TBS Software Inc.

OfficePath

Version 1 Release 6.1

General Information Manual

OfficePath General Information Manual

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Edition Information

September 2021

This edition applies to Version 1 Release 6.1 of OfficePath. It also applies to subsequent releases until otherwise indicated in new editions.
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Chapter 1 Overview

During the 1990s electronic-mail has become one of the fastest growing areas in Information Technology. This growth has included messaging within an organisation, messaging to external organisations and the integration of applications ("mail-enabling" applications). Communication with anyone, anywhere, at anytime has become an essential element to remain competitive and responsive in today's changing business environment.

Keane Ltd has been committed to the use of electronic-mail since the beginning of the 1980s, when we first installed a DISOSS system from IBM. Since that early beginning electronic mail has evolved from workers on the same e-mail system communicating with one another, to those same workers being able to communicate with others either inside or outside the organisation but with similar systems, to today's promise of X.400 and the Internet where communication with anyone, regardless of e-mail system or location, is possible. Throughout all of these changes Keane Ltd has always been at the forefront of "getting the most" out of an e-mail system. From those early days RAPID from Keane Ltd became the "standard" way of mail-enabling DISOSS systems.

The introduction of PC LAN technology to organisations has seen the shift from a host-based to a LAN-based electronic mail strategy. This shift has presented new challenges for organisations. In most organisations the move to the PC will be a gradual, not a "big bang", approach. This will result in the need for the coexistence of systems. Also, many line-of-business applications will remain on the host at least in the medium term, and in many cases beyond that.

OfficePath can help an organisation in many ways. OfficePath can extend the reach of the current host based systems to enable users to communicate with others within the organisation who use a different, possibly LAN-based, e-mail system, and with other communities external to the organisation via, for example, X.400 or the IBM Mail network. OfficePath can also simplify the task of mail-enabling TSO, batch or CICS applications. OfficePath can provide these functions, and more.

Recently added features of OfficePath also assist in the process of migrating away from the host system. The Redirector feature will automatically intercept mail addressed to the migrated user's old host mailbox and redirect it to his new mailbox. The DISOSS Library Retrieval feature permits retrieval from the DISOSS library, even when DISOSS itself has been discontinued and removed.

In addition, OfficePath can help to save administration time, host resources and money.

Chapter 2 Introduction

About this Publication

Audience for this book

The intended audience are those individuals within the organisation who are responsible for providing at least one of the following:

- Connection between an MVS CICS based Office System, such as Personal Services (either PS/CICS or the Personal Services component of OfficeVision) or Computer Associates' eMAIL, and other types of e-mail system.
- Connection between an MVS CICS application and the Office System network
- Connection between MVS batch application and the Office Systems network
- Connection between TSO and the Office Systems network.

The purpose of this book is to explain how OfficePath can help provide the solution.
Although not essential the reader would benefit from some knowledge of SNADS and general Office Systems terminology.

How this book is organised

This book is arranged to provide a general introduction to OfficePath giving a brief overview of its features and benefits, followed by chapters which expand on each particular feature. Each chapter begins with an introduction to the feature, followed by further technical detail. This further technical detail may be skipped by a reader not requiring this level of detail.

The evolution of OfficePath

OfficePath has an impressive pedigree, being "son of RAPID". OfficePath shares a lot of RAPID's source code. RAPID became an absolute necessity for organisations at the forefront of Office Systems technology who wished to mail-enable their host applications. For organisations with DISOSS, it allowed CICS, batch and TSO applications to communicate with the Office Systems user. Batch reports that were printed and then distributed in the internal post, producing both delay and the use of much paper, could be sent electronically to the recipients. Using RAPID, organisations were already beginning to realise the benefits of an Office System to provide information without delay.

The original release of OfficePath provided the RAPID programming interfaces link for users of Personal Services, with no pre-requisite for DISOSS. The flexible kernel design allowed further enhancements to provide a SNADS (SNA Distribution Services) interface and the addition of support for Computer Associates' eMAIL. The "opening" of the system to provide user-exit facilities followed in subsequent releases. Recent releases have added the Redirector and DISOSS Library Retrieval features.

What is OfficePath?

The heart of OfficePath is a CICS based message router. This provides "store and forward" Document Distribution Services for routing from a "source" to one or more "destinations". It provides many of the same routing facilities as IBM's DISOSS.

OfficePath Connectivity

Figure 1 shows some of the connectivity options available with OfficePath.

Figure 1. OfficePath Connections

Figure 2 shows an example of how OfficePath could be used to mail-enable an application. In this example an existing CICS application which prints purchase-orders, either on request from a user or automatically when stock falls below re-order level, is modified to send the Purchase Order, via OfficePath, to the supplier either as mail via X.400 or as a Fax[i].

Figure 2. Sample OfficePath CICS Application

Following chapters in this book discuss OfficePath in more detail. Chapter 8, for example, describes how to mail-enable an application.

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[i] See page 51 for further details regarding Fax software from *TBS Software Inc.*

Chapter 3 OfficePath in action

Introduction

This chapter discusses a number of examples of the use of OfficePath, based on actual customer installations.

OfficePath as a SNADS HUB

The need to provide a systems environment to support the growth of one of America's most rapidly expanding manufacturers resulted in the selection of OfficePath to provide host based routing facilities.

The company was new to Office Systems and needed to select products to support both the LAN users and users of 3270 terminals. OfficeVision/MVS and cc:Mail were chosen as the products to do this. This resulted in a requirement to inter-connect these two user communities, together with connectivity to customers and suppliers accessible via fax or IBM Mail Exchange.

OfficePath was selected for its wide range of available connectivity options. Fax, cc:Mail, OfficeVision/MVS, batch/TSO and Mail Exchange gateways have all been successfully implemented.

Figure 3. OfficePath as a SNADS HUB

The fax connection was satisfied using the OV/Fax[i] product and cc:Mail was connected to OfficePath using the OfficePath/SNADS[ii]. As many of the subsidiary companies across North America and Europe already have a host connection to one of the company's IBM mainframes OfficePath is able to handle the routing between the Post Offices. Should another company be acquired which uses a different mail system, for example Microsoft Mail, these users can be connected into the mail network via OfficePath and a gateway.

OfficePath has provided a fully integrated solution as shown in Figure 3. Mail may be sent out from cc:Mail to IBM Mail Exchange via OfficePath. OV/Rerouter[iii] can be used to re-route mail to another mailbox, on OV/MVS or cc:Mail, during a period of temporary absence.

In the event that a user permanently migrates from OV/MVS to cc:Mail then the OfficePath Redirector[iv] feature can be used to ensure that any mail addressed to his old address is intercepted and Redirected to his new address, without affecting any requests for Delivery or Read Notification or the recipient's ability to reply. This feature can also be used to intercept any mail being sent by the migrated user to Mail Exchange and to make it appear that it came from the user's original address. This avoids the need to register cc:Mail post-offices in Mail Exchange.

Coexistence between DISOSS Library and OfficePath

The Australian arm of a multinational chemical company with a large Office System user base was having problems with CPU usage. The company used DISOSS connected to OfficeVision/MVS to provide mail connectivity from Personal Services to the outside world. As there was a great need to communicate to Fax using OV/Fax[v], to the SNADS-connected world-wide offices and, increasingly, to users of LAN-based e-mail systems, the use of DISOSS was heavy and increasing. The company not only used DISOSS for distribution but also for library with the DLSE product.

OfficePath was installed in the main Office System CICS region to cut the host resource use. Their performance tests showed that CPU savings of over 25% could be made with typical distributions with certain distributions (for example, to fax) achieving savings as high as 90%. DISOSS was moved to another CICS region where its library facilities were made available to the Office Systems users via mail, using DLSE.

In the future the company may decide not to continue to file documents in the DISOSS library. Already filed documents can continue to be retrieved using DISOSS and DLSE. Alternatively the OfficePath DISOSS Library Retrieval feature[vi] could be used, allowing the company to dispense with both DISOSS and DLSE.

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[i] See page 51for further details regarding the OV/Fax product
[ii] See page 51 for further details regarding the OfficePath/SNADS product
[iii] See page 51 for further details regarding the OV/Rerouter product
[iv] See page 35 for further details regarding the Redirector feature of OfficePath
[v] See page 51 for further details regarding the OV/Fax product
[vi] See page 40 for further details regarding the DISOSS Library Retrieval feature of OfficePath

Using OfficePath to return a document for an invalid distribution

As a large multinational bank, it was critical that mail would never go "missing" and a user was made fully aware of any mail that did not reach its destination. The bank had DISOSS and one of the Administrator's tasks was to regularly manually check the "Error" queue for mail. The Administrator then manually mailed a notification to the originators of items on the "Error" queue, warning them that their mail had not arrived.

In the short term, because it was continuing to file documents in the DISOSS library and also had a number of PS/PC users, the bank needed to retain DISOSS. OfficePath was installed in a separate CICS region to DISOSS and a SNADS connection defined between the two. All mail sent to an invalid destination was forwarded to OfficePath. The OfficePath Audit Exit (described on page 44) was used to send a note back to the originator explaining that the document had been sent to an invalid user. The mail item itself was returned back to the originator as well, ensuring there would be no loss of mail.

