



**Program Directory for  
Virtual Machine  
Remote Spooling Communications Subsystem  
Networking**

Version 3 Release 2

Program Number 5684-096

for Use with  
VM/ESA® 1.2.1 or higher  
z/VM Version 3 or higher

Document Date: July 2001

GI10-4665-04

**Note!**

Before using this information and the product it supports, be sure to read the general information under "Notices" on page 197.

This program directory, dated July 2001, applies to VM/RSCS Version 3 Release 2 (RSCS), Program Number 5684-096 for the following:

| <b>COMPIDs</b> | <b>Feature Numbers</b> | <b>System Name</b>       |
|----------------|------------------------|--------------------------|
| 568409601      | 5881                   | VM/ESA® 1.2.1 or higher  |
|                | 5882                   | z/VM Version 3 or higher |
|                | 5664                   |                          |
|                | 5665                   |                          |
|                | 5604                   |                          |
|                | 5605                   |                          |
|                | 7121                   |                          |
|                | 7122                   |                          |
|                | 7123                   |                          |

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## 2 Summary of Changes

2 The following describes the different revision indicators used and the timeframe when they were inserted:

- 2 • Lines flagged with revision indicator of '1' indicate changes made between October 1995 and July  
2 1996.
- 3 • Lines flagged with revision indicator of '2' indicate changes made between July 1996 and February  
3 1998.
- 3 • Lines flagged with revision indicator of '3' indicate changes made between February 1998 and August  
3 1998.
- 4 • Lines flagged with revision indicator of '4' indicate changes made between August 1998 and May  
4 1999.
- 5 • Lines flagged with revision indicator of '5' indicate changes made between June 1999 and February  
5 2001.
- 6 • Lines flagged with revision indicator of '6' indicate changes made between February 2001 and July  
6 2001.

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## 4 RSCS Web Information

5 The RSCS web page can be visited at URL: <http://www.ibm.com/s390/vm/related/rscs> where you will  
4 find:

- 4 • Additional useful information, hints, and tips.
- 4 • A postscript version of the RSCS 3.2.0 program directory available for downloading.
- 4 • Appendix F, "TCP/IP Enhancements" on page 130 available for viewing online.
- 6 • The ability to subscribe to future updates.



---

## 1.0 Introduction

This program directory is intended for the system programmer responsible for program installation and maintenance. It contains information concerning the material and procedures associated with the installation of RSCS and RSCS Data Interchange Manager. The *RSCS Planning and Installation* and *RSCS Data Interchange Manager Installing, Managing, and Using* books are used as reference material for RSCS and RSCS Data Interchange Manager. You should read all of this program directory before installing the program and then keep it for future reference.

6 When you are ready to install RSCS, read 3.1, “Preventive Service Planning” on page 9. This section tells you how to find any updates to the information and procedures in this program directory.

**Note!**

Knowledge of VMSES/E is required prior to installing and/or servicing RSCS. For a complete description of VMSES/E refer to *VMSES/E Introduction and Reference*.

The program directory contains the following sections:

- 2.0, “Program Materials” on page 3 identifies the basic and optional program materials and documentation for RSCS.
- 3.0, “Program Support” on page 9 describes the IBM support available for RSCS.
- 4.0, “Program and Service Level Information” on page 11 lists the APARs (program level) and PTFs (service level) incorporated into RSCS.
- 5.0, “Installation Requirements and Considerations” on page 13 identifies the resources and considerations for installing and using RSCS.
- 6.0, “Installation Instructions” on page 26 provides detailed installation instructions for RSCS.
- 7.0, “Service Instructions” on page 64 provides detailed servicing instructions for RSCS.
- Appendix A, “Test the Installation/Service for RSCS” on page 79 provides instructions on testing for RSCS.
- Appendix B, “Local Modification Example: Assemble File” on page 97 provides a local modification example for RSCS.
- Appendix C, “Applying a Recommended Service Upgrade (RSU) Tape For RSCS” on page 100 provides detailed RSU install instructions for RSCS.
- Appendix D, “Overriding the VMSYS File Pool Name” on page 107 provides instructions on overriding the VMSYS file pool name for RSCS.
- Appendix E, “Supplied Sample Packages” on page 111 provides a list of sample packages provided with RSCS.

- 2 • Appendix F, “TCP/IP Enhancements” on page 130 provides a description of the numerous and  
2 significant TCP/IP enhancements made for RSCS.
- 5 • Appendix G, “Disabling RSCS” on page 192 provides a description of disabling RSCS 3.2.0 if on  
5 VM/ESA 2.3.0, 2.4.0, or z/VM, when RSCS is not licensed.
- 6 • Appendix H, “Service Instructions for z/VM Express Users Only” on page 194 provides detailed  
6 servicing instructions for z/VM Express only customers of RSCS.

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## 5 **1.1 Important VM/ESA 2.3.0, 2.4.0, or z/VM Information**

5 With VM/ESA 2.3.0, 2.4.0, or z/VM, RSCS 3.2.0 is pre-installed on the VM DDR tapes in a disabled state.  
2 Most of the installation steps have already been completed. This includes installing the RSCS base tape,  
2 RSU tape, and all optional installation steps. You will still need to complete some new planning steps and  
2 the place into production steps. In addition, you should be aware of information provided in 6.6.3, “Install  
2 Optional Source Files” on page 43 and 6.6.4, “Local Modifications to RSCS” on page 45; all installation  
2 steps in those sections have already been completed.

6 While disabled, **only** support for most RSCS TCP/IP printing and sender-initiated file transfer functions are  
6 available. All other RSCS functions are disabled, and attempts to use them will result in the issuance of  
2 either message DMT257I or DMT258I. Message DMT257I will also be issued if RSCS detects it is  
2 running disabled during initialization. See F.10, “New and Changed Messages” on page 154 for a  
2 description of these messages.

## 2.0 Program Materials

An IBM program is identified by a program number and a feature code. The program number for RSCS is 5684-096. Feature codes for RSCS can be found in Figure 1.

The program announcement material describes the features supported by RSCS. Ask your IBM marketing representative for this information if you have not already received a copy.

The following sections identify:

- The basic and optional program materials available with this program

5 **Ordering RSCS 3.2.0 on VM/ESA 2.3.0, 2.4.0, or z/VM**

5 If you plan on licensing RSCS 3.2.0 on VM/ESA 2.3.0, 2.4.0, or z/VM, the following describes how to  
 2 order the product, and obtain a set of manuals, depending on your current RSCS license:

- 2 • Installations who have not previously ordered RSCS 3.2.0:  
 2 Order one of the feature codes listed in Figure 1, and indicate that you want to suppress media  
 2 shipment. This will license you for RSCS 3.2.0 and provide you with a set of manuals. Media  
 2 shipment is not necessary since the product has already been installed for you.
- 2 • Installations currently using RSCS 3.2.0:  
 2 There is nothing additional you need to order.

