT	64
TXT13A	1	the last fourteen characters of the thirteenth line	EDIT	14
TXT14	1	the first sixty-four characters of the fourteenth line	EDIT	64

Name	Occurs	Description	Format	Maximum size
TXT14A	1	the last fourteen characters of the fourteenth line	EDIT	14
TXT15	1	the first sixty-four characters of the fifteenth line	EDIT	64
TXT15A	1	the last fourteen characters of the fifteenth line	EDIT	14
TXT16	1	the first sixty-four characters of the sixteenth line	EDIT	64
TXT16A	1	the last fourteen characters of the sixteenth line	EDIT	14
TXT17	1	the first sixty-four characters of the seventeenth line	EDIT	64
TXT17A	1	the last fourteen characters of the seventeenth line	EDIT	14
TXT18	1	the first sixty-four characters of the eighteenth line	EDIT	64
TXT18A	1	the last fourteen characters of the eighteenth line	EDIT	14
TXT19	1	the first sixty-four characters of the nineteenth line	EDIT	64
TXT19A	1	the last fourteen characters of the nineteenth line	EDIT	14

Message Records

During OV/Fax operation a number of different messages are issued, these are grouped into four categories:

- Screen Messages** These are the messages which are issued to the user during their interaction with the on-line transactions of OV/Fax.
- Status Messages** During the transmission and monitoring of faxes OV/Fax issues editable documents or messages to the originator to inform them of the status of the fax transmission.
- Transmission Messages** During the transmission of faxes errors may occur on the PC, these messages correspond to the error numbers issued by the PC program code. These messages are sent to the originator.
- Error Messages** A proportion of the OV/Fax programs run in 'background'; any serious errors detected are reported on the CICS log and/or are issued to the system operator.

MSG - Screen Messages

Name	Occurs	Description	Format	Maximum size
/MSG		the number of the message	decimal	999
TYPE	0-1	a single character for example I - informational E - error S - severe	TEXT	1
TEXT	1	the text of the message	TEXT	64

DMSG - Status Messages

Name	Occurs	Description	Format	Maximum size
/DMSG		the number of the message	decimal	999
SEND	1	whether the message should be sent	Y/N	
REASON	1	error reason used for the document subject and on the screen panels	TEXT	35
TEXT	1-20	message text	TEXT	64

OMSG - Transmission Messages

Name	Occurs	Description	Format	Maximum size
/OMSG		the number of the message	decimal	999
RESCHED	1	whether OV/Fax should reschedule (try again) the request if this error is detected	Y/N	
REASON	1	error reason	TEXT	35
TEXT	1-4	message text	TEXT	64

EMSG - Error Messages

Name	Occurs	Description	Format	Maximum size
/EMSG		the number of the message	decimal	999
LOG	1	whether the message should be written to the CICS log	Y/N	
OPS	1	whether the message should be sent to the system operator	Y/N	
TEXT	1-2	the text of the message	TEXT	64

User Access Control

USER Record

Name	Occurs	Description	Format	Maximum size
/USER		<p>the address and user id of the user or group of users; this can be of the form:</p> <p>LOCATION.USER for a specific user (for example KSOLN.SUPPORT)</p> <p>LOCATION.* for a specific node (for example IBMMAIL.*)</p> <p>*.* the generic, catch-all, user.</p>	locn.user	
COVER	0-1	the name of the cover sheet to be used; a blank or missing cover sheet will stop the user(s) from sending faxes; a cover sheet of ***** will mean that faxes will be sent out without a cover sheet.	TEXT	5
CSID	1	the CSID to be used when sending a fax	EDIT	30
ADMIN	0-1	indicates whether the user is an administrator	YES/NO	
TRAN	1	the transaction to be used to determine language/environment specific details	TEXT	4

Note: Note to translators: these values do not require translation, they may be customised at installation time, for local preferences.

DID - Direct Inbound Dialling

Direct Inbound Dialling is a facility only available to those customers in the USA who have purchased a GammaFax CPD board, and who have the necessary DID phone lines and hardware installed. Direct Inbound Dialling is a relatively new technology which allows callers to contact individual extension numbers directly, without the intervention of a telephonist. If a GammaFax CPD board is used, the digits which identify the

extension number are not used to route the call further, but may be passed on to an application such as OV/Fax. Let us imagine that the following is a dialled fax number:

0121-356

and that the last three digits represent the individual extension number; GammaFax will not attempt to contact this station, but will pass the extension number (337) directly on to OV/Fax, which will then look up the extension number in a special table.

Name	Occurs	Description	Format	Maximum size
/DID				
SERVER	1	the name of the receiving server	TEXT	8
EXTN	1	the telephone extension number specified on the incoming fax	TEXT	8
NODE	1	the address of the user to whom the fax should be sent	TEXT	8
USER	1	the user id of the user to whom the fax should be sent	TEXT	8

Note: Note to translators: these values do not require translation, they may be customised, at installation time, for local preferences.

DEFER

Faxes are normally addressed to a user called 'FAX', or to a fax nickname at an address of 'FAX'. Such requests will be passed from the mainframe to the server at the earliest opportunity. However, it is possible to define extra names which may be used to defer the time at which the fax is passed to the server. There may be up to ten deferred users defined.

Name	Occurs	Description	Format	Maximum size
/DEFER	1	the name of the deferred OV/Fax user, for example FAXD1	TEXT	8
START	1	the start time (HHMM) of the available window	decimal	2359

Name	Occurs	Description	Format	Maximum size
END	1	the end time (HHMM) of the available window	decimal	2359

Setting up the Number Routing Entries

You may be using more than one fax server with OV/Fax. Your servers may be situated in different parts of the country, or even in different countries. If this is the case, you may wish to ensure that each fax is sent by the server which results in the cheapest call. **If you have servers in different countries, with different dialling requirements, it is essential to ensure that each fax is sent by an appropriate server.**

In the remainder of this chapter, we will examine the task faced by a fax administrator in the UK working for ACOMPANY. He has servers available to him in his own country, in the United States, and in Australia, all accessible to the CICS system in which OV/Fax is running on a mainframe in the UK. To begin with, we will assume that he has a server in each country, with the names NEWYORK, LONDON and SYDNEY.

Structure of numbers in OV/Fax

Our discussion of Number Routing must begin by describing how fax numbers are set up in OV/Fax.

Let us imagine that a user at ACOMPANY wishes to send a fax to the USA. He may specify it (in the personal or shared fax address book, or as a full fax number) as follows:

1.212-123

The number breaks down into several parts, revealing the following structure:

Country code The full stop, or period, ('.') indicates that this is an international fax. The international dialling prefix for the USA is '1'. The international dialling code (which is 00 in the UK) need not be specified, as the server will have been configured to add this automatically.

Area code The hyphen ('-') denotes the end of the area code, or STD code. In this instance, the area code is 212, the area code for New York.

Since the number has been coded in this way, OV/Fax now 'knows' the country to which the fax is being transmitted (1), and the area within that country (212), and can attempt to locate the server that will result in the easiest or least expensive call.

Setting up Number Routing Records

Let us imagine that the fax administrator at ACOMPANY has been given the task of ensuring that the following routing takes place within the fax system:

- All UK faxes (country code 44) are sent by server LONDON
- All faxes to Australia (country code 61) are sent by server SYDNEY
- All faxes to the USA and Canada are sent by server NEWYORK (Canada and the USA both have the country code '1').

Example number routing records are stored on the member **FAXCTLA** on the **JCL**. The following three records would be sufficient for ACOMPANY's initial requirements:

Figure 40. Number routing configuration

```
/STD 1.*
SERV1 NEWYORK

/STD 44.*
SERV1 LONDON

/STD 61.*
SERV1 SYDNEY
```

The /STD record takes two parameters separated by a ".": the table number and the area code.

The asterisk for the area codes means that the record is valid for all area codes within the country specified by the table number. Faxes to any other country will go to the least busy of the three servers. This is calculated by dividing the size of the queue of faxes waiting to go out on the server by its capacity (defined as a numeric rating). The following table shows the results of sending faxes with this configuration in place.

Figure 41. Routing results with configuration

1.203-661 9263	NEWYORK
1.213-987 6543	NEWYORK
0171-379 1553	LONDON
379 1553	LONDON
44.171-379 1553	LONDON
61.2-345 6789	SYDNEY
64.4-321 8765	Least busy server
33.1-43 21 21 23	Least busy server

The third and fourth examples above are routed to LONDON even though the user has not entered the full information. This is because, when the country code is omitted, the

default country code is taken from the CONF5 record. When the country code and area code are both omitted, they are derived from the CONF5 record.

Let us now imagine that ACOMPANY realises that all faxes to New Zealand should really be sent out at SYDNEY rather than by any of the three servers. The country code for New Zealand is '64'. A new record should be added, to give the following configuration:

Figure 42. Number routing configuration

```
/STD 1.*
SERV1 NEWYORK

/STD 44.*
SERV1 LONDON

/STD 61.*
SERV1 SYDNEY

/STD 64.*
SERVE1 SYDNEY
```

The following table shows the results of sending faxes with this configuration in place.