Helping to stop the threat of viruses

A Scandinavian company with a strict code on incoming PC data, to halt the spread of computer viruses, required that no PC Files were to be received via the mail network. This requirement was easily satisfied by simple use of the OfficePath destination record for the Personal Services system (this record is described on Page 46). Simply setting the "Accept PC File" flag to "N", the users were unable to receive PC Files.

The system could be further enhanced to use the OfficePath User Validation Exit (described on page 44). When a PC data file is received by OfficePath, a User Validation Exit-program could verify that the originator is internal to the organisation. If the originator is not internal then the mail item would be rejected, with an explanatory message being sent back to the originator explaining that the system does not accept PC Files.

Chapter 4 Administration and Monitoring

Introduction

Most of the administration and monitoring of OfficePath is carried out using on-line CICS transactions. The whole system has been designed to minimise the task of the administrator, whilst still providing easy access to diagnostic and monitoring information should a problem arise.

This chapter discusses in more detail some of the on-line features that OfficePath provides for administration and monitoring.

OfficePath Administration Facility

The main-menu of the OfficePath on-line administration facility can be initiated either via its CICS transaction name, or via an OV/MVS ATD. Figure 4 shows the OfficePath Maintenance Main Menu.

```
PIPX              O f f i c e P a t h  Version 1.6.1      Date: 23/12/95
Function.... ENQUIRE    Control File Maintenance          Time: 13:09:38
Type........ SYSTEM   Key....
-----------------              M A I N   M E N U          -----------------
Type                   Description
                       TOP OF DATA
COPYLIST               Copylist Maintenance
DEST                   Destination Maintenance
INTRAY                 Input File Maintenance
JCL                    JCL Maintenance
LINKMON                SNADS Link Monitor
MESSAGE                Message File Browse
PSFAMILY               Maintain PS family/location information
SYSTEM                 System Default Values Maintenance
USER                   User Maintenance
                       BOTTOM OF DATA




-------                                                          -------


 PF 1=HELP  4=EXIT  7=BACKWARD  8=FORWARD  12=QUIT
```

Figure 4. Main Menu Of On-line Maintenance System

Message Monitoring

As mail messages pass through OfficePath they are logged on the OfficePath message file. This acts as a log and audit of OfficePath's activity. It is possible to determine which messages are active and which messages have been completely processed. The log file browse function allows all of this to be viewed on-line. Figure 5 shows the Log File Browse list panel.

```
PIPY                O f f i c e P a t h  Version 1.6.1      Date: 23/12/95
Function.... ENQUIRE          Log File Browse              Time: 13:11:08
Type........ MESSAGE    Key.... M0000E1DC                   Cycle: MMSS
------------------- LAST NEW REQUEST: 23/12/95 AT 13:05:31  --------------
Start date _____ _____ Select.._____ _____ _____   STATUS
S  Log-no      Created      Lst updt Command   Requester   Sender  Recip
   M0000E1DC 23/12/95 12:41:53 12:41:56 SEND     GBICOM  MPP      ACCEPTD COMPLT
   M0000E1DD 23/12/95 12:53:18 12:53:20 SEND     GBICOM  FAX      ACCEPTD COMPLT
   X0000DD26 15/12/95 10:27:31 19/08/94 SEND     GBICOM  RWK      COMPLTE
 s X0000DD70 15/12/95 13:46:33 13:49:28 SEND     GBICOM  DIB      COMPLTE
   X0000DDA4 15/12/95 15:30:51 19/08/94 SEND     GBICOM  ASP      COMPLTE
   X0000DDC3 15/12/95 16:16:00 16/08/94 SEND     GBICOM  MJF      COMPLTE
   X0000DDC4 15/12/95 16:18:24 19/08/94 SEND     GBICOM  SUPPORTA COMPLTE
   X0000DDE9 16/12/95 06:39:34 17/08/94 INPUT            ZPMAILSK COMPLTE
   X0000DDEA 16/12/95 07:00:22 07:00:52 SEND     IBMMAIL USXYZABC COMPLTE
   X0000DDEB 16/12/95 07:00:35 07:00:37 OBTAIN   GBICOM  DKM      COMPLTE
   X0000DDEC 16/12/95 07:00:35 07:00:38 OBTAIN   GBICOM  JRJ      COMPLTE
   X0000DDED 16/12/95 07:40:40 07:41:03 SEND     GBICOM  FAX      COMPLTE
   X0000DDEE 16/12/95 08:01:44 08:01:53 SEND     IBMMAIL AUTTTZZZ COMPLTE
   X0000DDEF 16/12/95 08:01:47 08:01:49 OBTAIN   GBICOM  JBY      COMPLTE
   X0000DDF0 16/12/95 08:10:53 08:11:16 SEND     GBICOM  ZMDVRAO  COMPLTE
------------------- LAST RESTARTED: 23/12/95 AT 06:53:20   ----------------
PIPCFM93 Please enter Function/Type or press PF key
PF 1=HELP  2=RESTART  4=EXIT  5=TOP  6=BOTTOM  7=BACKWARD  8=FORWARD  12=QUIT
```

Figure 5. Log File Browse list panel

Selection criteria can be input, to filter the messages which are displayed. An 'Alert' function is available which will display only those messages which have failed to complete in a defined time.

Messages which failed to complete satisfactorily are displayed highlighted (on a colour monitor various colours are used to differentiate particular message statuses).

Optionally the panel can be automatically refreshed at an interval defined in the 'Cycle' field, to provide a regular snapshot.

By selecting an individual message from the list additional information about that message, or its recipients, can be viewed as shown in Figure 6 and Figure 7.

```
PIPY               O f f i c e P a t h  Version 1.6.1      Date: 23/12/95
Function.... ENQUIRE              Message Details            Time: 13:11:53
Type........ MESSAGE    Key.... X0000DD70
-----------------                             ------------------
Date created...: 15/12/95  13:46:43   Last updated on...: 15/12/95  13:49:28
Command........: SEND                 Requestor.........: GBICOM  DIB
Sender status..: COMPLETE             Recipient status..: COMPLETE
Document type..: NOTE      REPLY 15/12/95 13:21:49 DIB
Document Size..: 00002838             Current HOP Count.: 0010

1st recipient..: IBMMAIL USXYZABC
No. recipients.: 0001                 Delivered.........: 0000
No. processed..: 0001                 Rejected..........: 0001

Reply required.: Y                    Reply destination.: PSCICS
Input file.....:                      Reply file........: DMDHU30

Correlation....: C4C9C24040404040CA08100B00282DE2
Reply NAK/DATA.: 000000               Next transid......: PIP2
C7C2C9D4C9C3F0F0C4C9C24040404040F6F8F7F207CA08100B  GBICOM  DIB     6872.....
-------------------------------------------------------------------------------


 PF 1=HELP  4=EXIT  10=RECIPIENTS  12=QUIT
```

Figure 6. Log File Browse detail panel

```
PIPX               O f f i c e P a t h  Version 1.6.1      Date: 23/12/95
Function.... ENQUIRE              Status Details            Time: 13:12:06
Type........ MESSAGE    Key.... X00000D70
----------------- Message File Browse          ------------------
CMD|   ACTUAL USER  |  ORIGINAL USER | STATUS  |  NODE  |  DATE  |TIME |REP|
   ***************************** TOP OF DATA *****************************
   IBMMAIL  USXYZABC   (unchanged)   INVALID   IBMMAIL  15/12/95 14:01  Y
   ***************************** BOTTOM OF DATA *****************************










   -------------------------------------------------------------------------------
PIPCFM12 Enquiry only, input Function/Type or PF key
PF 1=HELP  4=EXIT  5=TOP  6=BOTTOM  7=BACKWARD  8=FORWARD  9=STATUS  12=QUIT
```

Figure 7. Log File Browse recipients panel

The log file browse functions are useful and powerful tools to monitor the use of OfficePath and
help with any problem resolution.

Additional On-line Administration and Monitoring

OfficePath contains panels to allow the administration of the system defaults and the interfaces, and the administration and monitoring of the SNADS connections to other nodes. These are explained, where relevant, in the chapter in this book relating to the particular OfficePath feature.

Chapter 5 DISOSS API Support

Introduction

OfficePath supports many of the features of the DISOSS API. This enables applications which use that API to interface to OfficePath, as if they were interfacing to DISOSS. As far as these applications are concerned, OfficePath appears the same as DISOSS. This support for the DISOSS API enables OfficePath to interface to Personal Services (OfficeVision/MVS) and to Computer Associates eMAIL.

The rest of this chapter discusses the OfficePath DISOSS API in more technical detail.

How OfficePath Functions as a DISOSS API

When a DISOSS API program wishes to communicate with DISOSS, it invokes the DSVAW100 module (Personal Services actually invokes DMDAW130, but this is functionally equivalent to DSVAW100). This module reads and writes to the DISOSS DSVAPIQ dataset.