## 2.1 Basic Machine-Readable Material

The distribution medium for this program is 9-track magnetic tape (written at 6250 BPI), 3480 cartridge, or 4mm DAT cartridge. The tape or cartridge contains all the programs and data needed for installation. RSCS is installed using VMSES/E. See section 6.0, "Installation Instructions" on page 26 for more information about how to install the program. Figure 1 describes the tape or cartridge. Figure 2 on page 4 describes the file content of the program tape or cartridge. Figure 3 on page 5 describes the file content of the NLS feature tape.

- 2 **Note:** A RSCS Recommended Service Update (RSU) tape will accompany each order. This tape will be labeled 'yynnRSU', where 'yynn' indicates the RSU level.

Figure 1 (Page 1 of 2). Basic Material: Program Tape

| Feature Number | Medium    | Physical Volume | Tape Content | External Tape Label |
|----------------|-----------|-----------------|--------------|---------------------|
| 5881           | 6250 tape | 1               | RSCS 3.2.0   | Base Product 1 of 1 |

Figure 1 (Page 2 of 2). Basic Material: Program Tape

| Feature Number | Medium        | Physical Volume | Tape Content                  | External Tape Label |
|----------------|---------------|-----------------|-------------------------------|---------------------|
| 5882           | 3480 cart.    | 1               | RSCS 3.2.0                    | Base Product 1 of 1 |
| 7121           | 4mm DAT cart. | 1               | RSCS 3.2.0                    | Base Product 1 of 1 |
| 5664           | 6250 tape     | 1               | RSCS 3.2.0 Kanji NLS Feature  | Japanese NLV 1 of 1 |
| 5665           | 3480 cart     | 1               | RSCS 3.2.0 Kanji NLS Feature  | Japanese NLV 1 of 1 |
| 7123           | 4mm DAT cart. | 1               | RSCS 3.2.0 Kanji NLS Feature  | Japanese NLV 1 of 1 |
| 5604           | 6250 tape     | 1               | RSCS 3.2.0 German NLS Feature | German NLV 1 of 1   |
| 5605           | 3480 cart     | 1               | RSCS 3.2.0 German NLS Feature | German NLV 1 of 1   |
| 7122           | 4mm DAT cart. | 1               | RSCS 3.2.0 German NLS Feature | German NLV 1 of 1   |

Figure 2 (Page 1 of 2). Program Tape: File Content

| Tape File | Content                      |
|-----------|------------------------------|
| 1         | Tape Header                  |
| 2         | Tape Header                  |
| 3         | Product Header               |
| 4         | Product Memo                 |
| 5         | Service Apply Lists          |
| 6         | PTFPARTs                     |
| 7         | RSCS Service                 |
| 8         | RSCS Service Inventories     |
| 9         | RSCS Base Code               |
| 10        | RSCS Sample Tailorable Files |
| 11        | RSCS Exit Packages           |
| 12        | RSCS Help                    |
| 13        | RSCS Component               |

Figure 2 (Page 2 of 2). Program Tape: File Content

---

| <b>Tape File</b> | <b>Content</b>                     |
|------------------|------------------------------------|
| 14               | Data Interchange Manager Component |
| 15               | Source files                       |

---

Figure 3. Program Tape: File Content of NLS Feature Tape

---

| <b>Tape File</b> | <b>Content</b>        |
|------------------|-----------------------|
| 1                | Tape Header           |
| 2                | Tape Header           |
| 3                | Product Header        |
| 4                | Product Memo          |
| 5                | RSCS NLS Feature Help |

---

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## 2.2 Optional Machine-Readable Material

There are no optional machine-readable materials for RSCS.

---

## 2.3 Program Publications

The following sections identify the basic and optional publications for RSCS.

### 2.3.1 Softcopy Publications

- 5 RSCS publications are offered in displayable softcopy form on CD-ROM. These files are shipped on the
- 5 IBM Online Library VM Collection (SK2T-2067) CD-ROM.
  
- 6 BookManager® format displayable manuals can be used with the BookManager READ licensed programs
- 5 in any of the supported environments. Terms and conditions for use of the machine-readable files are
- 5 shipped with the Online Product Library.
  
- 6 Adobe PDF files are available on the VM Collection CD-ROM and are available at the IBM VM Web site at
- 6 <http://www.ibm.com/eserver/zseries/zvm/pubs/>
  
- 6 You can view a PDF file using the Adobe Acrobat Reader which is available free from the Adobe Web site
- 6 at <http://www.adobe.com>

## 2.3.2 Basic Program Publications

Figure 4 on page 6 identifies the basic program publications for RSCS. One copy of each of these 5 publications is included when you order the basic materials for RSCS. Additional copies can be ordered 5 separately for a fee using the specific publication number through the IBM Publications Ordering System 5 (POS) at <http://www.elink.ibm.com/pbl/pbl>

Figure 4. Basic Material

| Publication Title                                             | Form Number |
|---------------------------------------------------------------|-------------|
| RSCS Line Printer Daemon Link Driver                          | GC24-5828   |
| RSCS Licensed Programming Specifications                      | GH24-5223   |
| RSCS General Information                                      | GH24-5218   |
| RSCS Planning and Installation                                | SH24-5219   |
| RSCS Operation and Use                                        | SH24-5220   |
| RSCS Exit Customization                                       | SH24-5222   |
| RSCS Messages and Codes                                       | SH24-5221   |
| RSCS Data Interchange Manager Installing, Managing, and Using | SH24-5248   |
| RSCS Reference Summary                                        | SX24-5257   |

## 2.3.3 Optional Program Publications

Figure 5 identifies the optional publications for RSCS. The first copy is available at no charge to licenses of the basic material by ordering the first copy feature number. Additional copies may be ordered using the additional copy feature number. A fee is charged for additional copies. For additional copies, contact your IBM representative.

Figure 5. Optional Material

| Publication Title        | First Copy Feature Number | Additional Copy Feature Number | Form Number |
|--------------------------|---------------------------|--------------------------------|-------------|
| RSCS Diagnosis Reference | 7083                      | 8166                           | LY24-5248   |

## 2.4 Microfiche Support

There is no microfiche for RSCS.