Figure 43. Routing results with configuration

1.203-661 9263	NEWYORK
1.213-987 6543	NEWYORK
0171-379 1553	LONDON
379 1553	LONDON
44.171-379 1553	LONDON
61.2-345 6789	SYDNEY
64.4-321 8765	SYDNEY
33.1-43 21 21 23	Least busy server

Later still, a server is added at yet another site at Los Angeles, and is simply called LA. It is now required that all faxes to Los Angeles go out through this server. The following entries would ensure that this happens (the area code for Los Angeles is 213):

Figure 44. Number routing configuration

```
/STD 1.*
SERV1 NEWYORK

/STD 1.213
SERV1 LA

/STD 44.*
SERV1 LONDON

/STD 61.*
SERV1 SYDNEY

/STD 64.*
SERV1 SYDNEY
```

With this new record in place, all faxes to Los Angeles will be sent out via the LA server - but faxes anywhere else in America will be sent out via New York. Of course, further routing entries could be added which would ensure that faxes to cities near Los Angeles could also be sent out through that server. For the time being, configuration 3 gives the following results:

Figure 45. Routing results with configuration

```
1.203-661 9263 NEWYORK
1.213-987 6543 LA
1.916-567 8901 NEWYORK
0171-379 1553 LONDON
379 1553 LONDON
44.171-379 1553 LONDON
61.2-345 6789 SYDNEY
64.4-321 8765 SYDNEY
33.1-43 21 21 23 Least busy server
```

On occasion, it may happen that it does not matter which server of a group of two or three is used for a particular number. Let us now imagine that a further server is made available at Sacramento (SACRAM) California. ACOMPANY is quite happy for faxes to Los Angeles to be sent by either the LA or the SACRAM server - but not for any other server to send the fax. The area code for Sacramento is 916, and so the following amendment to the number routing configuration would take care of this:

Figure 46. Number routing configuration

```
/STD 1.*
SERV1 NEWYORK

/STD 1.213
SERV1 LA
SERV2 SACRAM

/STD 1.916
SERV1 SACRAM
SERV2 LA

/STD 44.*
SERV1 LONDON

/STD 61.*
SERV1 SYDNEY

/STD 64.*
SERV1 SYDNEY
```

Figure 47. Routing results with configuration

1.203-661 9263	NEWYORK
1.213-987 6543	LA or SACRAM
1.916-567 8901	LA or SACRAM
0171-379 1553	LONDON
379 1553	LONDON
44.171-379 1553	LONDON
61.2-345 6789	SYDNEY
64.4-321 8765	SYDNEY
33.1-43 21 21 23	Least busy server

So, by using the slots SERV2, SERV3, ... (up to ten servers may be specified) it is possible to allow more than one server to serve an area code or a country. OV/Fax, when making a routing decision based on such a record, will choose the least busy of the servers specified.

Catering for long-distance calls (US)

Area codes in the United States may often be preceded by a long distance digit (usually 1). This can be catered for by use of the DIALn prefixes on the Number Routing records. For example, the fax number of TBS Software Inc. is 905-940-9376. If this number were to be dialled from a server in Los Angeles, it would need to be given as 1905-940 9376. This difficulty can be overcome by using the following Number routing records:

Figure 48. Number routing configuration

```
/STD    1.905
SERV1   LA
DIAL1

/STD    1.1905
SERV1   LA
```

If the user enters the number 905-707 9376, this will be changed to 1905-707 9376 before the number is passed to the LA server. On the other hand, if the user has already entered 1905-707 9376, then the second Number Routing Record ensures that this too is passed to the LA server.

Using a Wide Area Telephone System (WATS or PABX)

OV/Fax may be used in conjunction with a Wide Area Telephone System or Private Branch Exchange. If a fax is sent which is to take advantage of a leased line, then the fact needs to be communicated to OV/Fax and to the GammaFax software by specifying this character as part of the number:

```
77#144
```

In the above example, a leased line is in use between two sites within the same company. This is accessed by dialling 77. The WATS indicator # tells the OV/Fax server software that a leased line is being used. The server software will then convert this into a pause character before issuing a dial command for the GammaFax software. '144' is the number to be dialled once the connection has been made.

A separate table with a number of zero is used for the routing of these numbers - an example is shown below.

Figure 49. A sample number routing record for WATS numbers

```
/STD    0.77
SERV1   SERVER01
SERV2   SERVER02
```

Actions taken when servers are unavailable

We now need to consider what action OV/Fax needs to take when none of the servers mentioned on the number routing record is available. The following actions are possible:

1. All faxes remain held until one of the servers is available.
2. The faxes are diverted to another, available server.

This action is controlled by the LCROVER flag on the CONF5 record: if this flag is set to 'N', then the first action above takes place: if it is set to 'Y', then the second action is taken.

If you are operating servers in more than one country, we recommend that you set this flag to 'N'.

STD

Name	Occurs	Description	Format	Maximum size
/STD		<international country code> "." <area code>		
SERV1	1	server name	TEXTA9	8
DIAL1	0-1	the number to be dialled	TEXTA9	8
SERV2	0-1	server name	TEXTA9	8
DIAL2	0-1	the number to be dialled	TEXTA9	8
SERV3	0-1	server name	TEXTA9	8
DIAL3	0-1	the number to be dialled	TEXTA9	8
SERV4	0-1	server name	TEXTA9	8
DIAL4	0-1	the number to be dialled	TEXTA9	8
SERV5	0-1	server name	TEXTA9	8
DIAL5	0-1	the number to be dialled	TEXTA9	8
SERV6	0-1	server name	TEXTA9	8
DIAL6	0-1	the number to be dialled	TEXTA9	8
SERV7	0-1	server name	TEXTA9	8
DIAL7	0-1	the number to be dialled	TEXTA9	8
SERV8	0-1	server name	TEXTA9	8

Name	Occurs	Description	Format	Maximum size
DIAL8	0-1	the number to be dialed	TEXTA9	8
SERV9	0-1	server name	TEXTA9	8
DIAL9	0-1	the number to be dialed	TEXTA9	8
SERV10	0-1	server name	TEXTA9	8
DIAL10	0-1	the number to be dialed	TEXTA9	8

Report Headings

The heading and status descriptions for the batch reports can be customised.

RMSG - Report Headings

Name	Occurs	Description	Format	Maximum size
/RMSG0		the heading number	decimal	999
TEXT	1	the heading text	EDIT	64

Installing User Exits for OV/Fax

The on-line component of OV/Fax is designed so that it may be operated as a user-exit from PS/CICS or the Personal Services component of OfficeVision/MVS. OV/Fax supports nine possible user exits:

- To display the OV/Fax menu
- To directly enter each of the eight user options from the OV/Fax menu.

In all the examples that follow, we shall demonstrate how to set up these facilities as options 71, 72, 73, 74, 75, 76, 77, 78, and respectively.

Installing the user-exit for PS/CICS

Skip this section, if OV/Fax is being installed with OfficeVision/MVS. If OV/Fax is being installed with the PS/CICS, read this section.

Linking the user-exit to PS/CICS

Despite the fact that there are nine exit points to OV/Fax, only one user exit module is supplied with the system. The source module is named DMDFUX07 and is found on the **SOURCE** library. This module will always start transaction FAX0, (that is "FAX zero") no matter where it is invoked from. FAX0 is a multi-purpose user-exit transaction for OV/Fax, which will link to one of the nine options above, depending on the panel and option number information passed to it.

This user-exit DMDFUX07 needs to be assembled and linked to your existing PS/CICS system using JCL supplied by IBM on the PS/CICS installation JCL library. This is typically achieved by submitting member DMDDIGG. Follow the IBM instructions for this procedure.

If your system already has user exits installed, you may need to rename this member to DMDFUXnn, where nn = from 01 to 10. Be aware that the name must be different from all other user-exits installed on your system.

Modifying the PS/CICS Dialog Processor Table

The Dialog Processor Table controls which options are valid on which PS/CICS panels and the actions to be taken for these options. This table is typically called DMDDPBLT on the PS/CICS install JCL library. Here are sample entries which would enable you to set up the nine options already discussed:

```
DMDDPBLM MM00,71,,,U7,,,,MM00
DMDDPBLM AI00,72,,,U7,,,,MM00
DMDDPBLM AI00,73,,,U7,,,,AI00
DMDDPBLM AI00,74,,,U7,,,,AI00
DMDDPBLM AI00,75,,,U7,,,,AI00
DMDDPBLM MM00,76,,,U7,,,,MM00
DMDDPBLM MM00,77,,,U7,,,,MM00
DMDDPBLM MM00,78,,,U7,,,,MM00
DMDDPBLM MM00,79,,,U7,,,,MM00
```

If you found it necessary to change the name of the user-exit module, then you will need to adapt these entries accordingly. For instance, if you had to call the module DMDFUX09, then the entries above would be modified as follows:

```
DMDDPBLM MM00,71,,,U9,,,,MM00
DMDDPBLM AI00,72,,,U9,,,,MM00
DMDDPBLM AI00,73,,,U9,,,,AI00
DMDDPBLM AI00,74,,,U9,,,,AI00
DMDDPBLM AI00,75,,,U9,,,,AI00
DMDDPBLM MM00,76,,,U9,,,,MM00
DMDDPBLM MM00,77,,,U9,,,,MM00
DMDDPBLM MM00,78,,,U9,,,,MM00
DMDDPBLM MM00,79,,,U9,,,,MM00
```

The option number for the exit from the main-menu can be changed here as long as it matches the exit defined in DMDDIAA (see next section). If it is changed then it should be different from all others on the main-menu.

It would also be possible to define the administrator options in a similar way.

Changing the main-menu to show the user-exit description

The main-menu panel can be changed to show the user-exit and its description by running the IBM procedure DMDDIAA supplied by IBM on the PS/CICS installation JCL library. Follow the IBM instructions for this procedure. The following changes need to be made to this job:

```
EXITOP1=(71)

EXITLB1=(Fax,X'40',facilities)
```

If you already have user-exits on the PS/CICS main-menu you may need to use EXITOP2,3,4, or 5 and EXITLB2,3,4 or 5 rather than 1. If you do this make sure that the title matches up with the option. You may if you wish change the titles as desired.