OfficePath replaces the DSVAW100 (and DMDAW130) module with a module of its own with the same name. This module will then intercept all requests that would have been sent to DISOSS.

Defining API users

Typically all the API users can be identified in OfficePath by means of a single generic definition (for example, DSVHOST-*), which simplifies administration. See Chapter 12 for an example of the definitions required.

When used with OfficeVision/MVS OfficePath validates recipients by reading the Personal Services HUD dataset. When used with other systems which utilise the API (for example, Computer Associates' eMAIL) an exit is provided in OfficePath for validation of the recipient. The exit program for use with CA eMAIL is provided.

Replacing DISOSS by OfficePath

The support for both the DISOSS API and SNA Distribution Services (see Chapter Chapter 6) means that OfficePath can be used in organisations that use DISOSS as a SNADS intermediate node, or as a connection between either Personal Services or Computer Associates eMAIL and SNADS (including IBM Mail Exchange).

OfficePath provides support for the following DISOSS functions:

- SIGNON
  This function can contain DCA and GCID information to restrict the types of document that the signing-on user (or application) can receive. This is used, for example, by the "Receive Document" defaults in Personal Services. OfficePath ignores this information and uses instead the information on the DESTination records on its own Control-File (see Chapter Chapter 12).

- SIGNOFF
  No options can be specified.

- REQDIST
  All options not involving library documents.

- LIST
  OfficePath supports only Unformatted list and combined mail/status information.

- OBTAIN
  OfficePath supports only Obtain all mail.

- EXECUTE ("host print")

The following features are not supported:

- USERSETS
  OfficePath does not explicitly support USERSETS. However since OfficePath allows for users to be registered generically (for example, all users at the same address can be registered by means of a single generic USER record) then OfficePath provides an equivalent function.

- FORMAT41
  FORMAT41 addressing, in either originator or recipient fields, is not supported.

The following services are also not provided by OfficePath:

1. Document Library Services.
   The DISOSS API commands (FILE, SEARCH, RETRIEVE and DELETE) for the Document Library Services of DISOSS are not supported. However it is still possible to use a remote DISOSS System for library facilities via IBM's DLSE product (see page 8 for an example of OfficePath and DLSE).

   Alternatively the DISOSS Library Retrieval feature of OfficePath can be used to provide users with the facility to retrieve already-filed documents from the DISOSS library.

2. RGN (Routing Group Name).
   OfficePath does not support the RGN (it does however support the REN). The RGN is left blank on distributions sent to another node, and ignored on incoming requests.

3. Non-SNADS connections.
   Connections that are not "true" SNADS are excluded. The following connections are not supported:
   - PS/PC

- PROFS
- 8100

Chapter 6 SNADS Feature

Introduction

What is SNADS?

SNADS is an acronym for SNA Distribution Services. SNADS was developed by IBM to allow two IBM Office Systems, connected to an SNA network, to communicate with one another. In this way users of Personal Services can communicate with other Personal Services systems (with OfficePath or DISOSS installed), OfficeVision/400 systems and the IBM Mail network. Other vendors provide SNADS gateways for their products. Examples are Verimation's MEMO, Software AG's Con-nect and DEC Office Systems. By utilising the SNADS protocol these systems can communicate with one another and with IBM Systems.

Most LAN email systems now have SNADS gateways[i] available. These allow the users of the existing host systems to communicate with their LAN counterparts.

The OfficePath SNADS Interface

Using the SNADS protocol an OfficePath system can communicate with another OfficePath, DISOSS, IBM Mail Exchange, AS/400, a LAN e-mail SNADS gateway or any other SNADS compliant system.

OfficePath can also provide access to SNADS from the Personal Services component of OfficeVision/MVS. Many organisations have successfully installed OfficePath for just this reason. Their Office System, which previously supported only distributions within the Personal Services system, required connection to an external system. This could be because of the implementation of a LAN e-mail system such as Microsoft Mail, Microsoft Exchange, cc:Mail or Lotus Notes. Alternatively it could be because of an acquisition or merger requiring the addition of a Verimation MEMO or OfficeVision/400 system into the Office Systems network.

The remainder of this chapter discusses the OfficePath SNADS feature in more technical detail, and may be skipped if this level of technical detail is not required.

Defining an OfficePath SNADS Connection

To define a new node (or DGN) to the OfficePath system requires the addition of two records in the OfficePath maintenance suite.

Figure 8 shows a central OfficePath in London that is to be connected to an OfficePath in Berlin, a DISOSS in Paris and an X.400 Gateway. Assuming that the VTAM and CICS TCT definitions have been set up, these three connections only require the addition of two records each to the

---

[i] See page 51 for details regarding OfficePath/SNADS

OfficePath control file. All OfficePath maintenance for this can be carried out on-line whilst OfficePath is up and running.
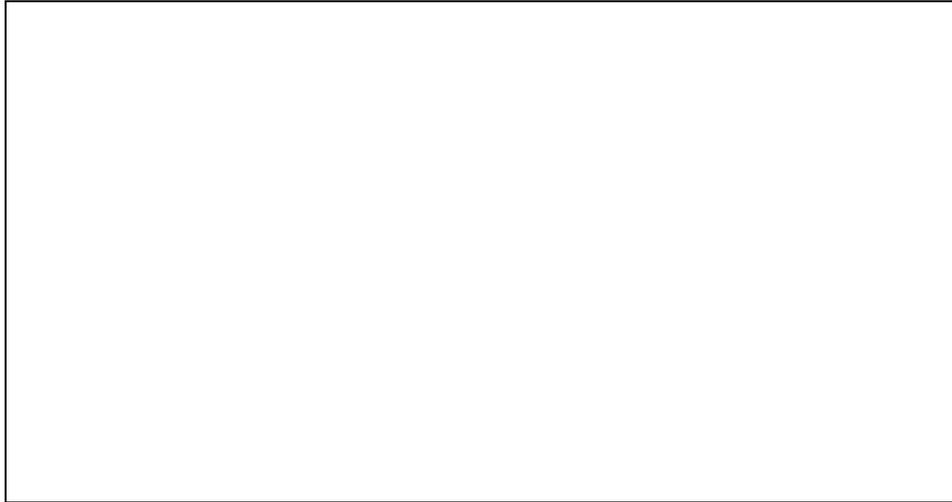
Figure 8. OfficePath SNADS Connections

For each SNADS connection, OfficePath requires the addition of a "USER" record and a "DESTINATION" record. The "USER" record defines the node name (DGN) of the target Office System. The "DESTINATION" record defines the name of the target systems REN (often the same as the DGN). In the example above, the following records would need to be added:

Destination Records

Destination	Type	System name
BERLIN	SNADS	LNKB
PARIS	SNADS	LNKP
X400	SNADS	LNKX

User Records

User	Destination
BERLIN-*	BERLIN
PARIS-*	PARIS
X400-*	X400

These user entries are generic entries. This means that a message sent to **any** user with an address of BERLIN will be routed to the BERLIN destination. If required it is possible to define specific routing for a particular user. For example, an additional user entry of "BERLIN-USER1" with a destination of PARIS would cause messages addressed to USER1 at BERLIN to

be routed to PARIS, whereas the generic entry would cause messages addressed to any other user whose address is BERLIN to be routed to BERLIN.

Figure 9 shows the BERLIN destination record being added in OfficePath.

```
PIPA                O f f i c e P a t h  Version 1.6.1      Date: 23/12/95
Function.... INSERT      Control File Maintenance           Time: 13:17:18
Type........ DEST       Key.... BERLIN
----------------- Destination Maintenance                 ----------------
    Destination type: SNADS
DOCUMENT TYPES                          APPLICATION ATTRIBUTES
Accept RF Text....... Y                 Accumulate recipients.......: Y
Accept FF Text....... Y
Accept PC File....... Y
Accept Image......... Y
Accept Editable.....: N                 Returns status information..: Y
Accept Msg/External.. Y
Other document types.
     ..............

CHARACTER SET                           CICS PARAMETERS


Accept GCID.........: MULTI-LINGUAL
                                        System name (TCT)............ LNKB


Comments.....
-----                                                          -----

PF 1=HELP  4=EXIT  10=PREV REC  11=NEXT REC  12=QUIT
```

Figure 9. Adding an OfficePath SNADS Destination Record

Figure 10 shows the generic user record for BERLIN being added in OfficePath.

```
PIPX                O f f i c e P a t h  Version 1.6.1      Date: 23/12/95
Function.... INSERT      Control File Maintenance           Time: 14:09:05
 Type........ USER       Key.... BERLIN-*
----------------- User Maintenance                        -----------------

          Destination of above user....... BERLIN



 If you want to redirect mail then enter a user id in one of the fields below

  When this user sends mail change the sender's id to.....

  When mail is addressed to this user redirect the mail to

          Start date of redirection.....


            NOTE: a user is entered in the format NODE-USER

Comments.....
-----                                                          -----

PF 1=HELP  4=EXIT  10=PREV REC  11=NEXT REC  12=QUIT
```