---

## 2.5 Publications Useful During Installation/Service

5 The publications listed in Figure 6 on page 7 through Figure 10 on page 8 may be useful during the  
4 installation of RSCS. To order copies, contact your IBM representative.

6 *Figure 6. Publications Useful During Installation / Service on z/VM 4.1.0*

| 6 | Publication Title                                           | Form Number |
|---|-------------------------------------------------------------|-------------|
| 6 | z/VM: VMSES/E Introduction and Reference                    | GC24-5997   |
| 6 | z/VM: Service Guide                                         | GC24-5993   |
| 6 | z/VM: Planning and Administration                           | SC24-5995   |
| 6 | z/VM: Group Control System                                  | SC24-5998   |
| 6 | z/VM: CMS Command and Utility Reference                     | SC24-6010   |
| 6 | z/VM: CMS File Pool Planning, Administration, and Operation | SC24-5949   |
| 6 | z/VM: System Messages and Codes - CP                        | GC24-6030   |
| 6 | z/VM: System Messages and Codes - CMS                       | GC24-6031   |
| 6 | z/VM: System Messages and Codes - Other Components          | GC24-6032   |

*Figure 7. Publications Useful During Installation / Service on z/VM 3.1.0*

|   | Publication Title                                           | Form Number |
|---|-------------------------------------------------------------|-------------|
| 5 | z/VM: VMSES/E Introduction and Reference                    | GC24-5947   |
| 5 | z/VM: Service Guide                                         | GC24-5946   |
| 5 | z/VM: Planning and Administration                           | SC24-5948   |
| 5 | z/VM: CMS Command Reference                                 | SC24-5969   |
| 5 | z/VM: Group Control System                                  | SC24-5951   |
| 5 | z/VM: CMS File Pool Planning, Administration, and Operation | SC24-5949   |
| 5 | z/VM: System Messages and Codes                             | GC24-5974   |

*Figure 8. Publications Useful During Installation / Service on VM/ESA 2.3.0 or VM/ESA 2.4.0*

|   | Publication Title                                             | Form Number |
|---|---------------------------------------------------------------|-------------|
| 4 | VM/ESA: VMSES/E Introduction and Reference                    | GC24-5837   |
| 4 | VM/ESA: Service Guide                                         | GC24-5838   |
| 4 | VM/ESA: Planning and Administration                           | SC24-5750   |
| 4 | VM/ESA: CMS Command Reference                                 | SC24-5776   |
| 4 | VM/ESA: GCS Reference                                         | SC24-5757   |
| 4 | VM/ESA: CMS File Pool Planning, Administration, and Operation | SC24-5751   |
| 4 | VM/ESA: System Messages and Codes                             | GC24-5841   |

4 *Figure 9. Publications Useful During Installation / Service on VM/ESA 2.1.0 and VM/ESA 2.2.0*

| 4 | <b>Publication Title</b>                                      | <b>Form Number</b> |
|---|---------------------------------------------------------------|--------------------|
| 4 | VMSES/E Introduction and Reference                            | SC24-5747          |
| 4 | VM/ESA: Service Guide                                         | SC24-5749          |
| 4 | VM/ESA: Planning and Administration                           | SC24-5750          |
| 4 | VM/ESA: CMS Command Reference                                 | SC24-5776          |
| 4 | VM/ESA: GCS Reference                                         | SC24-5757          |
| 4 | VM/ESA: CMS File Pool Planning, Administration, and Operation | SC24-5751          |
| 4 | VM/ESA: System Messages and Codes                             | SC24-5784          |

*Figure 10. Publications Useful During Installation/Service on VM/ESA Version 1*

|   | <b>Publication Title</b>                                    | <b>Form Number</b> |
|---|-------------------------------------------------------------|--------------------|
| 4 | VMSES/E Introduction and Reference                          | SC24-5444          |
| 4 | VM/ESA: Planning and Administration                         | SC24-5521          |
| 4 | VM/ESA: Service Guide                                       | SC24-5527          |
| 4 | VM/ESA: CMS Command Reference                               | SC24-5461          |
| 4 | VM/ESA: GCS Reference                                       | SC24-5531          |
| 4 | VM/ESA: SFS and CRR Planning, Administration, and Operation | SC24-5649          |
| 4 | VM/ESA: System Messages and Codes                           | SC24-5529          |

5 **Note**

5 References to VM publications through out this program directory do not include the system name  
 5 (VM/ESA or z/VM). Add the appropriate system name for your environment.

---

## 3.0 Program Support

This section describes the IBM support available for RSCS.

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### 3.1 Preventive Service Planning

Before installing RSCS, check with your IBM Support Center or use IBMLink™ (Service Link) to see whether there is additional Preventive Service Planning (PSP) information. To obtain this information, specify the following UPGRADE and SUBSET values:

Figure 11. PSP Upgrade and Subset ID

---

| <b>Retain</b>      |                |                |               |                                         |
|--------------------|----------------|----------------|---------------|-----------------------------------------|
| <b>COMPID</b>      | <b>Release</b> | <b>Upgrade</b> | <b>Subset</b> | <b>Description</b>                      |
| 568409601          | 320            | RSCSV32        | RSCSV32/320   | Install information                     |
| 568409601          | 320            | RSCSV32        | yynnRSU       | RSU service recommendations             |
| 568409601          | 320            | RSCSV32        | RSU-BY-LVL    | Service sorted by RSU service level     |
| 568409601          | 320            | RSCSV32        | RSU-BY-APAR   | Service sorted by RSU APARs             |
| 568409601          | 320            | RSCSV32        | RSU-BY-PTF    | Service sorted by RSU PTFs              |
| <b>4</b> 568409601 | 320            | YR2000VM       | RSCS          | Year 2000 information                   |
| <b>4</b> 568409601 | 320            | EUROVM         | RSCS          | European currency character information |
| 568409601          | 3J2            | RSCSV32        | RSCSV32/320   | Kanji install information               |
| 568409601          | 3G2            | RSCSV32        | RSCSV32/320   | German install information              |

---

## 3.2 Statement of Support Procedures

Report any difficulties you have using this program to your IBM Support Center. If an APAR is required, the Support Center will provide the address to which any needed documentation can be sent.

Figure 12 identifies the component IDs (COMPID), Retain Release and Field Engineering Service Numbers (FESN) for RSCS.