Changing the PS/CICS Help Panels

Finally, you may wish to amend the PS/CICS Help Panels to reflect the addition of these user-exits. The help documents are actually shared pattern documents within PS/CICS.

Configuration of the fax user exit

The configuration record CONF1 (found in the FAXCTL2 member of the JCLlibrary) is used to modify the action of the user exit transaction FAX0. The CONF1 record is used by FAX0 to decide which part of the on-line system should receive control once FAX0 has been started. The CONF1 record is supplied as shown below:

Figure 50. CONF1 record as supplied in FAXCTL2

```
      /CONF1
MENU
CPA
VPA
CSA
VSA
STATUS
SERVER
INBOUND
USERS
```

The record parameters are as follow:

- /CONF1** Indicates that this is the configuration record which is read by the user exit transaction FAX0. It is used by that transaction to decide which panel to display, on the basis of the option number which is obtained from the Restart Control Block.
- MENU** This parameter indicates which option number is used in order to direct FAX0 to transfer control to the 'OV/Fax Menu' panel, FAX0FAX1.
- CPA** This parameter indicates which option number is used in order to direct FAX0 to transfer control to the 'EDIT PERSONAL FAX ADDRESS BOOK' panel, FAX0FAX4.
- VPA** This parameter indicates which option number is used in order to direct FAX0 to transfer control to the 'VIEW PERSONAL FAX ADDRESS BOOK' panel, FAX0FAX4.
- CSA** This parameter indicates which option number is used in order to direct FAX0 to transfer control to the 'EDIT SHARED FAX ADDRESS BOOK' panel, FAX0FAX4.
- VSA** This parameter indicates which option number is used in order to direct FAX0 to transfer control to the 'VIEW SHARED FAX ADDRESS BOOK' panel, FAX0FAX4.
- STATUS** This parameter indicates which option number is used in order to direct FAX0 to transfer control to the 'FAX STATUS INFORMATION SELECTION' panel, FAX0FAX5.
- SERVER** This parameter indicates which option number is used in order to direct FAX0 to transfer control to the 'SERVER LIST' panel, FAX0FAXA.
- INBOUND** This parameter indicates which option number is used in order to direct FAX0 to transfer control to the 'STATUS OF INBOUND FAXES' panel, FAX0FAXE.
- USERS** This parameter indicates which option number is used in order to direct FAX0 to transfer control to the 'USER PROFILE MAINTENANCE' panel, FAX0FAX3.

Installation with OfficeVision/MVS

The Application Services or Application Support Facility fast-path can be created using the appropriate on-line administration functions.

1. Using the library maintenance functions, an ATD is created for fast path FAX (using WIB as a model).
2. Amend the title to 'OV/Fax Menu'.
3. Amend the application program to FAX0.
4. Amend the invocation to '1' (start).
5. Amend the value of the DXBPSFUNCT parameter from WIB to the numeric value of MENU on the CONF1 record.

This enables the fast path to be used within OfficeVision/MVS, although it will not appear on the fast path description table. The fast path description table is an INFO record which may be amended using library maintenance facilities. Refer to the *Application Services Customisation Guide* or *Application Support Facility Administration Guide* for details on how to do this.

Other fast paths may similarly be created to directly access specific OV/Fax options.

Receiving Faxes from OV/Fax

The role of the spill-operators

If you are not installing the OV/Fax inbound component, you may skip this section.

Inbound faxes are not received directly by all Office Systems users, but only by those users defined as 'spill-operators' or Direct Inward Dialing (DID) recipients.

Inbound faxes are received as RFT documents with embedded images. As a result, many work-stations will not be able to view them. Users will only be able to view incoming faxes if they are able to do one of the following:

- Use DisplayWrite/370, with the Image and Graphics feature, at a graphics terminal (or a PC with appropriate emulation facilities).
- Sign-on to the Office System at a Personal Computer, and transfer the fax down to a PC file by using a transfer mechanism such as Keane Ltd's **PIXI** product. Once the fax has been transferred to the PC, it can be viewed using standard products such as Imagedit 2, Image Document Utility, or DisplayWrite/5.

Anyone who has been nominated as a Spill Operator or a DID recipient will receive faxes directly from OV/Fax. These should be viewed using one of the techniques outlined above. The Spill Operator (and maybe the DID recipient) may have to forward the fax to the correct recipient. There are several ways of doing this:

- Sending to the recipient(s) using the normal 'send' options in Personal Services. This method is suitable only if the recipient can view the fax in one of the ways mentioned above.
- Print off the fax using facilities in DisplayWrite/370, IDU, or DisplayWrite/5 and mail the fax to the user.

Spill operators may be nominated in one of two ways:

- On a server record, so that faxes may be routed to various spill-operators, depending on the server which received them. See [Figure 39](#) and the *OV/Fax Administration Guide*.
- It is not necessary to specify a spill-operator on a server record. If none is specified, then any faxes received by the server will be sent to the user specified in the field INFAX on the CONF4 records.

Viewing inbound faxes in DisplayWrite/370

Even if a user has a graphics terminal, and has the Image and Graphics feature of DisplayWrite/370, the viewing of an inbound fax can still be a tedious process. When the document is viewed, it appears as some text (indicating the received CSID and duration of the call, and so on), followed by one or more image components, each representing one page of the fax.

The first image will normally have the name PAGE001. In order to view this, it is necessary to enter the command

```
show PAGE001
```

on the command line. The image will appear on the screen, but the scaling may be unsatisfactory. For instance, it is likely that you will be able to see only the top left-hand corner of the image. The image may be scaled to suit your requirements by entering the following command:

```
image zoom 0.4 0.5
```

The first of these parameters indicates horizontal scaling, whilst the second of these indicates vertical scaling. The image should now be readable, and its entire width will be seen on the screen. However, it will still be necessary to scroll up and down the page.

Because of the cumbersome nature of these operations, you may wish to automate the procedure. The following DisplayWrite/370 CLIST is a sample which may be used by anyone (particularly a Spill-operator) who needs to do this more speedily.

Figure 51. User CLIST for viewing inbound faxes

```
fax1
<LBL: ENDPROFILE>
<LBL: FAX1>
%dl1dc = info(D1DC)
%tera = (info(TERA) & 32)
if (%dl1dc ^= 0) | (%tera ^= 32) then do
    return
end
x set cmdsyn show fax1
next component
if %rc <= 1 then do
    x show
    x image zoom 0.4 0.5
    x set cmdsyn quit fax4
    x set cmdsyn end fax4
    x set cmdsyn page fax3
    x set pf 11 fax2 Next
end
<LBL: FAX2>
next component
if %rc <= 1 then do
    x image zoom 0.4 0.5
end
else do
    x set cmdsyn page '%page'
    x set pf 11 Next Next
    x end
end
<LBL: FAX3>
x end
%count =
x top
do while %count < %1
    next component
    %retcd = %rc
    if %rc > 1 then do
        x set cmdsyn page '%page'
        x set PF 11 Next Next
        %count = %1
    end
    else
%count = %count +
```

```
end
if %retcd <= 1 then do
    x show
    x image zoom 0.4 0.5
end
<LBL: FAX4>
x set cmdsyn page '%page'
x set PF 11 Next Next
x set cmdsyn quit '%quit'
x set cmdsyn end '%end'
x end
```

It is recommended that the CLISTs FAX1 to FAX4 are added either to your system CLIST or application CLIST. You should arrange for the CLIST FAX1 to be invoked whenever a user enters DisplayWrite/370. If you wish to restrict the use of the CLIST to the spill-operator, then the command FAX1 can be added to the appropriate point in the application CLIST.

If the document is not an RFT document, or the terminal does not support the display of images, the CLIST will terminate.

If the document and the terminal are suitable, then the CLIST will perform the SHOW and IMAGE ZOOM commands, so that the user will immediately be shown the first page of the fax, suitably scaled.

The PF11 key may be used to go to the next page of the inbound fax, suitably formatted.

Specific image pages may be viewed by entering the command 'PAGE n' onto the command line, where 'n' is the number of the desired page, and may be in the range 1 -

PART THREE - CUSTOMER REPLACEABLE MODULES

Accessing your own Directory Files

OV/Fax may be set up to access the Enterprise Address Book of OfficeVision/MVS in order to resolve fax nicknames. Please see "[CONF6 - EAB Parameters](#)" for details on how this may be achieved. This chapter applies only when the Enterprise Address Book is not being used in conjunction with OV/Fax.

The addressing user exit is invoked when a user has sent a fax specifying a fax nickname rather than a full address. The user may, for example, send his request to:

```
KEANE @ FAX
```

The fax nickname KEANE needs to be resolved into two fields:

- a fax number
- a description

The purpose of the fax number is obvious. The description field can be used on the cover sheet of the fax and is a free-format text field. It might, for instance, include the name of the company to which the nickname applies. It should be supplied wherever possible.

OV/Fax as shipped uses an addressing exit program called FAXCODEX. This program, given the above example, would try to locate the nickname KEANE on the FAXSCOD file. This file is a part of the OV/Fax system, and contains both shared nicknames (set up by an administrator for everyone to use) and personal nicknames (set up by a user for his own use). Each nickname has a primary fax number defined, and may optionally have an alternate number defined for use when the primary number fails all its retries. The choice of number is indicated by the priority field.

The FAXCODEX program locates the KEANE nickname, giving preference to personal nicknames, and returns the values of the fax number and description fields back to the calling transaction. Two programs call FAXCODEX:

FAXO010 Outbound Fax Processor (transaction FAXO). This passes up to nicknames in the commarea for FAXCODEX to validate, returning the fax number and description for each valid nickname.