Figure 10. Inserting OfficePath user record for a SNADS definition

Monitoring an OfficePath SNADS Connection

As part of its administration OfficePath contains a facility for monitoring SNADS connections. Figure 11 shows the OfficePath panel relating to the configuration shown in "Figure 8. OfficePath SNADS Connections".

```
PIPX                 O f f i c e P a t h  Version 1.6.1        Date: 23/12/95
Function.... ENQUIRE        Remote Link Monitor                Time: 13:12:27
Type........ LINKMON    Key....                                Cycle: MMSS
----------------- SNADS Link Monitor                     -----------------
   |         | |---- System -----|  Active  |Request|---- Oldest request ---|
Cmd| Dest  |HL|Netname    Status | svc  usr | count | Date     Time    Log-no|
   ************************** TOP OF DATA *******************************
   BERLIN       VNETLNKB INS ACQ * 002  000    000
   PARIS        VNETLNKP INS ACQ * 002  000    000
m  X400         VNETLNKX INS REL * 000  000    004 23/12/95 12:38:21 M00010AA8
   ************************* BOTTOM OF DATA *****************************




-------                                                          -------
 PIPCFM91 Enter action in CMD field, or press Enter to refresh screen
 PF 1=HELP  4=EXIT  7=BACKWARD  8=FORWARD  12=QUIT
```

Figure 11. OfficePath Link Monitor

The OfficePath Link Monitor allows commands to be entered for the SNADS connection. The connection may be acquired, released, put in service, out of service, purged, force purged, opened for traffic, closed for traffic, and any items queued for the connection retried. This enables the connection to be administered without requiring access to, or knowledge of, CEMT.

Optionally the panel can be automatically refreshed at an interval defined in the 'Cycle' field, to provide a regular snapshot of the status of the SNADS connections. In addition an 'Alert' function is available which will display only those connections which are either out of service or are in service but have mail which has been waiting on the link for more than a defined period.

The command (Cmd) field can also be used (as in the example in Figure 11) to display the list of messages which are queued on the selected connection. An example of the message-list is shown in Figure 12. Individual messages on the displayed list can be held or retried.

```
PIPX                    O f f i c e P a t h  Version 1.6.1        Date: 23/12/95
Function.... ENQUIRE              Mail List                       Time: 13:13:01
Type........ LINKMON    Key.... X400
------------------ SNADS Link Monitor                     ------------------
C | Log No. |Retry|   Originator   | Created Date |Doc Size|First Recipient |
    **************************** TOP OF DATA ****************************
    M00010AA8    0 GBICOM   CGD     23/12/95 12:38    1567 X400     38764
    M00010AB1    0 GBICOM   INB     23/12/95 12:43   97420 X400     49634
    M00010AC4    0 GBICOM   RBP     23/12/95 12:51    2480 X400     87345
    M00010AD2    0 GBICOM   RBP     23/12/95 12:59   12673 X400     79828
    **************************** BOTTOM OF DATA ****************************




-------------------------------------------------------------------------------
PIPCFM03 Valid commands are H - hold, A - release, M - message, R - recipients
PF 1=HELP  4=EXIT  5=TOP  6=BOTTOM  7=BACKWARD  8=FORWARD  12=QUIT
```

Figure 12. Link Monitor Message Queue Display

Chapter 7 Batch-TSO Facility

Introduction

OfficePath includes a facility to connect the MVS Batch environment to the Office Systems network. This allows mail items to be transferred between the two environments. For example, a message can be sent from an Office System user to a TSO user, a document sent from the Office System to a dataset or a member of a partitioned dataset, or a dataset or a member of a partitioned dataset sent to an Office System user.

The OfficePath batch interface has been used by many organisations to distribute reports from the batch environment. Reports that were previously printed and then distributed manually, for example by the internal or external postal service, can now be sent directly to a mail box. This provides a quicker, cost effective and environment-friendly solution. If the Office System has a connected fax machine the items may be automatically sent out as faxes to remote recipients who may not have an electronic mail connection.

The OfficePath batch facility provides an easy to use programming interface which requires little effort to "mail-enable" current batch processes.

As part of the batch facility, TSO panels are provided for the TSO user. This allows the TSO user to communicate with the Office Systems network via OfficePath. The TSO user is able to send and receive mail.

The remainder of this chapter discusses the OfficePath batch-TSO feature in more technical detail.

The Batch Interface

The OfficePath batch interface utilises a file which is defined to both CICS and batch. OfficePath uses an MVS enqueuing mechanism to ensure data integrity on this file.

Sending from batch to OfficePath

When sending into OfficePath, requests are supplied as a set of simple input parameters providing document profile information and the document text. These requests are processed by an API program supplied with OfficePath, PIPGS3B. This API program is responsible for submitting the request to the OfficePath system.

Figure 13 gives an example of what is required to send an item from batch into OfficePath. This is an example of distributing a report (in this case the output from an IDCAMS LISTCAT command), produced in an earlier jobstep which wrote the report to a temporary dataset. This temporary dataset is then used as the input document (LISTDSN) for the step that invokes the PIPGS3B program.

In this example the input parameters are instream in the job; these parameters could be in a separate dataset. Also in this example the document to be sent is contained within a batch dataset (LISTDSN); the document could be instream.

The example uses almost the minimum number of parameters necessary to perform a distribution. OfficePath has many additional optional parameters which can be used to customise the distribution .

```
//JOBNAMEX JOB (ACCOUNT),'PROGNAME',
//         MSGCLASS=A,CLASS=0,NOTIFY=XXXXXXX
//*
//*       EXAMPLE JOB TO SHOW HOW A BATCH REPORT CAN BE MAILED
//*
//*
//IDCAMS   EXEC PGM=IDCAMS
//SYSPRINT DD   DISP=(NEW,PASS),DSN=&TEMP,
//         UNIT=DASD,SPACE=(1330,(10,1),RLSE),
//         DCB=(RECFM=FBA,LRECL=133,BLKSIZE=1330)
//SYSIN    DD   *
  LISTC ENT('PIPS.VSAM.PIPCNTL') ALL
//*
//SENDIT   EXEC PGM=PIPGS3B,PARM='D'
//STEPLIB  DD   DISP=SHR,DSN=PIPS.LOAD
//ZPMAILBX DD   DISP=SHR,DSN=PIPS.VSAM.ZPMAILBX
//PIPCNTL  DD   DISP=SHR,DSN=PIPS.VSAM.PIPCNTL
//SYSABEND DD   SYSOUT=*
//SYSUDUMP DD   SYSOUT=*
//SYSOUT   DD   SYSOUT=*
//LISTDSN  DD   DISP=(OLD,DELETE),DSN=&TEMP
//CARDFILE DD   *
COMMAND    SEND
DOC NAME   IDCAMS LISTCAT FOR PIPCNTL FILE
SUBJECT    Demonstrating how to mail a batch report
AUTHOR     C M LANGFORD
RECIPIENT SIMON     DSVHOST
REPLY     N
//*
//ENDIT    EXEC PGM=IEFBR14
//
```

Figure 13. Sample JCL for a request from Batch to OfficePath

Sending from OfficePath to batch

One or more "special" users can be defined to OfficePath so that, when mail is sent to any of them, OfficePath intercepts the mail and creates a batch JCL deck containing the document information as instream data. This JCL is then submitted to JES using a CICS transient data queue which is defined as an internal reader.

The JCL, which is set up using the OfficePath on-line administration facility, can have parameters taken from the request (for example, document name and sender name) substituted into it before the job is submitted. This means that it is possible to control the processing of the job by means of the user's input.

A "special" internal reader user is defined in a similar way to the SNADS users, the destination is defined as an INTRDR rather than SNADS. Figure 14 is an example of a destination record for an internal reader.

```
PIPX                O f f i c e P a t h  Version 1.6.1      Date: 23/12/95
 Function.... ENQUIRE     Control File Maintenance          Time: 15:38:36
 Type........ DEST       Key.... INTRDR
 ----------------- Destination Maintenance            ----------------
     Destination type: INTRDR
 DOCUMENT TYPES                       APPLICATION ATTRIBUTES
 Accept RF Text....... N              Accumulate recipients........ N
 Accept FF Text....... N              Can process ASA controls..... N
 Accept PC File....... Y              Can process NOTE doctype..... Y
 Accept Image........ N               Requires document header..... Y
 Accept Editable...... Y              Returns status information... Y
 Accept Msg/External.. Y
 Other document types.                Line-length.................. 133
       ..............

 CHARACTER SET                        CICS PARAMETERS

 Accept GCID.......... LOCAL
                                      Transient data queue name.... ZR13
                                      Output record format......... FBA
 Comments.....
 ----- LAST MODIFIED BY ZMUSDK   AT TERM IBMK2FJ3 AT 23:00:40 ON 26/04/95 ----
 PIPCFM12 Enquiry only, input Function/Type or PF key
 PF 1=HELP  4=EXIT  10=PREV REC  11=NEXT REC  12=QUIT
```