*Figure 12. Component IDs*

---

| <b>Retain</b> |                |                       |             |
|---------------|----------------|-----------------------|-------------|
| <b>COMPID</b> | <b>Release</b> | <b>Component Name</b> | <b>FESN</b> |
| 568409601     | 320            | RSCS 3.2.0            | 0465049     |
| 568409601     | 3J2            | RSCS 3.2.0 Kanji      | 0465049     |
| 568409601     | 3G2            | RSCS 3.2.0 German     | 0465049     |

---

## 4.0 Program and Service Level Information

This section identifies the program and any relevant service levels of RSCS 3.2.0. The program level refers to the APAR fixes incorporated into the program. The service level refers to the PTFs integrated. Information about the cumulative service tape is also provided.

---

### 4.1 Program Level Information

The following APAR fixes against the 3.1.0 release of RSCS have been incorporated into this release:

|         |         |         |         |         |         |
|---------|---------|---------|---------|---------|---------|
| VM44760 | VM46661 | VM47864 | VM49299 | VM51195 | VM52606 |
| VM44841 | VM46712 | VM47866 | VM49449 | VM51211 | VM52609 |
| VM44904 | VM46771 | VM47884 | VM49572 | VM51233 | VM52618 |
| VM44914 | VM46797 | VM47887 | VM49583 | VM51240 | VM52674 |
| VM44939 | VM46808 | VM47945 | VM49717 | VM51271 | VM52749 |
| VM44940 | VM46824 | VM47946 | VM49726 | VM51329 | VM52751 |
| VM44942 | VM46854 | VM47947 | VM49867 | VM51377 | VM52788 |
| VM45267 | VM46867 | VM47948 | VM49878 | VM51530 | VM52806 |
| VM45373 | VM46895 | VM47949 | VM49948 | VM51550 | VM52843 |
| VM45461 | VM46979 | VM48044 | VM49958 | VM51561 | VM52863 |
| VM45551 | VM46997 | VM48059 | VM49987 | VM51580 | VM52875 |
| VM45556 | VM47064 | VM48068 | VM50045 | VM51624 | VM52949 |
| VM45589 | VM47097 | VM48101 | VM50046 | VM51629 | VM53003 |
| VM45769 | VM47110 | VM48202 | VM50076 | VM51730 | VM53007 |
| VM45770 | VM47150 | VM48321 | VM50279 | VM51745 | VM53012 |
| VM45862 | VM47205 | VM48347 | VM50452 | VM51754 | VM53013 |
| VM45930 | VM47209 | VM48381 | VM50507 | VM51762 | VM53019 |
| VM45930 | VM47228 | VM48799 | VM50578 | VM51802 | VM53041 |
| VM45942 | VM47330 | VM48800 | VM50580 | VM51891 | VM53123 |
| VM45957 | VM47363 | VM48801 | VM50590 | VM52000 | VM53127 |
| VM45958 | VM47457 | VM48894 | VM50641 | VM52004 | VM53146 |
| VM46059 | VM47477 | VM48901 | VM50720 | VM52170 | VM53162 |
| VM46083 | VM47489 | VM48940 | VM50745 | VM52262 | VM53180 |
| VM46104 | VM47493 | VM48964 | VM50749 | VM52283 | VM53192 |
| VM46157 | VM47528 | VM48978 | VM50763 | VM52377 | VM53193 |
| VM46280 | VM47567 | VM48981 | VM50769 | VM52389 | VM53201 |
| VM46325 | VM47699 | VM48996 | VM50811 | VM52393 | VM53262 |
| VM46388 | VM47706 | VM49023 | VM50838 | VM52421 | VM53296 |
| VM46395 | VM47716 | VM49058 | VM50867 | VM52462 | VM53336 |
| VM46477 | VM47798 | VM49181 | VM50872 | VM52499 | VM53356 |
| VM46530 | VM47826 | VM49206 | VM50921 | VM52520 | VM53382 |
| VM46551 | VM47827 | VM49211 | VM51019 | VM52536 | VM53387 |
| VM46603 | VM47837 | VM49212 | VM51180 | VM52602 | VM53388 |

|         |         |         |         |         |         |
|---------|---------|---------|---------|---------|---------|
| VM53405 | VM54043 | VM54758 | VM55322 | VM55717 | VM56220 |
| VM53546 | VM54049 | VM54957 | VM55324 | VM55762 | VM56225 |
| VM53597 | VM54090 | VM55017 | VM55341 | VM55768 | VM56245 |
| VM53670 | VM54208 | VM55021 | VM55364 | VM55827 | VM56259 |
| VM53695 | VM54344 | VM55082 | VM55392 | VM55899 | VM56273 |
| VM53757 | VM54403 | VM55104 | VM55441 | VM55918 | VM56320 |
| VM53774 | VM54495 | VM55107 | VM55480 | VM55949 | VM56378 |
| VM53810 | VM54498 | VM55179 | VM55482 | VM55964 | VM56382 |
| VM53820 | VM54519 | VM55181 | VM55483 | VM55974 | VM56470 |
| VM53884 | VM54525 | VM55181 | VM55503 | VM56016 | VM56473 |
| VM53888 | VM54605 | VM55198 | VM55506 | VM56098 | VM56487 |
| VM53931 | VM54618 | VM55212 | VM55542 | VM56143 | VM56503 |
| VM53948 | VM54620 | VM55219 | VM55582 | VM56185 | VM56789 |
| VM53953 | VM54643 | VM55273 | VM55602 | VM56201 |         |
| VM53974 | VM54672 | VM55299 |         |         |         |

The following APAR fixes against the 3.1.1 release of RSCS have been incorporated into this release:

|         |         |         |         |         |         |
|---------|---------|---------|---------|---------|---------|
| VM36661 | VM57359 | VM57888 | VM58312 | VM58740 | VM59130 |
| VM36663 | VM57387 | VM57889 | VM58437 | VM58767 | VM59140 |
| VM52469 | VM57407 | VM57903 | VM58445 | VM58770 | VM59201 |
| VM56358 | VM57430 | VM57950 | VM58468 | VM58781 | VM59215 |
| VM56754 | VM57516 | VM57978 | VM58501 | VM58794 | VM59269 |
| VM57175 | VM57556 | VM57995 | VM58503 | VM58798 | VM59308 |
| VM57298 | VM57576 | VM58016 | VM58548 | VM58869 | VM59316 |
| VM57299 | VM57603 | VM58024 | VM58573 | VM58912 | VM59326 |
| VM57300 | VM57636 | VM58045 | VM58576 | VM58940 | VM59407 |
| VM57301 | VM57643 | VM58046 | VM58642 | VM59024 | VM59551 |
| VM57302 | VM57768 | VM58049 | VM58646 | VM59036 | VM59597 |
| VM57303 | VM57770 | VM58106 | VM58648 | VM59051 | VM59616 |
| VM57324 | VM57772 | VM58118 | VM58654 | VM59080 | VM59644 |
| VM57333 | VM57814 | VM58147 | VM58669 | VM59106 | VM59667 |
| VM57348 | VM57876 | VM58192 | VM58708 |         |         |

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## 4.2 Service Level Information

This is the initial release of RSCS 3.2.0. There are no PTFs on the installation tape.