FAXS010 Outbound Server Interface (transaction FAXS). This passes a single nickname in the commarea, requesting the alternate fax number to be returned if possible.

FAXO010 and FAXS010 communicate with FAXCODEX by means of the commarea given below. The calling programs perform a CICS LINK to FAXCODEX, passing the commarea. FAXCODEX will finish with an EXEC CICS RETURN statement passing back the modified commarea, having performed the appropriate look-up in the FAXSCOD directory. The commarea layout is as follows:

```

01  CE-COMMAREA.
    05  CE-ORIG-NODE          PIC X(8) .
    05  CE-ORIG-USER         PIC X(8) .
05  CE-RECIPIENT            OCCURS
    10  CE-FLAG              PIC X .
    88  CE-88-OK            VALUE SPACE .
    10  CE-USERID           PIC X(8) .
    10  CE-NODE             PIC X(8) .
    10  CE-PRIORITY         PIC X .
    10  CE-FAXNO            PIC X(30) .
    10  CE-DESCRIPTION      PIC X(30) .

01  CE-COMM-LEN             PIC S9(4) COMP VALUE

```

When FAXO010 and FAXS010 link to the exit program, they will pass the following information in the commarea:

1. CE-ORIG fields will contain the node and userid of the originator of the fax query.
2. There will be up to 50 nicknames to be validated, held in the CE-RECIPIENT area. The list is terminated when CE-USERID has a value of spaces. (FAXS010 will only pass one nickname).
3. In each occurrence of CE-RECIPIENT, the following will apply:
 - CE-FLAG will be initialised to a space
 - Each occurrence of CE-USERID will contain the nickname to be validated.
 - Each occurrence of CE-NODE will contain an address field which should be passed back unaltered. If the user has sent his fax to:
 -
 -
 - KEANE @ FAXD1
 -
 - then CE-USERID(1) will have the value 'KEANE' and CE-NODE(1) will have the value 'FAXD1'.
 - CE-PRIORITY will contain a '1' when called by FAXO010 (indicating a primary number) and a '2' when called by FAXS010 (indicating an alternate number).

When the exit program returns back to the calling transaction, it should return the modified commarea as follows:

- CE-ORIG fields should be left unaltered.
- The entries in the CE-RECIPIENT area are completed by the exit program as follows:
 - CE-FLAG will be set to a space if the accompanying value of CE-USERID could be found in the fax nickname directory. It could either be in the originator's personal address book, with a key of CE-ORIG-NODE/CE-ORIG-USER/CE-USERID/CE-PRIORITY, or in the shared address book with a key of SPACES/SPACES/CE-USERID/CE-PRIORITY. If it could not be found, then CE-FLAG should be set to 'X'.
 - Each occurrence of CE-USERID, CE-NODE and CE-PRIORITY should be passed back unaltered.
 - CE-FAXNO should contain the fax number into which CE-USERID(n) has been resolved.
 - CE-DESCRIPTION should contain the description into which CE-USERID(n) has been resolved.

Provided that the user exit program obeys these rules, then you may access a directory of your own in order to resolve OV/Fax nicknames. Please note that the function of the exit program is merely to locate entries in the directory, NOT to perform any validation on the information retrieved.

If you want to use this facility, you will need to replace the FAXCODEX program with you own CICS program.

The Password Validation Exit

The on-line facilities of OV/Fax may be accessed by the user in one of two ways:

- As a user exit from Personal Services
- Directly, by entering the transaction ID 'FAX2'.

If the second option is chosen, the user is presented with a sign-on panel as shown below:

Figure 52. The user sign-on panel

```
FAX2FAX2
                                OV/FAX User Sign-On

Type your logon information below; then press Enter.

  User ID  ===>                Address  ===>

  Password ===>

(C) Copyright Keane Ltd.

PF1=          2=          3=          4=Exit          5=          6=
PF7=          8=          9=          10=          11=          12=
```

When the user presses Enter, having entered the required information, a CICS LINK is performed to the program 'FAX2EXIT'. (The first characters of the program name are, as usual, customisable - see ["Customising CICS Names"](#)).

The sample program FAX2EXIT program validates the user ID and password by looking them up in the DISOSS HUP. This validation exit may not be suitable for your installation, particularly if using OV/Fax with OfficePath and without DISOSS. In this case, you may supply your own password validation program.

When the FAX2 transaction links to the exit program, it passes a commarea, as shown below:

Figure 53. The password validation commarea.

```
01  CV-VALIDATION-DATA.
    05  CV-USER                PIC X(8) .
    05  CV-ADDRESS             PIC X(8) .
    05  CV-PASSWORD            PIC X(8) .
    05  CV-RESPONSE            PIC X .
        88  CV-88-OK            VALUE '1' .
        88  CV-88-INVALID-PSW  VALUE '2' .
        88  CV-88-INVALID-USER VALUE '3' .
        88  CV-88-INVALID-NODE VALUE '4' .
    05  CV-HUP                 PIC X(8) .
    05  CV-ALERT-QUEUE         PIC X(4) .
01  CV-LENGTH                 PIC S9(4) COMP VALUE
```

The FAX2 transaction passes details of the user ID, user node and password from the panel to the exit. The exit program now needs to perform the necessary validation, and return an appropriate value for CV-RESPONSE when passing control back to FAX2. The valid flag values are:

- 1 - Validation successful
- 2 - Password invalid
- 3 - User ID invalid
- 4 - Node invalid.

CV-HUP contains the name of the DISOSS HUP, and CV-ALERT-QUEUE contains the name of CICS error TDQ to which serious error messages should be written.

PART FOUR - OTHER CONSIDERATIONS

Customising CICS Names

You can customise the CICS data set, transaction, and program names as long as the following rules are obeyed:

1. Only the first three characters of a name can be changed.
2. All programs must have the same first three characters.
3. All data sets must have the same first three characters.
4. All transactions must have the same first three characters.
5. The transaction and data set names must share the same first three characters.

You will need to reflect any changes in the CICS tables.

If you change the transaction prefix it will be necessary to change the PLT program:

1. Change the value of parameter FAXLTRN in member FAXLTABP of the **SOURCE** library; change this parameter value from 'FAXL' to 'xxxL', where 'xxx' is the transaction prefix you have selected.
2. Assemble this table using a batch assembly and link-edit it to the PLTPI module (default name FAXL010). The LINKTAB member of the **JCL** library can be used to perform the link-edit.

National Language Support

The current version of OV/Fax is supplied in UK English and German on the host (the server is only currently supplied in UK English).

Each installation of OV/Fax is capable of supporting a number of different national languages. If you wish to run OV/Fax in a different language, you should take the following steps:

- Perform the relevant customising (creating new members if you wish to keep the English text) of the English-language control records held on the following members of the **JCL**:
 - FAXCTL2
 - FAXCTL3
 - FAXCTL4
 - FAXCTL5
 - FAXCTL6
 - FAXCTL7
 - FAXCTL8
 - FAXCTL9

The German language members have a suffix of '1'.

- Insert a line at the beginning of the CARDFILE containing **/-REPL n** where **n** is the language code (see [Appendix E, "Language Codes"](#) for a list of language codes).
- Re-run the control file update JCL, restarting the JCL at STEP30.

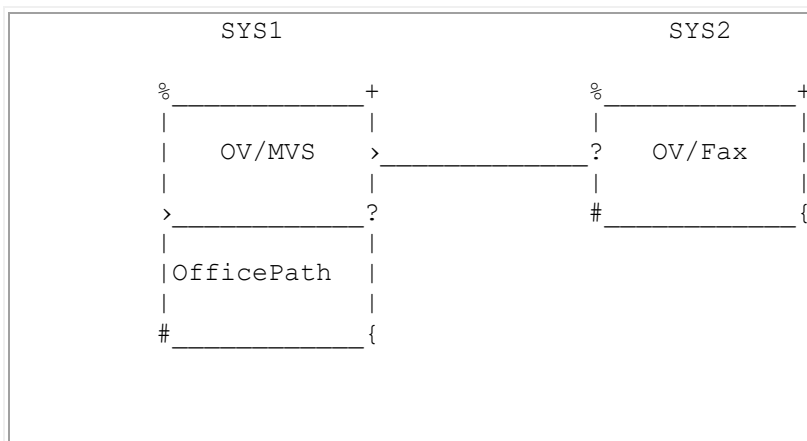
Note: The PARM= value on the FAXCNTL program specifies the default language code. If the language code on the /REPL is the same value, the records will be added with a language code of spaces. If the values are not the same, the /REPL value will be used. If, for example, you want the German language records to be the default values, specify a '1' for both the PARM= and the /REPL values. To then add the UK English records as an alternative language, keep the PARM= value as '1' but specify 'J' for the /REPL value.

MRO/ISC considerations

OV/Fax in a different region from OfficePath or RAPID

Multi Region Operation and Inter System Communication are supported between OV/Fax and OfficePath or RAPID (version 3.3.4 and above). [Figure 54](#) shows OV/Fax installed in a different CICS system from both OfficeVision/MVS and OfficePath.

[Figure 54. OV/Fax installed remotely from OfficePath](#)



If you wished to use the above configuration, then you should be aware of the following points.

- OV/Fax passes messages to the Office System and receives outbound faxes by linking to two interface programs called PIPGS3 and PIPGT3. These two programs need to be defined in SYS2. (If you are using RAPID, the program names are APIGS3 and APIGT3).
- The dataset normally called FAXOUTP (the fax out-tray) is used to pass fax requests from the Office System to OV/Fax. This dataset should belong to SYS2, and be defined as remote in SYS1.
- Similar remarks apply to the dataset normally called FAXOUTC (the inbound fax confirmations out-tray), though this need only be done if you are installing the inbound component of OV/Fax.