Figure 14. Example of DESTination record for an Internal Reader

Using the OfficePath on-line administration facility, a JCL record can then be added for the user
as shown in Figure 15.

```
PIPC                O f f i c e P a t h  Version 1.6.1      Date: 23/12/95
 Function.... AMEND      Control File Maintenance           Time: 13:22:44
 Type........ JCL        Key.... JCLUSRS-*
 ----------------- JCL Maintenance               ----------------
       ****************************** TOP OF DATA ***************************
       //XXJCLUSR JOB (XX,JCL,USR),'USR',CLASS=1,MSGCLASS=A
       //* THE FOLLOWING JCL COPIES THE SENT DOCUMENT (SPECIFIED BY THE
       //* THE 'DOCUMENT_CONTENTS' PARAMETER TO A PDS MEMBER WHOSE NAME
       //* IS OBTAINED BY THE FIRST 8 CHARACTERS OF THE USER NAME FROM
       //* WHOM THE DOCUMENT IS BEING SENT, THE MEMBER NAME IS THE
       //* RECIPIENT FIRST 8 CHARACTERS OF THE RECIPIENT (THE 'NODE' OF
       //* THE RECIPIENT BEING 'JCLUSRS'). I.E. SENDING TO TEST @ JCLUSRS
       //* FROM USER USR1, RESULTS IN THE DOCUMENT CONTENTS BEING SENT TO
       //* 'USR1.PIPS.TEXT(TEST)'.
       //STEP10   EXEC PGM=IEBGENR
       //SYSPRINT DD   SYSOUT=*
       //SYSUT1   DD   *
       &DOCUMENT_CONTENTS
       //SYSUT2   DD   DISP=SHR,DCB=(LRECL=133,RECFM=FBA,BLKSIZE=6188),
       //              DSN=&USER_NAME(1,1,8).PIPS.TEXT(&RECIPIENT(1,1,8))
       *****************************BOTTOM OF DATA ************************
 ----- LAST MODIFIED BY ADMIN    AT TERM LU2X1234 AT 14:05:21 ON 01/12/95 -----
 PIPCFM14 Amend record details, then press <Enter> to update
 PF 1=HELP  4=EXIT  7=BACKWARD  8=FORWARD  10=PREV REC  11=NEXT REC  12=QUIT
```

Figure 15. Example of JCL record for an Internal Reader

TSO Interface

OfficePath allows a TSO user to participate in electronic mailing. OfficePath requires **no** additional pre-requisite software such as the Application Connectivity feature of OfficeVision/MVS or NetView/Access services.

The supplied TSO CLISTs and panels provide the following functions for the TSO user:

- To mail a dataset, or a member of a partitioned dataset, to any user on the Office Systems network.

- To send a message to any user on the Office Systems network.

- To view the status dataset containing information relating to distributions performed by the user.

- To receive mail into a sequential dataset, or member of a partitioned dataset, from any user on the Office Systems network.

Figure 16 is an example of the OfficePath TSO main menu.

```
------------------          O F F I C E P A T H          -----------------

SELECT OPTION ===>


  1  MAIL       Work with Mail items          OfficePath Node... ICOMTSO
                                                    and Userid... TSOUSR

  2  SEND       Send a document


  3  SEND MSG   Send a message


  4  STATUS     Work with status information


  5  DEFAULTS   Change your OfficePath defaults



```

Figure 16. The OfficePath TSO main menu

Selecting the "SEND" option from the OfficePath TSO main menu results in OfficePath displaying the send dataset panel, as shown in Figure 17. The name of the dataset containing the document can be entered, together with additional profile information.

```
------------------          O F F I C E P A T H          ------------------

COMMAND ===>


Document Dataset... 'PIPS.TEXT(INFO)'

Document name..... NOTE 09/12/95 11:21:16
Subject........... OfficePath Information
Author............ Keane Ltd          Class........ MEMO
                                              Doctype...... NOTE


Attached....
Message.....
      .....
      .....

 Send to........... XYZ          Address...... GBICOM
      ............               ......
      ............               ......
      ............               ......
      ............               ......
 Personal.......... N          Receipt Ack.. Y

            Press ENTER to confirm or END to exit
```

Figure 17. The OfficePath TSO send dataset panel

Chapter 8 CICS Feature

Introduction

The OfficePath CICS facility allows a CICS application to communicate with the Office Systems network. An Office System user may send a document to a CICS application that will invoke a CICS transaction, passing it the document details. These details can then be processed and the result mailed back to the Office Systems user. Alternatively, a CICS application may generate data to send to an Office System user or to a connected Office System application.

The remainder of this chapter discusses the OfficePath CICS feature in more technical detail.

Using OfficePath to mail-enable an application

OfficePath enables you to write an application which can be invoked in response to requests sent via mail. This could be used to automate certain activities.
Figure 18. Mail-enabled application shows an example of an application to which users mail enquiries for stock availability. In this example the mailed enquiry is passed, by OfficePath, to the application. The application then processes the enquiry and passes the response back to OfficePath for mailing to the enquiring user. The application is given an e-mail address (For example, STOCK@ENQUIRY) to which the user mails in the normal way

Figure 18. Mail-enabled application

In terms of its relation ship with OfficePath the application consists of two parts; receiving the mailed enquiry from OfficePath, and sending the response to OfficePath for onward mailing to the user.

Receiving the mailed enquiry from OfficePath

An application can be enabled to receive mail by defining a DESTination record (for an OUTTRAY) which identifies the application, and then defining one or more USER records for that destination. When mail is sent to the application's userid, the application is started by OfficePath. Figure 19 shows a USER record for ENQUIRY-STOCK pointing to a destination of STOCK. Any mail sent to the userid STOCK@ENQUIRY will go to the STOCK destination. Figure 20 shows the DESTination record for STOCK. OfficePath will write the document and profile information of the mailed enquiry to a VSAM file, defined in CICS as STCKINQY, and will start transaction INQY. Alternatively the transaction-id may be excluded from the DESTination record, and the application then has the responsibility for polling OfficePath for its mail. This allows the application to process mail in batches, rather than one item at a time.

```
PIPX                O f f i c e P a t h  Version 1.6.1      Date: 23/12/95
Function.... ENQUIRE     Control File Maintenance           Time: 11:37:48
Type........ USER        Key.... ENQUIRY-STOCK
----------------- User Maintenance                     ----------------


                 Destination...... STOCK









           NOTE: a user is entered in the format NODE-USER

Comments.....
----- LAST MODIFIED BY ADMIN    AT TERM LU2X1234 AT 14:05:21 ON 11/12/95 ----
PIPCFM12 Enquiry only, input Function/Type or PF key
PF 1=HELP  4=EXIT  10=PREV REC  11=NEXT REC  12=QUIT
```

Figure 19. Sample USER record for CICS Application

```
PIPA              O f f i c e P a t h  Version 1.6.1        Date: 23/12/95
Function.... ENQUIRE    Control File Maintenance            Time: 11:40:14
Type........ DEST       Key.... STOCK
----------------- 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....... Y              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.................. 133
      ...............


CHARACTER SET                        CICS PARAMETERS
                                     Output file name............. STCKINQY
Accept GCID......... MULTI-LINGUAL   Mail transaction............. INQY
                                     and terminal (optional)......


Comments.....
----- LAST MODIFIED BY ZMDVSJG  AT TERM WU78DKA3 AT 13:35:06 ON 22/11/95 -----
PIPCFM12 Enquiry only, input Function/Type or PF key
PF 1=HELP  4=EXIT  10=PREV REC  11=NEXT REC  12=QUIT
```