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## 4.3 Cumulative Service Tape

A RSU tape for VM/RSCS will be produced periodically as service warrants. See upgrade bucket RSCSV32 subset yynnRSU (where yynn is the RSU service level) for the latest RSU tape available. For the list of PTF's included on the RSU tape, see the service memo from the tape. The RSU tape can be obtained by ordering PTF UV99320. For z/VM 4.1.0 express users, the stacked RSU, UM97410, should be ordered instead of the individual RSU for RSCS.

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## 5.0 Installation Requirements and Considerations

The following sections identify the system requirements for installing and activating RSCS.

---

### 5.1 Hardware Requirements

There are no special requirements for RSCS.

---

### 5.2 Program Considerations

The following sections list the programming considerations for installing RSCS and activating its functions.

#### 5.2.1 Operating System Requirements

The following operating systems can be used to install RSCS:

- 6 • VM/ESA 1.2.1 (or higher)
- 6 • **RSU9501 or higher service level** must be applied to VMSES/E on VM/ESA 1.2.1 or VM/ESA 1.2.2  
6 prior to installing RSCS
- 6 • VM/ESA Version 2
- 6 • **RSU9904 service level** or above must be applied to VMSES/E on VM/ESA 2.4.0 prior to installing  
6 RSCS
- 6 • **RSU9905 service level** or above must be applied to VMSES/E on VM/ESA 2.3.0 prior to installing  
6 RSCS
- 6 • z/VM Version 3 or higher

5 **Note:** VMSES/E product packaging APAR VM62316 has to be applied in order to install RSCS. It is  
5 contained in the above RSUs. It is in the base of z/VM 3.1.0.

#### 5.2.2 Program Installation / Service Considerations

This section describes items that should be considered before you install or service RSCS.

- VMSES/E is used to install and service this product.
- If multiple users install and maintain licensed products on your system there may be a problem getting the necessary access to MAINT's 51D disk. If you find that there is contention for write access to the 51D disk, you can eliminate it by converting the Software Inventory from minidisk to the Shared File System (SFS). See the *VMSES/E Introduction and Reference* manual section "Changing the Software Inventory to an SFS directory", for information on how to make this change.

- Customers will no longer install and service RSCS strictly using the MAINT user ID, but will use a new user ID P684096K. This is the IBM suggested user ID name. You are free to change this to any user ID name you wish. However, a PPF override must be created.

**Note:** It may be easier to make the above changes during the installation procedure 6.2, “Plan Your Installation” step 8 on page 30, than after you have installed this product.

- RSU tapes will be supplied as necessary. Service between refresh tapes can be obtained via CORrective service.

### 5.2.3 Required Service

There is no required service for installing RSCS.

### 5.2.4 Required Program Products / Components

5 The GCS component of VM/ESA or z/VM is required to run RSCS 3.2.0

The following is required to run RSCS if SNA links are desired or if reassembly of modules DMTLOG, DMTVXT, DMTSCT, DMTSNE, DMTSPT, or DMTSJE is desired:

- 1 • VTAM® (ACF/VTAM®) Version 3 Release 4.1 for VM/ESA (5684-095), or VTAM Version 4 Release 2  
1 for VM/ESA (5654-010).

5 **Note:** See APAR II09249 when using VTAM Version 3 Release 4.1 for VM/SP (5664-280).

- The VMFHASM or VMFHLASM assembler is required if reassembling any of the listed RSCS 3.2 modules with VTAM MACLIBs. They will not assemble cleanly using VMFASM.

2 **Warning!**

|                                                                                                                                                                                                                                                                                                                                                                       |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>2 HLASM APAR PN91458 added support for the ESA/390 opcode BRC. This conflicts with the BRC<br/>2 macro which the RSCS product uses. After applying this PTF, assembling any RSCS assemble<br/>4 parts with HLASM will fail. In order to assemble cleanly with HLASM, RSCS APAR VM61946 must<br/>4 be applied, or the OPTABLE(XA) assembly option must be used.</p> |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

The following is required to run RSCS Data Interchange Manager or any of the new TCP/IP drivers provided with RSCS 3.2.0:

- 5 • IBM VM TCP/IP Version 2 Release 2 for VM (5735-FAL) or higher, or a TCP/IP Function Level  
5 supplied with VM/ESA 2.3.0, 2.4.0, or z/VM.

5 **Notes:**

- 5 1. PTF UN42195 must be applied to VM TCP/IP 2.2.
- 5 2. The TCP/IP Function Level supplied with VM/ESA 2.3.0, 2.4.0, or z/VM is required in order to use  
5 TN3270E-type links.



- 2 The following is required to run the GETHOSTC MODULE (which provides Domain Name Server support  
2 for RSCS):
- 2 • If on VM/ESA Version 1, the C runtime library from the IBM Language Environment® for MVS and VM  
2 (5688-198) 1.5.0 or higher is required.
  - 5 • If on VM/ESA Version 2 or z/VM Version 3 or higher the C runtime library supplied with VM can be  
2 used.
- 6 IBM Library for SAA REXX/370 (5695-014) Release 3.0 is required if using compiled EXECs is preferred.  
4 The only EXECs which are compiled are MCOMP, MCONV, and ACHAMAIN.

## 5.2.5 User ID Directory Information

User directory statements supplied in the 5684096K PRODPART file have user IDs that have privilege classes other than G. These privilege classes are required for the following reasons:

- The RSCS virtual machine must have class B privilege for any of the following:
  - If the configuration file (RSCS CONFIG) contains a MSGNOH record, or
  - If telecommunication lines and local 3270 printers are attached by ATTACH statements in a PROFILE GCS or issued from the RSCS console.
- The XCHANGE machine must have class B privilege if you wish Data Interchange Manager to issue messages using MSGNOH.
- If you have RACF® installed, the XCHANGE machine must have the following RACF PERMIT statements to operate correctly:

```
RACF Permit XCHANGE class(VMBATCH) id (XCHANGE) acc(control)
RACF Permit RSCS class(VMBATCH) id (XCHANGE) acc(control)
```

## 5.2.6 Special Program Installation Considerations for NLS

RSCS 3.2.0 is shipped with mixed-case American English, uppercase American English, French, Canadian French and German message repository language files. They are also built into the RSCS LOADLIB supplied on the product tape. The sample configuration files define mixed-case American English as the default national language. You can use the LANGUAGE configuration file record to automatically set the system national language. RSCS users receive RSCS messages in the system national language. Only American English help files are shipped on the RSCS 3.2.0 product tape.