- The file usually set up as ZPMAILSK is used to pass messages from OV/Fax to the Office System. This dataset belongs to the SYS1 region and is defined as remote in SYS2. (The name ZPMAILSK is used in both RAPID and OfficePath).
- If using OfficePath, with a separate in-tray for OV/Fax, then the same comments apply to this dataset as to ZPMAILSK.
- The following transactions should be defined as remote in the SYS1 region where either RAPID or OfficePath reside:
 - FAXO
 - FAXK (only needed if you are installing the inbound component of OV/Fax).
- The following should be defined as remote in the SYS2 region where OV/Fax resides:
 - The transaction ZAPK (if RAPID is being used)
 - The transaction PIP5 (if OfficePath is being used)

In all the examples above, remember that files and transaction names are customisable. If customisation has been performed, then the above remarks apply to the customised names.

Using the on-line system in a remote region

Some sites may wish to run with the configuration shown in [Figure 54](#), and wish in addition to access the on-line fax transaction from the SYS1 CICS system - possibly by using the Personal Services user exit provided with OV/Fax. All of the remarks in the previous section still apply, together with the following considerations:

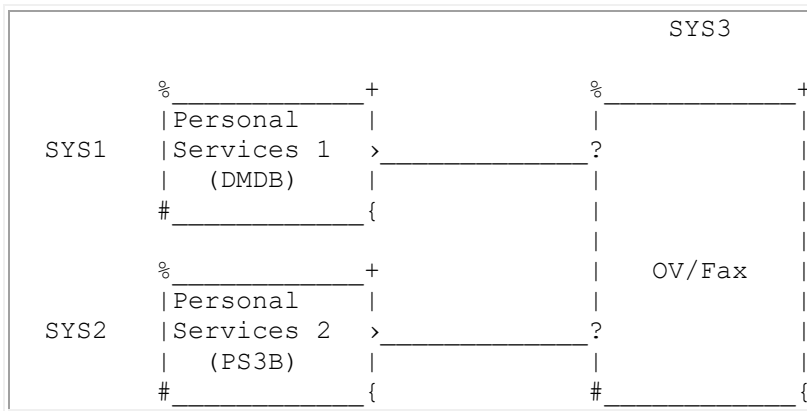
- The following transactions should be defined as remote in the SYS1 region:
 - FAX0
 - FAX1
 - FAX2
 - FAX3
 - FAX4
 - FAX5
 - FAX6
 - FAX7
 - FAX8
 - FAX9
 - FAXA
 - FAXB
 - FAXC
 - FAXD
 - FAXE (necessary only if you are installing the OV/Fax inbound component)
 - FAXG
 - FAXH
 - FAXM (necessary only if you are installing the OV/Fax inbound component)
 - FAXN (necessary only if you are installing the OV/Fax inbound component)
- The main Personal Services transaction DMDB (or customised variation) will need to be defined as remote in the SYS2 region.

- The Temporary Storage Table in the SYS2 region will need to have a generic entry defining all TSQ names beginning with DMD as remote (again this may vary if the Personal Services transaction name has been customised).
- The TYPETERM governing terminals which are to be used in this manner should be defined as 'shippable'.
- If AUTOINSTALL is being used, then a XICTENF global user exit is required to the interval control program.

Using OV/Fax with multiple Personal Services families

You may wish to use one version of OV/Fax for two or more Personal Services transaction families. If you wish to install OV/Fax only once, and to use the user exit facilities of OV/Fax from both Personal Services, then the set-up shown in [Figure 55](#) is a possibility.

[Figure 55. OV/Fax used with two Personal Services transaction families \(1\)](#)



In order to use Personal Services user exits in both SYS1 and SYS2 to access the on-line fax transactions in SYS3, the following steps must be taken:

- The two Personal Services transaction families must be installed with different transaction prefixes, even though they are in different CICS regions. In [Figure 55](#), the main Personal Services transaction is DMDB in SYS1 and PS3B in SYS2.
- The two Personal Services must share a single HUD, which is defined as remote to one of them as well as to SYS3.
- The following transactions must be defined as remote both in SYS1 and SYS2:
 - FAX0
 - FAX1
 - FAX2
 - FAX3
 - FAX4
 - FAX5
 - FAX6
 - FAX7
 - FAX8

- FAX9
- FAXA
- FAXB
- FAXC
- FAXD
- FAXE (necessary only if you are installing the OV/Fax inbound component).
- FAXG
- FAXH
- FAXM (necessary only if you are installing the OV/Fax inbound component).
- FAXN (necessary only if you are installing the OV/Fax inbound component).

The following transactions should be defined as remote in SYS3:

- DMDB
- PS3B
- The Temporary Storage Table in the SYS3 region will need to have a generic entry defining all TSQ names beginning with DMD and PS3 as remote, and pointing to SYS1 and SYS2 respectively.

If the sharing of the HUD dataset is not acceptable, then OV/Fax should be installed separately in SYS1 and SYS2.

Using OV/Fax with the Enterprise Address Book

As the size of your Office Systems community grows, you may find it desirable to split up the various components of OfficeVision/MVS, so that they reside in different CICS systems. Many customers already have DISOSS installed in a separate CICS region, and others may wish to separate out the Enterprise Address Book component. Please note that, if you wish OV/Fax to work with the Enterprise Address Book, then the two must be installed in the same CICS region.

Accessing On-line Facilities from another Application

CICS applications may start the online OV/Fax transactions directly, using the SIB interface provided for OV/MVS Personal Services users. This allows an application to supply the user id and address details, bypassing the usual OV/Fax logon screen. The application can also specify a menu option number, taking the user directly to that option instead of going into the main menu.

The **SOURCE** library contains two members to demonstrate this facility:

- **DXBSIB** gives the layout of the SIB (Standard Interface Block).
- **FAXSAMP5** is a sample CICS COBOL program which starts the OV/Fax interface transaction, specifying a user of ADMIN at PIPHOST, and a menu option of 71 which

corresponds to the main OV/Fax menu. The program checks the AID key and cursor position to determine if the user is exiting OV/Fax.

Using the SIB Interface

To use the SIB interface, an application program must complete the relevant fields in the SIB, and then perform a **CICS START** of the OV/Fax Personal Services User Exit transaction, **FAX0** (FAX-zero). FAX0 uses the following header fields:

SB-IVERS	This should be set to
SB-UNAME	This should be set to the required user id. (The sample program sets this to 'ADMIN'.)
SB-TRANNAME	This should be set to the transaction to START on exit from OV/Fax. Exiting the main menu or selected option causes the particular program to return to FAX0 which then performs a CICS START of SB-TRANNAME. (The sample program sets this to itself.)
SB-PNUMB	This is the number of SIB parameters specified, and should be or +2. (The sample program sets this to +2 as it specifies both of the allowed parameters.)
SB-PS-TXCODE	This should be set to spaces.

FAX0 recognises the following SIB parameters:

1 = Menu Option	This parameter is mandatory. It specifies whether the main menu or one of its options are to be the entry point for the user. The fields should be set as follows: <ul style="list-style-type: none">• SB-PVALUE should be set to one of the values on the control file CONF1 record. (The sample program sets this to 71, the main menu.)• SB-PLTH is the length of the parameter. (The sample program sets this to +2).
2 = Node	This parameter is optional. It specifies the node of the user, and is only required if the user is on a different node to the OV/Fax system. The fields should be set as follows: <ul style="list-style-type: none">• SB-PVALUE should be set to the required node value. (The sample program sets this to 'PIPHOST'.)

Note: The allowed values for the menu option depend on whether the user id specifies an OV/Fax user or administrator. Users do not have access to all the menu options.

Appendices

Appendix A. Installing The Utility Programs

Introduction

Several of the OfficeVision Keane Ltd's products use utility programs to extract information about the environment in which they run. These utility programs are intended to simplify installation and maintenance of these products by providing a single customisation point for common features.

This version of the Utility Programs contains the following programs:

IMIPSDET This CICS program is used to extract details from either the Personal Services component of OfficeVision/MVS or PS/CICS Release 2 or 3. The program returns information such as the dataset names, language code and the date format which Personal Services uses. The program is also used to obtain details pertaining to either RAPID or OfficePath, if you have one of these products installed. If Personal Services is not available then the details are taken from the IMIPSFIL data set.

IMIPSFIL This CICS program is used to modify the default system values obtained by program IMIPSDET.

IMIPSCTL This batch program is used to modify the default system values obtained by program IMIPSDET.

The unload JCL for the Utility Programs includes statements to unload the **IMI.JCL** and **IMI.LOAD** If you have any other Keane Ltd products installed on your machine, it is possible that you will already have a version of the Utility Programs on your machine. It is important that you always have the most up-to-date version of the library available to the CICS system. To ensure this you should unload the new versions of the libraries from the tape or cartridge and follow the instructions in "[Step 2. Check the release of IMIPSDET](#)".

The Utility Programs are supplied on the same tape or cartridge as the products which use it. The file positions of the Utility Programs files will be directly after those used by the product: these positions are detailed earlier in this manual.

Step 1. Unload the libraries

The installation of the Utility Programs involves two datasets. A short description of each dataset is given in [Figure 56](#).

Figure 56. Contents of the distribution tape

FILE	DSN	DESCRIPTION
1	IMI.JCL	JCL Library for the Utility Programs
2	IMI.LOAD	Load Library for the Utility Programs

All JCL provided is sample JCL only and will require tailoring to your own installation standards. All disc space parameters are based on IBM 3380 (single density) devices and may need to be altered for different equipment.

Sample JCL to unload the tape is shown in [Figure 57](#).