Figure 20. Sample DESTination record for CICS Application

The CICS application will LINK to the OfficePath API program, PIPGT3. PIPGT3 will read any mail items off the STCKINQY file and write them to a Temporary Storage Queue for the application to process, as shown in.Figure 21
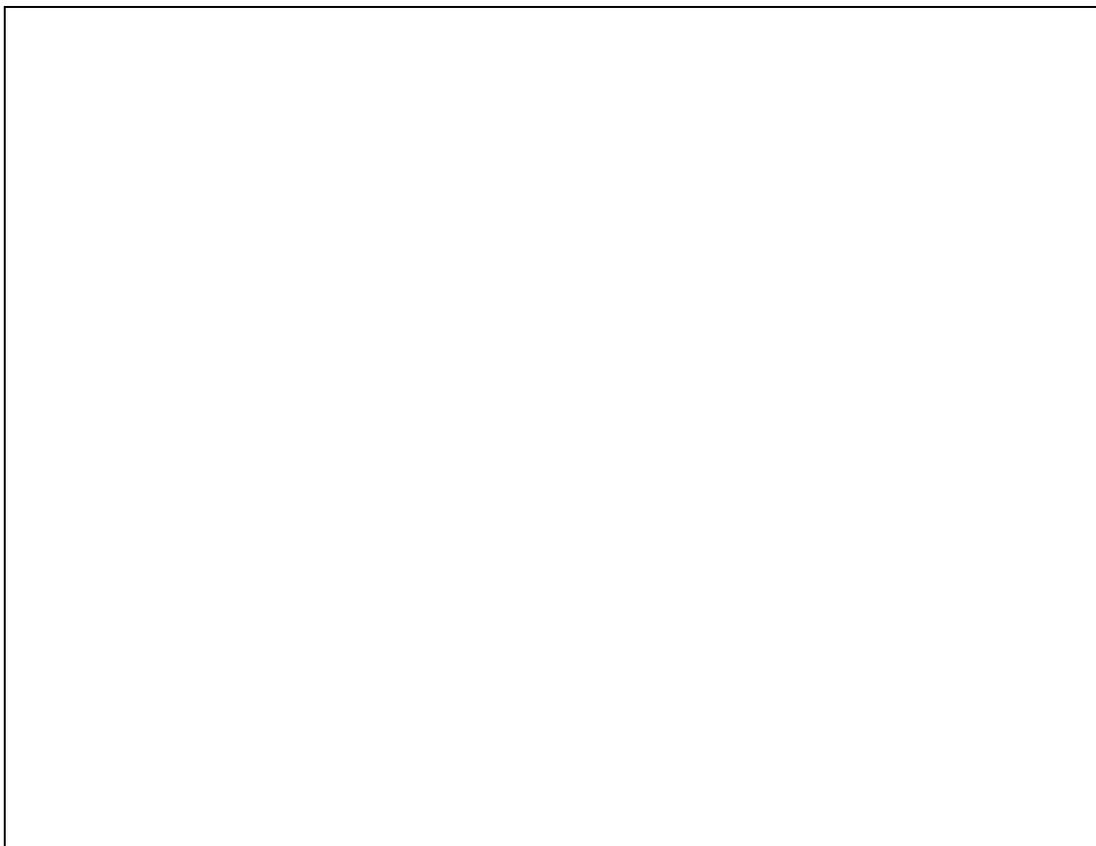
Figure 21. CICS application processing mail-item from OfficePath

Sending the response to OfficePath

The CICS application program , having ascertained the stock position, writes its response to a CICS Temporary Storage Queue and LINKs to the OfficePath API program, PIPGS3. Each record written to the TSQ by the application program contains either a parameter name, and its value, or a line of document text.

Figure 22 shows the application writing the data to a Temporary Storage Queue. The PIPGS3 program is then LINKed to, interprets the request, and passes it to OfficePath to distribute.

Figure 22. CICS application mailing response via OfficePath

Chapter 9 Redirector feature

Introduction

As a mail message passes through OfficePath the Redirector feature examines the userids of the originator and the recipients and, where requested, changes them. Examples of the use of this facility are given below.

Use of Redirector during migration

When a user moves from a host-based system to one on the LAN, mail may still be sent to the user's former userid on the host, especially from external sources. The OfficePath Redirector feature intercepts mail destined for the user's original host mailbox and redirects it to the new LAN-based mailbox. This assists organisations who are performing a phased implementation or total migration.

Making the organisation appear as one node

A LAN based Office System is usually implemented within an organisation as multiple nodes, for example each department having its own Post Office. On the other hand, many host based Office Systems are implemented as a single node. By using OfficePath Redirector, a multiple node Office System can be made to look externally as if it is composed of just one node. The userid of the migrated user is automatically changed, both as an originator of outgoing mail and as a recipient of incoming mail.

Using Redirector with IBM Mail Exchange

IBM Mail Exchange insists that each node in an organisation is registered in Mail Exchange if users at that node are to be able to send mail to, and receive mail from, Mail Exchange. This is true not only of that node in the organisation which is connected to Mail Exchange but also of all "down-stream" nodes in the organisation including, for example, LAN-based post-offices. OfficePath Redirector, by allowing the Organisation to appear to Mail Exchange as a single node, saves the expense and inconvenience of registering extra nodes with IBM Mail Exchange, particularly as the organisation adds new LAN-based post-offices.
Redirector also enables users to keep the same IBMMAIL address if they move to another node within the organisation.

Use with a group of users

If your organisation has, for example, a help-desk which uses e-mail to communicate with customers, you may decide that the e-mail addresses of the individuals who man the help-desk are to be hidden from the customers. Redirector can be used to ensure that mail sent from an individual has the originator changed to the group id e.g. HELPDESK.

After an individual has left the company

After an individual leaves the company the redirector feature can be used to redirect mail, which subsequently arrives for them, to another person's in-basket. You can then delete their userid to ensure that there are no security breaches, while ensuring that no correspondence is lost.

Preventing mail from certain users

Redirector can be used to block all mail from certain userids. This could be used, for example, to prevent junk or abusive mail from arriving from external sources, or to prevent certain internal users from sending mail.

Administration of OfficePath Redirector

Figure 23 shows the panel used for administration of the OfficePath Redirector facility.

```
PIPX                O f f i c e P a t h  Version 1.6.1       Date: 23/12/95
Function.... ENQUIRE       Control File Maintenance          Time: 14:09:05
Type........ USER      Key.... GBNODE1-SUE
 ----------------- User Maintenance                      -----------------

          Destination of above user....... PSCICS



  If you want to redirect mail then enter a user id in one of the fields below

   When this user sends mail change the sender's id to........

   When mail is addressed to this user redirect the mail to...GBMXS-SUE

          Start date of redirection.....01/01/96


             NOTE: a user is entered in the format NODE-USER

 Comments.....Sue Garton has been migrated to Microsoft Exchange

----- LAST MODIFIED BY ADMIN    AT TERM LU2A1234 AT 13:16:46 ON 09/05/95 -----
PIPCFM12 Enquiry only, input Function/Type or PF key
PF 1=HELP  4=EXIT  10=PREV REC  11=NEXT REC  12=QUIT
```

Figure 23 OfficePath Redirector Administration

Using the OfficePath on-line administration facility, the administrator is able to change the redirecting options for a specified user. The options are:

1. Change the user name when used as a sender. This causes the sender's name to be changed as the item passes through OfficePath. This could be used for the helpdesk scenario described above.

2. Change the user name when used as a recipient, as in Figure 23. When an item is sent to the original user, it will be redirected to the specified user. This could be used for the migration scenario described above.

3. In some cases (as in the single-node example described below) two records are required; one to deal with the user as a sender and the other to deal with the user as a recipient.

Example of Redirector Usage

Figure 24 shows two users communicating with one another via the IBM Mail Exchange network. OfficePath is used to connect IBM Mail to OfficeVision/MVS at "GBNODE1".

Figure 24. One Office Systems node, no redirection

Both "Sue" and "John" have address book entries for each other (Note: User @ Node format is used to simplify the example, the usual Mail Exchange IEA, i.e. "ID @ IBMMAIL" notation is equally valid). In Figure 25, Sue has moved and now uses Microsoft Exchange. However, using the OfficePath Redirector facility, she can still be known as her former e-Mail address when sending mail via OfficePath. Hence, John will still be able to send to SUE@GBNODE1 unaware that her address has changed, the mail being redirected to her new Microsoft Exchange mailbox. When Sue sends an item to John, or replies to his mail, OfficePath Redirector will change the sender id so it appears to come form her former address.

Sue's colleagues on her original OfficeVision/MVS system will also still be able to mail to her at SUE@GBNODE1, avoiding the need for Sue's entry in OV/MVS address-books and distribution-lists having to be changed[i].

---

[i] Sue's original entry must be deleted from the OV/MVS HUD dataset to avoid the internal distribution mechanism of OV/MVS.

Figure 25. After migration to the LAN, with redirection

Comparison of OfficePath Redirector and OV/Rerouter

OV/Rerouter is a product that allows an OfficeVision/MVS user to re-route mail to an alternative mail address. These two products are complementary and can work together to provide ease of migration. The following outlines the differences between the two products.

1. OV/Rerouter can be used for OV/MVS users only. Redirector can be used for any user whose mail passes through OfficePath.

2. OV/Rerouter processes the mail **after** it has been delivered to the recipient's OfficeVision/MVS in-basket and forwards it on to the new address. OfficePath Redirector intercepts the mail **before** it is delivered and changes the old address to the new address.

3. OV/Rerouter provides the facility for a copy of the item to remain in the original OV/MVS in-basket or for the mail to be forwarded to **two** recipients; Redirector does not.

4. OfficePath allows the sender id to be changed; OV/Rerouter does not.

5. OV/Rerouter will send a message to the originator informing them of the change of recipient. Redirector does not have this facility, but an OfficePath "exit" program[i] could be written to provide it.

6. OV/Rerouter has the facility, as an alternative to re-routing the mail, to generate a message back to the originator. This message is customisable by the user but is normally used to inform the originator that the recipient is absent and not responding to mail (e.g. during holiday periods). Again Redirector does not have this facility, but an OfficePath "exit" program could be written to provide it.

---

[i] See page 45 for a description of OfficePath's "exit" program facilities

Chapter 10 OfficePath DISOSS library-retrieval feature

Introduction

In the past many organisations used the DISOSS library for storing documents. However, in many of those organisations today, the library is used only to retrieve already stored documents, archiving of new items being performed by products such as CLASY, from TBS, or LAN-based products.