You can order other national language help files to install on your system. National languages (except American English and uppercase English) are distributed on separate national language feature tapes. The files on a national language feature tape contain translated information.

You install the national language feature tape or tapes **after** you install the RSCS product tape. Section 6.6.2, “Install NLS features” on page 42 steps you through the install.

## 5.2.7 VMSES/E Enablement Improvements in RSCS 3.2.0

The following improvements have been made to the VMSES/E enablement in RSCS 3.2.0:

- The COMPID used to install and service RSCS 3.2.0 is RSCS. In RSCS 3.1.1 the RSCSINS COMPID was used to install and the RSCS COMPID was used for service.
- The sample exits are VMSES/E enabled.

In RSCS 3.1.1, customers were still required to assemble the sample exits, compile the sample messages, build a MACLIB if appropriate, and build a LOADLIB for each exit. In RSCS 3.2.0 text files are supplied for the sample assemble and message files, a MACLIB containing all the sample exit macros is supplied, and one LOADLIB containing all the sample exits is supplied. The MACLIB (DMTMACEX) and LOADLIB (RSCSEXIT) is targeted to the P684096K's BUILD0 minidisk (400). A control file is also supplied for the exits, called RSCSV3EX.

For a customer to use a sample exit as supplied, all they will need to do is:

1. Update the GLOBAL statement of the PROFILE GCS to include the RSCSEXIT LOADLIB.
2. Copy the CONFSAMP file for the exit from the P684096K BUILD6 disk (406) or SFS directory to the P684096K BUILD0 disk (400) with a filetype of CONFIG, update the CONFIG file if appropriate, then imbed it into the RSCS CONFIG file by using the IMBED configuration statement.

- If a customer wishes to modify one of the supplied exits, they will need to do a local modification of the appropriate assemble file, assemble their changes, and run VMFBLD to rebuild the RSCSEXIT LOADLIB.

If a customer wishes to use one of their own exits, then they can do so in a couple of different ways:

1. Add their exits to the DMTBLELL build list as a local modification and rebuild the RSCSEXIT LOADLIB.
2. Build their own exit LOADLIB and add it to the list of LOADLIBs specified on the GLOBAL statement of the PROFILE GCS file.

- The exit ASSEMBLE and messages source files is now installed on the optional source P684096K's BASE2 disk (2B3) or directory.
- The sample packages now install to the P684096K BUILD6 disk (406) or directory and the BASE1 disk (2B2) or directory.
- Sample usable files (such as a config file) are shipped with a standard name targeted to the P684096K's BUILD6 minidisk (406) or directory. These files have a file type indicating it is a sample file. The files have to be copied/renamed to a real file type in order to be used. They are also shipped as local modifications so if IBM should service one, the customer will be notified of the change when applying the PTF containing the changed sample file.
- The modules for Data Interchange Manager that were shipped as full part replacements are now built at the customers site when doing VMFBLD. This will reduce the number of files supplied on RSCS PTFs.

- If a customer wishes to change the language of messages issued by Data Interchange Manager to uppercase English, then they will need to do the following:
  1. Update the DMTBLELL build list as a local modification changing the line **:PARTID. ACHAMENG TXT** to **:PARTID. ACHAUENG TXT**.
  2. Run VMFBLD to pick up the changes in the build lists.
- The MCOMP EXEC/CEXEC, MCONV EXEC/CEXEC, and the IN2PROD EXEC are now installed to P684096K's 400 minidisk, for easier access and maintenance.
- Shared File System directory support has been added for Data Interchange Manager disks (test build, production build, and logging), for the samples packages disks, and in the IN2PROD EXEC.
- The ACHARSCS LOADLIB has been merged with the new RSCSEXIT LOADLIB.

For a list of all samples supplied with RSCS 3.2.0, see Appendix E, "Supplied Sample Packages" on page 111.

## 5.2.8 Available VM/RSCS 3.2.0 Development APARs

The following development APARs are available for VM/RSCS 3.2.0:

- APAR VM59347
  - Provides a TCP/IP LPD link driver to receive a print data stream from a TCP/IP line print router (LPR) host for delivery to a network destination or printer, acting as a gateway for processing files from the TCP/IP world to the NJE world through RSCS. See publication *RSCS Line Printer Daemon Link Driver* for further details.
- APAR VM59999
  - Provides the **ITO=** parameter for the LPR-type link. For further details, see Appendix F, "TCP/IP Enhancements" on page 130.
- APAR VM60533
  - Provides year 2000 support.
- APAR VM60615
  - Provides the **FOrM=** and **FILter=** exit parameters for the LPRXONE, and LPRXPSE, sample exit routines. For further details, see Appendix F, "TCP/IP Enhancements" on page 130.
- APAR VM60695
  - Provides a configuration file for the LPDXMANY sample exit routine. For further details, see Appendix F, "TCP/IP Enhancements" on page 130.
- APAR VM60931
  - Provides Domain Name Server support. For further details, see Appendix F, "TCP/IP Enhancements" on page 130.
- APAR VM61295

- 2 Provides the **HOSTDafn=** parameter for the LPR-type link. For further details, see Appendix F,  
2 “TCP/IP Enhancements” on page 130.
- 2 • APAR VM61374
- 2 Provides numerous and significant TCP/IP enhancements for RSCS 3.2.0. For further details, see  
2 Appendix F, “TCP/IP Enhancements” on page 130.
- 3 • APAR VM61635
- 3 Provides additional TCP/IP enhancements for RSCS 3.2.0. For further details, see Appendix F,  
3 “TCP/IP Enhancements” on page 130.
- 3 • APAR VM61791
- 3 Provides additional LPR and LPD reliability, availability, and serviceability enhancements for RSCS  
4 3.2.0. Support for the European currency character is also provided. For further details, see  
3 Appendix F, “TCP/IP Enhancements” on page 130.
- 4 • APAR VM61946
- 4 Provides relief for truncation of SMSGs less than 132 bytes as well as assembly problems with the  
4 BRC macro.
- 4 • APAR VM62148
- 4 Provides UFT support for RSCS. For further details, see F.14, “UFT Support” on page 170.