Figure 57. Example JCL to unload the libraries from tape

```
//JOBNAME JOB (accounting)
//LOAD PROC OUTC='*',TAPE='PDNnnn',
// WORK=SYSDA, <== WORK AREA
// UNITT='(3480,,DEFER)', <== ENSURE UNIT TYPES
// UNITD='DASD', <== ARE COMPATIBLE
// DISK='NNNNNN', <== INSERT DISK VOLSER
// PREFIXO='IMI', <== INSERT PREFIX NAME
// JCLO='JCL', <==
// LOADO='LOAD' <==
//*
//IEBCOPY EXEC PGM=IEBCOPY
//SYSPRINT DD SYSOUT=&OUTC
//SYSUT3 DD UNIT=&WORK,SPACE=(80,(100,100))
//JCLO DD DSN=&PREFIXO..&JCLO,DISP=(,CATLG),
// VOL=SER=&DISK,UNIT=&UNITD,
// SPACE=(CYL,(1,1,15)),
// DCB=(LRECL=80,RECFM=FB,BLKSIZE=6080)
//JCLI DD DSN=IMI.JCL,
// DISP=(OLD,PASS),LABEL=(x,SL), <=== as defined earlier
// UNIT=&UNITT,VOL=SER=&TAPE
//LOADO DD DSN=&PREFIXO..&LOADO,DISP=(,CATLG),
// VOL=SER=&DISK,UNIT=&UNITD,
// SPACE=(CYL,(2,1,20)),
// DCB=(RECFM=U,BLKSIZE=6144)
//LOADI DD DSN=IMI.LOAD,
// DISP=(OLD,PASS),LABEL=(y,SL), <=== as defined earlier
// UNIT=&UNITT,VOL=SER=&TAPE
//*
// PEND
//LOAD EXEC LOAD
//SYSIN DD *
COPY INDD=JCLI,OUTDD=JCLO
COPY INDD=LOADI,OUTDD=LOADO
//
```

Step 2. Check the release of IMIPSDET

If you already have a version of the **IMI.JCL** library on your machine, compare the version number in the **@RELEASE** member of the library you have just unloaded with the corresponding member on the existing library. If the version which you are currently using is lower than the version from the tape then you should upgrade to the new release by replacing the existing **IMI.LOAD** library in your CICS DFHRPL concatenation with that from the tape. If you are already using the latest version, then you can delete the **IMI.JCL** and **IMI.LOAD** libraries you have unloaded and ignore the remainder of this appendix.

Note: If you already have a version of the **IMI.LOAD** library on your system you should check to see if the load library member names have been customised. If the member names have been changed from their default value of 'IMI' then refer to the [Appendix B, "Customising Utility Programs"](#).

The **@RELEASE** member may also contain details of prerequisites for the installation of the Utility programs, and should be reviewed prior to installing the utilities for the first time.

Step 3. Define the Utility Programs System File

The Utility Programs System File is a VSAM KSDS which contains information relating to requests passed to Utility Programs. Member **IMIPSFIL** in the **JCL** library contains JCL to create the file and is shown in [Figure 58](#).

[Figure 58. JCL to define the IMIPSFIL file](#)

```
//JOBNAME      JOB (ACCOUNT)
//STEP1       EXEC PGM=IDCAMS
//SYSPRINT    DD   SYSOUT=*
//DD1        DD   UNIT=DASD,          <== CHANGE TO STANDARDS
//           VOL=SER=PRM015,DISP=SHR  <== CHANGE TO VOLSER
//SYSIN      DD   *
      DELETE IMI.IMIPSFIL FILE(DD1)
      DEFINE CLUSTER (NAME(IMI.IMIPSFIL)
                    VOL(PRM015)
                    FILE(DD1)
                    FREESPACE(5 5)
                    TRACK(2 0)
                    SHAREOPTIONS(2 3)
                    UNIQUE)
                    DATA (NAME(IMI.IMIPSFIL.DATA)
                          RECORDSIZE(128 2048)
                          KEYS(17 0))
                    INDEX (NAME(IMI.IMIPSFIL.INDEX)
                          IMBED
                          REPLICATE)
/*
//
```

Step 4. Update CICS for Utility Programs

The Utility programs are invoked by the Utility Programs CICS transactions and so will require various CICS table entries.

PPT Entries

Member **IMIUPPT** on the **IML.JCL** library contains the PPT entries in macro format. Member **IMIUPPTR** contains the PPT entries in RDO format suitable as input to the DFHCSDUP program.

Note: If you get a duplicate entry when adding these (and you have not previously installed Utility Programs) then you will need to customise the program names. Refer to [Appendix B, "Customising Utility Programs"](#) for details on how to do this.

PCT Entries

Member **IMIUPCT** on the **IML.JCL** library contains the PCT in macro format. Member **IMIUPCTR** contains the PPT entries in RDO format suitable as input to the DFHCSDUP program.

FCT Entries

Member **IMIUFCT** on the **IML.JCL** library contains the FCT entries in macro format. Member **IMIUFCTR** contains the PPT entries in RDO format suitable as input to the DFHCSDUP program.

CICS JCL

The CICS Startup deck will need to be amended to include the **IML.LOAD** library in the DFHRPL concatenation. A DD statement will also be required for **IMIPSFIL**, with the DSN used in Step Alternatively the DSN can be specified in the FCT.

Step 5. Initialise the Utility Programs System File

If you are installing the Utility Programs for the first time you will need to initialise the System File. Sample JCL to invoke **IMIPSCCTL** can be found in member **IMIPSCCTL** on the **IML.JCL** data set. This is shown in [Figure 59](#).

Figure 59. Example JCL for the IMIPSCTL program

```

//JOBNAME    JOB (ACCOUNT)
//STEP      EXEC PGM=IMIPSCTL
//STEPLIB   DD  DISP=SHR, DSN=IMI.LOAD
//IMIPSFIL  DD  DISP=SHR, DSN=IMI.IMIPSFIL
//SYSOUT    DD  SYSOUT=*
//CARDFILE  DD  *
/-ADD
/*
//          DD  DISP=SHR, DSN=IMI.JCL(IMIOPATH)
// *        DD  DISP=SHR, DSN=IMI.JCL(IMIRAPID)
// *        DD  DISP=SHR, DSN=IMI.JCL(IMINONE)
//          DD  DISP=SHR, DSN=IMI.JCL(IMIGCUP)
// *
// *                CODE  PAGES  NOW
// *        DD  DISP=SHR, DSN=IMI.JCL(IMIGC100)    AUSTRIAN/GERMAN
// *        DD  DISP=SHR, DSN=IMI.JCL(IMIGC110)    CANADIAN BILINGUAL
// *        DD  DISP=SHR, DSN=IMI.JCL(IMIGC120)    DANISH/NORWEGIAN
// *        DD  DISP=SHR, DSN=IMI.JCL(IMIGC130)    ENGLISH (UK)
//          DD  DISP=SHR, DSN=IMI.JCL(IMIGC140)    ENGLISH (US)
// *        DD  DISP=SHR, DSN=IMI.JCL(IMIGC150)    FINNISH/SWEDISH
// *        DD  DISP=SHR, DSN=IMI.JCL(IMIGC160)    FRENCH
// *        DD  DISP=SHR, DSN=IMI.JCL(IMIGC170)    ITALIAN
// *        DD  DISP=SHR, DSN=IMI.JCL(IMIGC190)    SPANISH SPEAKING
// *        DD  DISP=SHR, DSN=IMI.JCL(IMIGC200)    SPANISH (CICS)
// *        DD  DISP=SHR, DSN=IMI.JCL(IMIGC210)    BELGIAN DUTCH
// *        DD  DISP=SHR, DSN=IMI.JCL(IMIGC220)    SWISS (FR., GER., ITA.)
// *        DD  DISP=SHR, DSN=IMI.JCL(IMIGC230)    PORTUGUESE
// *        DD  DISP=SHR, DSN=IMI.JCL(IMIGC240)    BRAZILIAN PROTUGUESE
// *        DD  DISP=SHR, DSN=IMI.JCL(IMIGC250)    ICELANDIC
// *
// *                CECP  CODE  PAGES  NOW
// *        DD  DISP=SHR, DSN=IMI.JCL(IMIGC500)
// *        DD  DISP=SHR, DSN=IMI.JCL(IMIGC510)
// *        DD  DISP=SHR, DSN=IMI.JCL(IMIGC520)
// *        DD  DISP=SHR, DSN=IMI.JCL(IMIGC530)
// *        DD  DISP=SHR, DSN=IMI.JCL(IMIGC540)
// *        DD  DISP=SHR, DSN=IMI.JCL(IMIGC550)
// *        DD  DISP=SHR, DSN=IMI.JCL(IMIGC560)
// *        DD  DISP=SHR, DSN=IMI.JCL(IMIGC570)
// *        DD  DISP=SHR, DSN=IMI.JCL(IMIGC580)
//

```

The System File must be initialised to contain the system information and GCID details before it can be used. Within the JCL dataset there are a number of members containing sample configuration records:

IMIRAPID System record for RAPID

IMIOPATH System record for OfficePath

IMINONE System record where neither RAPID or OfficePath is installed

IMIGCUP Multi-lingual lowercase to uppercase translation table

IMIGCnnn Multi-lingual to local translation tables. Ensure that you have the correct one included.

Note: One of IMIRAPID, IMIOPATH, or IMINONE is required. IMIGCUP is required and one GCID table is required.