In some cases the removal of DISOSS is only possible if there is an alternative method of accessing items which are already stored in the library. The OfficePath DISOSS Library Retrieval feature **is** that alternative.

How it works

The OfficePath DISOSS Library Retrieval feature requires no "migration" of Library Items. The items remain on the current DISOSS library datasets, from where users are able to access them using the OfficePath DISOSS Library Retrieval feature.
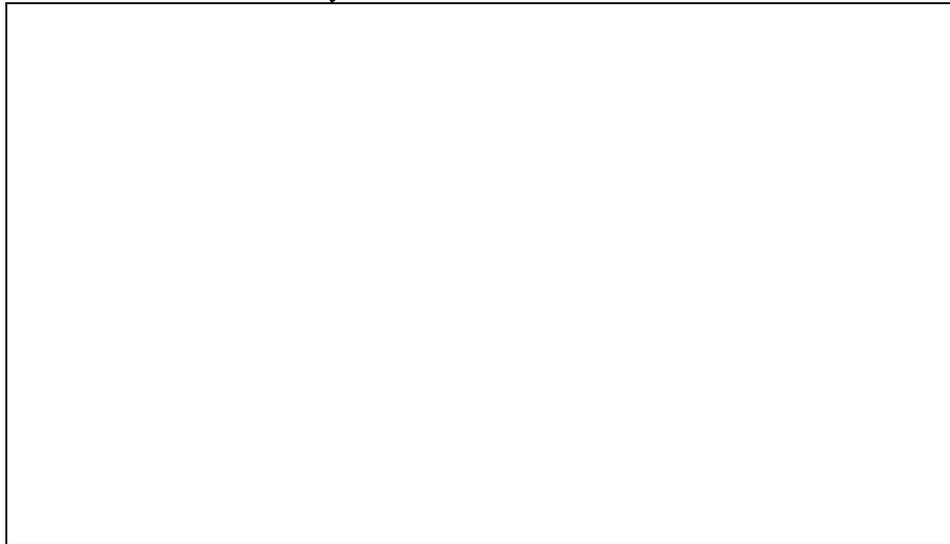
Figure 26. Migration of library retrieval from DISOSS to OfficePath

Figure 26 shows what happens when the migration takes place. When using DISOSS, the OfficeVision users are allowed to store, browse or retrieve documents in the DISOSS library. After migrating to OfficePath, the DISOSS Library Datasets are retained, and OfficePath is able to retrieve or browse items in the library. Access to the library may be directly from OfficeVision or from a CICS transaction.

Browsing the Library

The user defines the selection criteria (Document-name, subject, keywords etc.) for the required documents, as shown in Figure 27.

The panel can be invoked either from OfficeVision/MVS or as a transaction from native CICS. When started from OfficeVision/MVS, the transaction is in user mode. In this mode only those documents owned by the user, and which satisfy the selection criteria, will be displayed on the selection list. Users who no longer use OfficeVision/MVS could access their documents via a front-end application which invokes the transaction in user mode, via an OfficeVision/MVS SIB containing the userid. As a native CICS transaction the program runs in administrator mode. In this mode the administrator specifies the document-owner as one of the selection criteria. Those organisations which have only used the library for shared documents can give all users administrator authority.

```
PIPO                      LIBRARY DOCUMENT SELECTION CRITERIA

 User name.......: CGD
 Address.........: GBICOM
 Document name...:
 Subject.........: QA procedures*
 From Date.......:
 To Date.........:
 Keywords........:
         ........:
         ........:
         ........:
         ........:
         ........:
         ........:
         ........:
         ........:
         ........:



 PF1=          2=          3=          4=Main Menu   5=          6=
 PF7=          8=          9=        10=           11=         12=Quit
 Please enter selection criteria
 ===>
```

Figure 27. Library Document selection criteria

Figure 28 shows the list of items owned by the user, and which satisfy the selection criteria. Note, in this example, the use of an asterisk in the 'Subject' selection to list **all** documents beginning with the phrase 'QA procedures'.

```
PIPQ                   LIBRARY DOCUMENT SELECTION        USER: GBICOM-USER1

 Select the item(s) to work with, then press ENTER

  CMD Stored    DocType  Document Name       Subject
  x   10/04/95 FF TEXT   NOTE 10/04/95 10:42: QA procedures - index
      12/01/94 FF TEXT   MEMO 12/01/94 13:45: QA procedures - Administration
      17/01/94 FF TEXT   MEMO 17/01/94 14:00: QA procedures - Operations









 PF1=           2=          3=            4=Main Menu  5=           6=
 PF7=Backward  8=Forward   9=           10=          11=          12=Quit

 ==>
```

Figure 28. Library Document selection list

Note that, in administrator mode, the user field can be overtyped. This allows documents for a different user to be listed, but still subject to the selection criteria supplied in Figure 27.

Entering any character in the command field alongside an item in the list will display the Document Profile/Send Panel shown in Figure 29.

Document Profile/Send Panel

```
PIPQ                        SEND TO THE FOLLOWING USERS

Document name....: NOTE 10/04/95 10:42:11 CGD
Subject..........: QA procedures - index
Authors..........: User-1
Class............: MEMO                         Doctype.....: FF TEXT
Date stored......: 10/04/95
Location.........:
Keywords.........: QA,Index
        .........:
        .........:

Type recipient(s) below, then press ENTER

 Send to.........: DIB      Address.......:
        .........: LANUSER1         .....: MSMAIL
        .........: MXSUSER2         .....: EXCHANGE
        .........:                  .....:
        .........:                  .....:

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

===>
```

Figure 29. Document Profile/Send Panel

This panel displays more information about the selected document. In addition, the user may send the document to any users connected to the Office Systems network, including their own in-basket.

Chapter 11 Additional Facilities

Introduction

In addition to the connectivity features, already described, OfficePath includes a number of other features which are discussed in this chapter. These additional features are:

1. Document printing.
   This allows OfficePath to perform "Host Print" requests from Personal Services or to provide a "Mailroom" print function. These replace similar DISOSS functions.

2. OfficePath replaceable exits.
   OfficePath contains a number of replaceable exits which can be used to further customise OfficePath's functions. These are described in more detail further on in this Chapter.

3. Support for multiple/remote Personal Services.
   OfficePath can support multiple Personal Services defined in either one or many CICS systems, providing that each Personal Services system is associated with a different transaction family.

The remainder of this chapter discusses the above facilities in further detail.

Document Printing

OfficePath may be set up to support "Host Print" requests from Personal Services, or to provide a "Mailroom" print function. The print requests are normally processed directly by OfficePath. The OfficePath DisplayWrite/370 print feature allows DisplayWrite/370 to be used to control printers. Using DisplayWrite/370 allows higher quality output to be produced and also allows the printing of documents which contain image or graphic data.

Printing from Personal Services ("Host-Print" requests)

When printing from Personal Services the user can elect to use either a local (CICS attached) or a host (defined in JES) printer. The local print function is handled directly by Personal Services. OfficePath can deal with the Host Print function. The JCL required for this is provided with OfficePath and the customisation of this can be done from the OfficePath on-line administration facility.

Mailroom print Requests

Certain users may be defined to OfficePath as "Mailroom" users. This means that whenever any mail is sent to that recipient it is printed immediately rather than being placed in an in-basket.

Replaceable exits

OfficePath contains a number of replaceable exits ('hooks' to customer-written programs) that allow further customisation of the product. These are described in the following sections.

User Validation Exit

This exit is called every time an item of mail is routed through OfficePath. Details such as the recipient(s), originator and document text can be passed to the exit program before the item is processed by OfficePath. This allows the exit program to change the originator details, reject the request or add additional recipients.

A sample exit program is supplied which checks that items being sent to the IBM Mail Exchange Network came from the local node and cancels them if they have not.
Other uses of the exit could be to restrict the list of users who can:
    a) send external mail
    b) mail to the CEO
    c) receive PC-Files mailed from outside the organisation

Audit Exit

This exit is invoked each time a request has been completed by OfficePath. Details similar to those described above for the User Validation Exit are passed to the exit program.

A sample exit program is supplied which checks for any recipients that did not successfully receive a mailed item. A report is then mailed to the originator, identifying these invalid recipients. The report also returns the original document text.
Other uses of the exit could be to:
    a) write audit information to a file, for post processing for chargeback purposes.
    b) monitor the volume of mail, for capacity planning purposes.

API Userid validation exit

Unlike DISOSS, OfficePath does not insist that all API users (for example OV/MVS Personal Services users) are defined to it. OfficePath contains an exit which can be used for validating users against the API application's own user database.

When used with Personal Services, OfficePath validates the Personal Services recipients by reference to the Personal Services user dataset (the HUD). This is an integral part of OfficePath, the validation-exit is not involved in this process.

When OfficePath is used with any other e-mail system that utilises the DISOSS API (for example Computer Associates eMAIL) the API user validation exit can be used to validate the user who is receiving the mail. OfficePath passes the user's details to the exit which RETURNs back to OfficePath indicating if it is a valid user. A user-exit program to enable OfficePath to work with Computer Associates eMAIL product is supplied.