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## 5.3 DASD Storage Requirements

Section 5.3.1, “Required DASD Storage for RSCS” on page 19 lists the user IDs and minidisks which are required to install and service RSCS. 5.3.2, “Optional DASD Storage for RSCS” on page 22 lists the minidisks which are optional for RSCS.

### Important Installation Notes:

- User IDs and minidisks will be defined in 6.2, “Plan Your Installation” on page 27 and are listed here so that you can get an idea of the resources that you will need prior to allocating them.
- P684096K is a default user ID and can be changed. If you choose to change the name of the installation user ID you need to create a Product Parameter Override (PPF) to change the name. This can be done in 6.2, “Plan Your Installation” step 8 on page 30.
- If you chose to change the installation user ID, you must ensure that all the default virtual minidisk addresses for RSCS are unique on the new installation user ID. You will have to create a PPF override to change any minidisk address conflicts. Use of the shared file system will help reduce these conflicts. However, any disk with \*NONSFS listed in the SFS 4K block column of Figure 13 on page 19 must remain a minidisk.

### 5.3.1 Required DASD Storage for RSCS

The following table contains the required DASD for the P684096K and MAINT user IDs in order to install and service RSCS 3.2.0.

Figure 13 (Page 1 of 3). DASD Storage Requirements for Required RSCS Minidisks

| Minidisk owner (user ID)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Default Address | Storage in Cylinders                 |                            | FB-512 Blocks | SFS 4K Blocks | Usage                                                                                                                                                                 |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|--------------------------------------|----------------------------|---------------|---------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                 | DASD                                 | CYLS                       |               |               | Default SFS Directory Name                                                                                                                                            |
| P684096K                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 2B2             | 9345<br>3390<br>3380<br>3375<br>3350 | 15<br>13<br>15<br>24<br>19 | 15600         | 2250          | Contains all of the base code shipped with RSCS<br><br><b>VMSYS:P684096K.RSCS.OBJECT</b>                                                                              |
| P684096K                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 2C2             | 9345<br>3390<br>3380<br>3375<br>3350 | 1<br>1<br>1<br>1<br>1      | 930           | 150           | Contains sample files and user local modifications for RSCS<br>Format minidisk with 1K block size.<br><br><b>VMSYS:P684096K.RSCS.LOCALSAM</b>                         |
| P684096K                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 2D2             | 9345<br>3390<br>3380<br>3375<br>3350 | 60<br>50<br>60<br>95<br>76 | 64200         | 9000          | Contains serviced files.<br>Format minidisk with 2K block size.<br><br><b>VMSYS:P684096K.RSCS.DELTA</b>                                                               |
| P684096K                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 2A6             | 9345<br>3390<br>3380<br>3375<br>3350 | 2<br>2<br>2<br>2<br>2      | 1860          | 300           | Contains AUX files and version vector table that represents your test level of RSCS. Format minidisk with 1K block size.<br><b>VMSYS:P684096K.RSCS.APPLYALT</b>       |
| P684096K                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 2A2             | 9345<br>3390<br>3380<br>3375<br>3350 | 2<br>2<br>2<br>2<br>2      | 1860          | 300           | Contains AUX files and version vector table that represent your production level of RSCS. Format minidisk with 1K block size.<br><b>VMSYS:P684096K.RSCS.APPLYPROD</b> |
| <b>Notes:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                 |                                      |                            |               |               |                                                                                                                                                                       |
| <ol style="list-style-type: none"> <li>1. Cylinder values defined in this table are based on a 4K block size unless otherwise stated. FB-512 and SFS block values are derived from the 3380 cylinder values in this table.</li> <li>2. *NONSFS in the SFS 4K block column means that disk cannot be installed to the shared file system and must remain a minidisk which will be defined in 6.3, "Allocate Resources for Installing RSCS" on page 32. The 400 and 401 minidisks must remain disks since GCS does not support the shared file system.</li> <li>3. The Delta minidisk should be formatted using a 2K block size.</li> <li>4. The help, apply, alternate apply, and local sample minidisks should be formatted using 1K block sizes.</li> </ol> |                 |                                      |                            |               |               |                                                                                                                                                                       |

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5  
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Figure 13 (Page 2 of 3). DASD Storage Requirements for Required RSCS Minidisks

| Minidisk owner (user ID) | Default Address | Storage in Cylinders                 |                            | FB-512 Blocks | SFS 4K Blocks | Usage                                                                                                                     |
|--------------------------|-----------------|--------------------------------------|----------------------------|---------------|---------------|---------------------------------------------------------------------------------------------------------------------------|
|                          |                 | DASD                                 | CYLS                       |               |               | Default SFS Directory Name                                                                                                |
| P684096K                 | 29D             | 9345<br>3390<br>3380<br>3375<br>3350 | 8<br>7<br>8<br>13<br>11    | 9600          | 1200          | Contains American English help files for RSCS. Format minidisk with 1K block size.<br><br><b>VMSYS:P684096K.RSCS.HELP</b> |
| P684096K                 | 400             | 9345<br>3390<br>3380<br>3375<br>3350 | 15<br>13<br>15<br>24<br>19 | 18000         | *NONSFS       | Test disk for RSCS server                                                                                                 |
| P684096K                 | 401             | 9345<br>3390<br>3380<br>3375<br>3350 | 10<br>9<br>10<br>16<br>13  | 12000         | *NONSFS       | Production disk for RSCS server, also RSCS user ID's 191 disk                                                             |
| P684096K                 | 402             | 9345<br>3390<br>3380<br>3375<br>3350 | 3<br>3<br>3<br>5<br>4      | 3600          | 450           | Test disk for RSCS Data Interchange Manager server<br><br><b>VMSYS:P684096K.RSCS.XCHTEST</b>                              |
| P684096K                 | 406             | 9345<br>3390<br>3380<br>3375<br>3350 | 8<br>7<br>8<br>13<br>10    | 9600          | 1200          | Contains sample exit packages and usability execs<br><br><b>VMSYS:P684096K.RSCS.PACKAGE</b>                               |
| P684096K                 | 191             | 9345<br>3390<br>3380<br>3375<br>3350 | 10<br>9<br>10<br>16<br>13  | 12000         | 1500          | P684096K user ID's 191 minidisk<br><br><b>VMSYS:P684096K.</b>                                                             |

**Notes:**

1. Cylinder values defined in this table are based on a 4K block size unless otherwise stated. FB-512 and SFS block values are derived from the 3380 cylinder values in this table.
2. \*NONSFS in the SFS 4K block column means that disk cannot be installed to the shared file system and must remain a minidisk which will be defined in 6.3, "Allocate Resources for Installing RSCS" on page 32. The 400 and 401 minidisks must remain disks since GCS does not support the shared file system.
3. The Delta minidisk should be formatted using a 2K block size.
4. The help, apply, alternate apply, and local sample minidisks should be formatted using 1K block sizes.