Appendix B. Customising Utility Programs

Changing the CICS table entries

All the Utility Programs, transactions, and data sets use a three character prefix of IMI. This can be changed to another value if you have duplicate entries in your CICS tables. In order to do this you will need to do the following:

1. Rename all load modules with prefix **IMI** on the IMI.LOAD library to use the new prefix.
2. Rename all the **IMI** table entries to use the new prefix.
3. Member **IMIRENAM** on the **IMI.JCL** library contains a ZAP which must be applied to all the products which invoke IMIPSDDET. This is shown in [Figure 60](#).¹

Note: The prefix used for the transaction name and the file name must be the same.

[Figure 60. ZAP to rename the IMIPSDDET module](#)

```
NAME module GETPSDEF
VER 0000 C9D4C9D7E2C4C5E3          C'IMIPSDDET'
REP 0000 xxxxxxx                   New prefix value
```

Where:

```
module is the name of the OV/Fax module
xxxxxx is the new prefix in hexadecimal format
```

Updating the Utility Programs configuration records in batch

The Utility Programs System File contains many records that are used to control Utility Programs. These are created in batch with the System File dataset deallocated from CICS.

IMIPSCTL is a batch program that is used to set up the System File control records. This program takes records from an input dataset and interprets them to produce validated control records. The input dataset is a standard 80 character card file, of which only the first 72 bytes are used.

The different types of System File control record have different parameters, and these parameters have different data types.

Each record starts with a line containing a "/" as the first character followed by up to six alphanumeric characters indicating the type of record, and possibly some data for the record key, separated from the record type by spaces. Record data follows with any data preceded by the data type. The record type and data type must always be upper case. Comment lines must start with a "*" and are ignored. Blank lines may be placed anywhere and are ignored.

Sample JCL to invoke IMIPSCCTL can be found in member **IMIPSCCTL** on the **IMI.JCL** data set. This is shown in [Figure 61](#).

Figure 61. Example JCL for the IMIPSCCTL program

```
//JOBNAME    JOB (ACCOUNT)
//STEP1     EXEC PGM=IMIPSCCTL
//STEPLIB   DD  DISP=SHR,DSN=IMI.LOAD
//IMIPSFIL  DD  DISP=SHR,DSN=IMI.IMIPSFIL
//SYSOUT    DD  SYSOUT=*
//CARDFILE  DD  *
/-ADD
/*
//          DD  DISP=SHR,DSN=IMI.JCL(IMIOPATH)
//          DD  DISP=SHR,DSN=IMI.JCL(IMIRAPID)
//          DD  DISP=SHR,DSN=IMI.JCL(IMINONE)
//          DD  DISP=SHR,DSN=IMI.JCL(IMIGCUP)
//          DD  DISP=SHR,DSN=IMI.JCL(IMIGC100)
//          DD  DISP=SHR,DSN=IMI.JCL(IMIGC110)
//          DD  DISP=SHR,DSN=IMI.JCL(IMIGC120)
//          DD  DISP=SHR,DSN=IMI.JCL(IMIGC130)
//          DD  DISP=SHR,DSN=IMI.JCL(IMIGC140)
//          DD  DISP=SHR,DSN=IMI.JCL(IMIGC150)
//          DD  DISP=SHR,DSN=IMI.JCL(IMIGC160)
//          DD  DISP=SHR,DSN=IMI.JCL(IMIGC170)
//          DD  DISP=SHR,DSN=IMI.JCL(IMIGC190)
//          DD  DISP=SHR,DSN=IMI.JCL(IMIGC200)
//          DD  DISP=SHR,DSN=IMI.JCL(IMIGC210)
//          DD  DISP=SHR,DSN=IMI.JCL(IMIGC220)
//          DD  DISP=SHR,DSN=IMI.JCL(IMIGC230)
//          DD  DISP=SHR,DSN=IMI.JCL(IMIGC240)
//          DD  DISP=SHR,DSN=IMI.JCL(IMIGC250)
//          DD  DISP=SHR,DSN=IMI.JCL(IMIGC500)
//          DD  DISP=SHR,DSN=IMI.JCL(IMIGC510)
//          DD  DISP=SHR,DSN=IMI.JCL(IMIGC520)
//          DD  DISP=SHR,DSN=IMI.JCL(IMIGC530)
//          DD  DISP=SHR,DSN=IMI.JCL(IMIGC540)
//          DD  DISP=SHR,DSN=IMI.JCL(IMIGC550)
//          DD  DISP=SHR,DSN=IMI.JCL(IMIGC560)
//          DD  DISP=SHR,DSN=IMI.JCL(IMIGC570)
//          DD  DISP=SHR,DSN=IMI.JCL(IMIGC580)
//
```

Control Mode

This program will operate in four modes: ADD, REPLACE, UPDATE, and DELETE. To swap between modes a special mode change line is used.

The mode change controls are

/-ADD Add records, do not overwrite existing records. This is the default mode.

/-REPL Replace existing records, will add record if it does not exist.

/-UPDT Update records, reads record, makes changes and rewrites it.

/-DEL Delete record from System File.

Supplied Configurations

Within the JCL dataset there are a number of members containing sample configuration records:

IMIRAPID System record for RAPID

IMIOPATH System record for OfficePath

IMINONE System record when neither OfficePath or RAPID is installed.

IMIGCUP Multi-lingual lowercase to uppercase translation table

IMIGCnnn Multi-lingual to local translation tables

Record Parameter Definitions

There are three record types, the parameter definitions for each of the different records types are outlined in the following pages. The details of each record is presented in a four column table, the columns are as follows:

Name the name of the parameter

Description a description of the parameter

Occurs the number of times that the parameter may appear within the record

Format the parameter data type

Parameter Data Types

These data types are specified for the parameters of each record type. The data is validated by the batch program before writing to the System File.

decimal a numeric value

TEXT(n) characters upto a maximum length of n

- hexbytes** A list of 16 hexadecimal digits defining the value of n bytes. Spaces may be embedded between bytes and are ignored. There must be exactly 16 bytes defined.
- TERMGRP** either a single terminal name (up to eight characters) corresponding to the CICS "netname" or a generic name delimited by "*".

/GCID

All data is coded in the multilingual character set (GCID 00679-00500). This is the same character set as used by DISOSS and Personal Services to hold internal data.

When data is to be displayed on a terminal it has to be converted to your local character set or the data may appear incorrectly. (for example pound signs may appear as dollar signs.) This conversion is controlled by a table which is defined by parameters LOCAL. This table contains the local character set equivalent for every multilingual character from X"00" to X"FF".

When data is received from a terminal it has to be converted to the multilingual character set so that it can be processed correctly. This conversion is controlled by a table which is defined by parameters MULTI. This table contains the multilingual character set equivalent for every local character from X"00" to X"FF".

Name	Occurs	Description	Format
/GCID		the TERMGRP contains either a specific terminal or a generic terminal name for which the GCID translation is required.	TERMGRP
LOCAL	16	multi-lingual to local translation table	hexbytes
MUTLI	16	local to multi-lingual translation table	hexbytes

/UPPER

A number of Keane Ltd's products require lowercase to uppercase translation of characters, this is achieved using a table which contains the uppercase equivalents of all multi-lingual characters. The products will first convert the data to the multi-lingual CGID and then perform the uppercase translation.

Name	Occurs	Description	Format
/UPPER	1		
MULTI	16	uppercase translation	hexbytes

/SYSTEM

A number of Keane Ltd's products use RAPID or OfficePath to interface to the mail network: this record defines that interface.

Name	Occurs	Description	Format
/SYSTEM		the name of the system record (blank for the system defaults)	TEXT(3)
DESC	1	a suitable description	TEXT(32)
PRODUCT	1	"P" for OfficePath, "R" for RAPID, or blank to indicate neither	TEXT(1)
VERSION	1	the version of the above product in the range 0-999	decimal
MAILSK	1	the name of the mail-sack file (usually ZPMAILSK)	TEXT(8)
PREFIX	1	the program prefix for the mailing programs (usually PIP for OfficePath or API for RAPID)	TEXT(3)
TRANS	1	The name of either the RAPID or OfficePath in-tray processing transaction: usually ZAPK for RAPID and PIP5 for OfficePath.	TEXT(4)
HUP	1	The name of the DISOSS HUP data set when RAPID is installed.	TEXT(8)
NODE	1	The name of the node where either RAPID or OfficePath is installed.	TEXT(8)

GCID table names

The table below shows the code page names for various countries and their corresponding "includes" for the System File maintenance program.

JCL	GCID	Language
IMIGC100	00265-00273	AUSTRIAN/GERMAN
IMIGC110	00684-00037	CANADIAN BILINGUAL
IMIGC120	00281-00277	DANISH/NORWEGIAN
IMIGC130	00313-00285	ENGLISH (UK)
IMIGC140	00101-00037	ENGLISH (US)
IMIGC150	00285-00278	FINNISH/SWEDISH
IMIGC160	00682-00297	FRENCH
IMIGC170	00293-00280	ITALIAN
IMIGC190	00309-00284	SPANISH SPEAKING

IMIGC200	00650-00284	SPANISH (NEW)
IMIGC210	01114-00500	BELGIAN DUTCH
IMIGC220	00908-00500	SWISS (FRENCH,GERMAN,ITALIAN)
IMIGC230	01114-00037	PORTUGUESE
IMIGC240	00273-00037	BRAZILIAN PORTUGUESE
IMIGC250	01126-00871	ICELANDIC
		The following code pages are for CECPs
IMIGC500	00697-00500	BELGIAN DUTCH/SWISS(FR.,GER.,ITA.)
IMIGC510	00697-00037	ENGLISH(US)/CANADIAN BILINGUAL/PORTUGUESE
IMIGC520	00697-00273	AUSTRIAN/GERMAN
IMIGC530	00697-00277	DANISH/NORWEGIAN
IMIGC540	00697-00285	ENGLISH (UK)
IMIGC550	00697-00278	FINNISH/SWEDISH
IMIGC560	00697-00297	FRENCH
IMIGC570	00697-00871	ICELANDIC
IMIGC580	00697-00280	ITALIAN
IMIGC590	00697-00284	SPANISH

Maintaining the Utility Programs configuration records in CICS

With the exception of the GCID translation tables (including the lowercase to uppercase table) all information used by Utility Programs can be maintained via a CICS transaction which provides three panels enabling the maintenance of the three types of records.