Batch Userid/Password validation exit

The password validation exit is used by the OfficePath/Batch feature. Whenever a request is passed to the batch interface the exit is invoked, passing the userid and password which the exit-program is to validate. The exit-program can return a non-zero return code to reject the request. Alternatively, it can modify the userid supplied. A sample exit-program is supplied which does not reject any requests but uses the RACF userid (from the MVS accounting information) and makes the address "TSO".

JCL exit

This exit is provided to enable an exit-program to modify the Job card of JCL submitted by OfficePath. For example you could supply an exit-program to modify the Job card of host-print requests, for accounting purposes (by default all host-print requests use the same Job card).

Support for multiple/remote Personal Services

OfficePath can support multiple Personal Services systems in a variety of different configurations. The Personal Services systems may co-exist in the same CICS region or may be in different CICS regions. The following should be noted:

- Each Personal Services system connected to OfficePath must be given a unique transaction family prefix.

- The transaction families can be given a different node name or they can all share the same node name.

- Multiple transaction families which share the same Personal Services files are supported. This is typically used in an installation which requires support for multiple languages.

Chapter 12 Replacing DISOSS

Introduction

Many of the functions that OfficePath provides allow it to be used to replace an existing DISOSS system. OfficePath provides the SNADS distribution functions of DISOSS together with a DISOSS API, this allows organisations which use DISOSS for SNA Distribution Services to directly replace DISOSS with OfficePath. In addition the optional DISOSS Library Retrieval feature allows the organisation to continue to retrieve already-filed documents from the DISOSS library, without using DISOSS.

There are many benefits of replacing DISOSS with OfficePath, not least the cost benefit. DISOSS is usually a rented product, OfficePath a one time purchase. Typically payback from replacing DISOSS with OfficePath can be achieved in much less than a year. Organisations find that OfficePath can help to save money in other ways, by being easier to administer and monitor and by using less host resource (CPU and disk I/O).

The remainder of this chapter discusses how OfficePath can be configured to replace DISOSS when the latter is used with Personal Services (either PS/CICS or the Personal Services component of OfficeVision/MVS). The chapter describes the typical installation steps to be taken when replacing DISOSS with OfficePath. For a list of the DISOSS functions supported, and unsupported, by OfficePath see Page 15.

Installation with Personal Services

At installation time, OfficePath automatically creates the records necessary to work with Personal Services. These records are then available from the OfficePath on-line administration facility. For a typical installation only two records are required in order to address **all** Personal Services users[i]. The first of these is a "DESTination" record that defines the Personal Services family to OfficePath. An example of this record is shown in Figure 30.

---

[i] If certain users require non-standard document-conversion options then they will require additional records.

```
PIPA              O f f i c e P a t h  Version 1.6.1      Date: 23/12/95
Function.... ENQUIRE     Control File Maintenance          Time: 13:14:08
Type........ DEST     Key.... PSCICS
----------------- Destination Maintenance           ----------------
    Destination type: API
DOCUMENT TYPES                      APPLICATION ATTRIBUTES
Accept RF Text....... Y             Accumulate recipients.......: N
Accept FF Text....... N             Can process ASA controls....: Y
Accept PC File....... Y             Can process NOTE doctype....: Y
Accept Image........ Y
Accept Editable...... Y             Returns status information..: N
Accept Msg/External.. Y
Other document types.               Line-length.................: 133
     ..............


CHARACTER SET                       CICS PARAMETERS
                                    HUD Dataset name............. DMDHU30
Accept GCID......... MULTI-LINGUAL  Mail/Status transaction...... DMDD


Comments..... Destination record for Personal Services
----- LAST MODIFIED BY ZMDVCML  AT TERM WL78ZMC5 AT 13:11:29 ON 13/05/95 ----
PIPCFM12 Enquiry only, input Function/Type or PF key
PF 1=HELP  4=EXIT  10=PREV REC  11=NEXT REC  12=QUIT
```

Figure 30. Sample Personal Services "DESTination" record

The second record required is a "USER" record. This defines the node, or DGN, to OfficePath.
Figure 31 shows a sample user record for a Personal Services family with a node name of
DSVHOST


```
PIPA              O f f i c e P a t h  Version 1.6.1      Date: 23/12/95
Function.... ENQUIRE     Control File Maintenance          Time: 13:13:40
Type........ USER     Key.... DSVHOST-*
----------------- User Maintenance              ----------------



            Destination...... PSCICS









          NOTE: a user is entered in the format NODE-USER

Comments.....
----- LAST MODIFIED BY ZMDVSCL  AT TERM WL78DKC4 AT 11:23:46 ON 11/03/95 -----
PIPCFM12 Enquiry only, input Function/Type or PF key
PF 1=HELP  4=EXIT  10=PREV REC  11=NEXT REC  12=QUIT
```

Figure 31. "USER" record for the Personal Services family

Installation steps for replacing DISOSS

The following outline the steps to be taken to replace DISOSS with OfficePath.

1. Run the OfficePath unload job.

2. Submit the tailor JCL.
   This sets up the system specific details. The name of the host node, JCL details, location of datasets are amongst the items configured here. Using this JCL means the minimum changes are necessary in the following steps.

3. Create eight VSAM files.
   The product utilises eight VSAM files. The JCL (configured using the above step) is provided to create these files.

4. Load the Control File.
   This step sets up the OfficePath Control File with the default (customised from step 2) records.

5. Update CICS system.
   The CICS tables (FCT, PCT, PPT, PLTPI and, for the batch-TSO option, the DCT) need to be updated together with the CICS JCL.

6. Personal Services messages update.
   Even for organisations installing OfficePath with Personal Services, this is an optional update. The messages in Personal Services are changed to refer to OfficePath rather than DISOSS. Also, the Library options can be removed from Personal Services.

7. Update DW/370.
   OfficePath contains its own routines for conversion between Revisable Format Text (RFT) documents and editable or Final Format Text (FFT). However, if DW/370 is available we recommend that DW/370 is used for this type of conversion. In this case, or if the OfficePath DW/370 Print feature will be used, a DW/370 CLIST needs to be added. A sample is provided with OfficePath.

8. Migrate any DISOSS routing entries for remote (i.e. SNADS) systems.
   Each remote system in the DISOSS ROUT and HUP datasets will require an OfficePath DESTination and USER record. An example of the entries required for each SNADS connection is shown for 'Berlin' in "Chapter Chapter 6 SNADS Feature".

Chapter 13 Additional Information

Prerequisites

The successful implementation of OfficePath requires the prior installation of the following IBM software products:

- CICS Version 5 or above

- Language Environment 1.5 or above

In order to use the OfficePath DisplayWrite/370 print feature, you will require:
   ♦ DisplayWrite/370 (for CICS) Release 2 or above

Support

Product Support is available through electronic mail at <u>support@tbssoft.com</u> or via telephone or fax at:
Tel: 905-940-9373 Ext 777   Fax: 905-940-9376

For further information...

please contact:

TBS Software Inc.
278 Bloor St E

Suite 2201

Toronto, Ontario

Canada

M4W 3M4

Tel: 905-940-9373   Fax: 905-940-9376

If you wish to communicate electronically for sales information, email to: <u>sales@tbssoft.com</u>

Chapter 14 Other Products Available from TBS Software Inc.

OfficePath is one of the portfolio of products marketed and supported by TBS Software Inc. This portfolio includes products to facilitate enterprise-wide messaging and office automation across heterogeneous platforms, and products which complement IBM's OfficeVision/MVS, enriching its functionality and usability, and simplifying the development of mail-enabled applications.

OfficePath/SMTP-Send for z/OS and OS/390

OfficePath/SMTP-Send for z/OS and OS/390 replaces your SNADS e-mail network with industry-standard SMTP. Because it is designed to work with OfficePath or RAPID, no changes are required to your existing mail-enabled line-of-business applications.

OfficePath/Batch-TSO

Provides a bi-directional gateway to OV/MVS, or PS/CICS, to simplify the development of mail-enabled Batch applications; it includes TSO dialogs to mail data sets from TSO.

OfficePath/CICS

Provides a bi-directional gateway to OV/MVS, or PS/CICS, to simplify the development of mail-enabled CICS applications.

OfficePath/SNADS

Provides a SNADS gateway to OV/MVS or PS/CICS. This enables your mail-enabled CICS or Batch application, or any OV/MVS or PS/CICS user, to mail to/from any user on the SNADS network. Can be used to mail between multiple OV/MVS and/or PS/CICS systems, IBM's Mail Exchange, or to/from LAN-based mail systems.

RAPID/Batch-TSO

Provides a bi-directional gateway to DISOSS to simplify the development of mail-enabled Batch applications. It includes TSO dialogs to mail datasets from TSO.

RAPID/CICS

Provides a bi-directional gateway to DISOSS to simplify the development of mail-enabled CICS applications.

OV/Fax

Integrates FAX facilities with the Office System enabling any connected user, or mail-enabled application, to send or receive Faxes. Application Fax and AutoFax features provide added integration with business applications.