Record Types

System Records

These records define the interface to the mailing system: either RAPID/DISOSS or OfficePath. There is one "global" system record and possibly a number of overrides for other Keane Ltd products. The global records, with spaces in the name, **MUST** be defined.

Product Records

These records define language dependent values used by other Keane Ltd products. The information here corresponds to that usually available from Personal Services and is used when the information cannot be easily obtained from Personal Services. You should refer to the documentation of other Keane Ltd products to determine the necessary entries.

Security Authorisation Code Records

These records are required by certain Keane Ltd products. You should refer to the appropriate product installation documentation to determine if these records are necessary. When necessary these records contain the product and feature names, together with the related authorisation code issued by Keane Ltd.

Invoking The Maintenance Program

The Utility Programs on-line maintenance is invoked using transaction **IMIF**. After invoking the transaction a panel will be displayed showing a list of all the **SYSTEM** and **PRODUCT** records available. An example is shown in [Figure 62](#).

Figure 62. Panel showing list of records available

IMIF 2		OfficeInfo: File Maintenance		Version 5.2.1	
----- SYSTEM overrides -----		-----		----- PRODUCT values -----	
SEL	Description	SEL	Description		
	SYSTEM DEFAULTS		FAX Application FAX		
			RBB Bulletin		
PF3-Exit, PF5-New system, PF7-New product, PF8-Product security screen					
Select a transaction product, or press PK key					

From this panel you can select a system or product record to work with by typing a non-blank character in the SEL column corresponding to the record. You can create new records by pressing either PF5 or PF7; you will be prompted to enter the new record name and then taken to the panel corresponding to that record type. To maintain the security authorisation code records press PF8 to be taken to the security code panel.

Maintaining System Records

After selecting an existing **SYSTEM** record or after creating a new one you will be presented with "SYSTEM MAINTENANCE" panel.

Figure 63. Panel showing a system record

```
IMIF 3                      OfficeInfo: System Maintenance          Version  5.2.1

System Name.....

Description.....: SYSTEM DEFAULTS

Product.....: P OFFICEPATH
Version.....:

Mail Sack name.....: ZPMAILSK
DISOSS HUP.....:

Program prefix.....: PIP
Transaction id.....: PIP5
Node name.....: DZCICS

PF3 - Exit, PF9 - Delete
Modify details and press ENTER to confirm
```

The enterable fields will be validated as follows:

- | | |
|-------------------------|--|
| Product | Must be either R (for RAPID), P (for OfficePath), or blank (indicating that neither RAPID or OfficePath is installed). |
| Version | The version installed of either RAPID or OfficePath. |
| Mail sack name | The name of either the RAPID or OfficePath mail sack. |
| DISOSS HUP | The name of the DISOSS HUP data set when RAPID is installed. |
| Program prefix | The program prefix of the RAPID or OfficePath programs installed. |
| Transaction name | The name of either the RAPID or OfficePath in-tray processing transaction: usually ZAPK for RAPID and PIP5 for OfficePath. |
| Node name | The name of the node where either RAPID or OfficePath is installed. |

Maintaining Product Records

After selecting an existing PRODUCT record or after creating a new one you will be presented with "PRODUCT MAINTENANCE" panel.

Figure 64. Panel showing a product record

```

IMIF 4                      OfficeInfo: Product Maintenance          Version 5.2.1
                               10:17:07 05/09/94
Product Prefix..... FAX
Description.....: Application FAX

Language Code.....: 0 ENGLISH (US)

Date Format.....: 2 DD/MM/YY          Date Separator.....: /
Time Format.....: 2 24                Time Separator.....: :
Characters for am...: am              Characters for pm...: pm

Decimal.....: .                      Thousand.....: ,
Yes.....: 1                          No.....:

Error TDQ.....: CSMT                 Currency Symbol.....: $

----- Note Key Phrase Table -----
Date.....:          date:  CC.....:          cc:
From.....:          from:  Subject.....:      subject:
To.....:           to:    Reference.....:    ref:

PF3 - Exit,  PF9 - Delete
Details are valid and have been written to file

```

The enterable fields will be validated as follows:

- Language Code** an alpha-numeric character. Utility Programs will display a description of the language.
- Date Format** either 1 (MM/DD/YY), or 2 (DD/MM/YY), or 3 (YY/MM/DD).
- Date Separator** an optional single character used to separate the digits when displaying the date.
- Time Format** either 1 (12 hour format) or 2 (24 hour format)
- Time Separator** an optional single character used to separate the digits when displaying the time.
- Characters for am** two characters used after a 12 hour format time to indicate a time before midday.
- Characters for pm** two characters used after a 12 hour format time to indicate a time after midday.
- Decimal** the optional decimal separator.
- Thousand** the optional thousand separator.
- Yes** a single character.
- No** a single character.

- Error TDQ** the name of the CICS TDQ to which error messages should be written.
- Currency Symbol** the optional local currency symbol.
- Note Key Phrases** these should be entered "right justified", they will be used by products which scan documents for recipient and originator information.

Maintaining Security Code Records

Some of Keane Ltd's products require authorisation codes. To modify existing codes or add new ones enter a non-space character in the SEL column. The panel will list products for which security codes exist. To enter codes for a product which is not on the list use PF Key 5 and enter the product name as prompted.

Figure 65. Panel showing products with authorisation codes

```

IMIF 5                    OfficeInfo: Products with Feature Codes                    Version 5.2.1
-----
SEL Product
      BULLETIN
      PIXI

PF3 - Exit,  PF5 - Add New Product
Select a product, or press PK key

```

After selecting a product a panel similar to the one following will be displayed:

Figure 66. Panel showing a product's authorisation codes

IMIF 6	OfficeInfo: Feature Code Maintenance	Version 5.2.1

Product Name PIXI		
Feature Code	Feature Code	Feature Code
EXWIN WI 017MWER9		
IRMHL DO K11210AA		
MAIL QEF11SAH		
MVS BASE 7113I5A1		
3270 DO 126439AI		
PF3 - Exit, PF9 - Delete		
Enter feature and code details		

If a product requires security authorisation codes, then the following information should be copied from the Software Shipment form relating to the product.

- **Product Name**
- **Feature**
- **Security Authorisation Code**

A list showing the current features and codes is then displayed (an empty list if codes have not previously been entered for this product). This list may then be modified by overtyping existing entries or by adding a new feature and code at the end of the list. Each feature name can only appear once in the list.

Appendix C. OV/Fax Modules which use Utility Programs

The following OV/Fax modules invoke the IMIPSDET program:

1. FAXI010
2. FAXJ010
3. FAXK010
4. FAXL020
5. FAXO010
6. FAXP010
7. FAXQUE
8. FAXQ010
9. FAXR010
10. FAXS010
11. FAX0010
12. FAX2010
13. FAX3010

Appendix D. Code Page 500 Characters

The table below shows the characters in code page 00500. Any characters entered through the batch maintenance program must be entered in this code page.

Note: Due to the nature of some of the characters it has been very difficult to print them: some slight positional inaccuracies may occur, these inaccuracies are detailed below the table.

	-0	-1	-2	-3	-4	-5	-6	-7	-8	-9	-A	-B	-C	-D	-E	-F
4-			â	ä	à	á	ã	å	ç	ñç	[.	<	(+	!
5-	&	é	ê	ë	è	í	î	ï	ì	ß]	\$	*)	;	^
6-	-	/	Â	Ä	À	Á	Ã	Å	Ç	Ñ		,	%	_	>	?
7-	ø	É	Ê	Ë	È	Í	Î	Ï	Ì	`	:	#	@	‘	=	“
8-	Ø	a	b	c	d	e	F	g	h	i	«	»	ð	ý	þ	±
9-	°	j	k	l	m	n	O	p	q	r	ª»	°	æ	¸	Æ	¤
A-	µ	~	s	t	u	v	w	x	y	z	i	¿	Đ	Ý	Þ	®
B-	¢	£	¥	·	©	§	¶	¼	½	¾	¬		-	”	´	×
C-	{	A	B	C	D	E	F	G	H	I	~	Ô	ö	ò	ó	õ
D-	}	J	K	L	M	N	O	P	Q	R	¹	û	Û	ù	ú	ÿ
E-	\	÷	S	T	U	V	W	X	Y	Z	²	ô	ö	ò	ó	ô
F-	0	1	2	3	4	5	6	7	8	9	³	û	Û	Ù	Ú	

The following characters may not be printed accurately:

8D is lower case y acute

AD is upper case y acute

BC is overline

Note: **41** is a required space.

Appendix E. Language Codes

Personal Services Language Codes

Code	Language
0	English (US)
1	German
2	French
3	Danish
4	Norwegian
5	Swedish
6	Italian
7	Spanish
8	Dutch
9	Finnish
A	Portuguese
B	Brazilian Portuguese
C	Icelandic
D	Belgian Dutch
E	Canadian French
F	Swiss French
G	Swiss German
H	Swiss Italian
I	Latin American Spanish
J	English (UK)

Footnotes:

¹

The OV/Fax modules which will require this ZAP to be applied are listed in [Appendix C, "OV/Fax Modules which use Utility Programs"](#).