Figure 13 (Page 3 of 3). DASD Storage Requirements for Required RSCS Minidisks

| Minidisk owner (user ID) | Default Address | Storage in Cylinders                 |                       | FB-512 Blocks | SFS 4K Blocks | Usage                                                       |
|--------------------------|-----------------|--------------------------------------|-----------------------|---------------|---------------|-------------------------------------------------------------|
|                          |                 | DASD                                 | CYLS                  |               |               | Default SFS Directory Name                                  |
| MAINT                    | 193 and 493     | 9345<br>3390<br>3380<br>3375<br>3350 | 1<br>1<br>1<br>1<br>1 | 180           | 150           | Production disk containing Dump Viewing Facilities for RSCS |

**Notes:**

1. Cylinder values defined in this table are based on a 4K block size unless otherwise stated. FB-512 and SFS block values are derived from the 3380 cylinder values in this table.
2. \*NONSFS in the SFS 4K block column means that disk cannot be installed to the shared file system and must remain a minidisk which will be defined in 6.3, "Allocate Resources for Installing RSCS" on page 32. The 400 and 401 minidisks must remain disks since GCS does not support the shared file system.
3. The Delta minidisk should be formatted using a 2K block size.
4. The help, apply, alternate apply, and local sample minidisks should be formatted using 1K block sizes.

### 5.3.2 Optional DASD Storage for RSCS

The following table contains the DASD requirements for the MAINT user ID in order to copy the American English help files into production.

*Figure 14. DASD Storage Requirements for American English Help Files*

| Minidisk owner (user ID) | Default Address | Storage in Cylinders |      | FB-512 Blocks | SFS 4K Blocks | Usage                                                                                                |
|--------------------------|-----------------|----------------------|------|---------------|---------------|------------------------------------------------------------------------------------------------------|
|                          |                 | DASD                 | CYLS |               |               | Default SFS Directory Name                                                                           |
| MAINT                    | 19D             | 9345                 | 8    | 9600          | 1200          | Production disk containing American English help files for RSCS. Format minidisk with 1K block size. |
|                          |                 | 3390                 | 7    |               |               |                                                                                                      |
|                          |                 | 3380                 | 8    |               |               |                                                                                                      |
|                          |                 | 3375                 | 13   |               |               |                                                                                                      |
|                          |                 | 3350                 | 11   |               |               |                                                                                                      |

**Notes:**

1. Cylinder values defined in this table are based on a 4K block size unless otherwise stated. FB-512 and SFS block values are derived from the 3380 cylinder values in this table.
2. The help minidisks should be formatted using a 1K block size.
3. Sizes for MAINT minidisks are additional storage needed for existing MAINT minidisks.

The following table contains the DASD requirements for the P684096K user ID in order to install and service RSCS Data Interchange Manager.

*Figure 15. DASD Storage Requirements for Data Interchange Manager Minidisks*

| Minidisk owner (user ID) | Default Address | Storage in Cylinders |      | FB-512 Blocks | SFS 4K Blocks | Usage                                                                                                        |
|--------------------------|-----------------|----------------------|------|---------------|---------------|--------------------------------------------------------------------------------------------------------------|
|                          |                 | DASD                 | CYLS |               |               | Default SFS Directory Name                                                                                   |
| P684096K                 | 403             | 9345                 | 3    | 3600          | 450           | Production disk for RSCS Data Interchange Manager server; also XCHANGE 191 disk<br><br><b>VMSYS:XCHANGE.</b> |
|                          |                 | 3390                 | 3    |               |               |                                                                                                              |
|                          |                 | 3380                 | 3    |               |               |                                                                                                              |
|                          |                 | 3375                 | 5    |               |               |                                                                                                              |
|                          |                 | 3350                 | 4    |               |               |                                                                                                              |
| XCHANGE                  | 5BF             | 9345                 | 3    | 3600          | 450           | Production log disk for the XCHANGE server.<br><br><b>VMSYS:XCHANGE.LOG</b>                                  |
|                          |                 | 3390                 | 3    |               |               |                                                                                                              |
|                          |                 | 3380                 | 3    |               |               |                                                                                                              |
|                          |                 | 3375                 | 5    |               |               |                                                                                                              |
|                          |                 | 3350                 | 4    |               |               |                                                                                                              |

**Notes:**

1. Cylinder values defined in this table are based on a 4K block size unless otherwise stated. FB-512 and SFS block values are derived from the 3380 cylinder values in this table.
2. The 403 and 5BF minidisks are not optional if using the Data Interchange Manager server.

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The following table contains the DASD requirements for the P684096K user ID in order to install the optional source files for RSCS.

*Figure 16. DASD Storage Requirements for Optional Source*

| Minidisk owner (user ID)                                                                                                                                                                                                                 | Default Address | Storage in Cylinders |      | FB-512 Blocks | SFS 4K Blocks | Usage                                                                                                    |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|----------------------|------|---------------|---------------|----------------------------------------------------------------------------------------------------------|
|                                                                                                                                                                                                                                          |                 | DASD                 | CYLS |               |               | Default SFS Directory Name                                                                               |
| P684096K                                                                                                                                                                                                                                 | 2B3             | 9345                 | 23   | 27600         | 3450          | Contains base assemble, \$exec, and other optional source files<br><br><b>VMSYS:P684096K.RSCS.SOURCE</b> |
|                                                                                                                                                                                                                                          |                 | 3390                 | 20   |               |               |                                                                                                          |
|                                                                                                                                                                                                                                          |                 | 3380                 | 23   |               |               |                                                                                                          |
|                                                                                                                                                                                                                                          |                 | 3375                 | 37   |               |               |                                                                                                          |
|                                                                                                                                                                                                                                          |                 | 3350                 | 30   |               |               |                                                                                                          |
| <b>Notes:</b>                                                                                                                                                                                                                            |                 |                      |      |               |               |                                                                                                          |
| 1. Cylinder values defined in this table are based on a 4K block size unless otherwise stated. FB-512 and SFS block values are derived from the 3380 cylinder values in this table.                                                      |                 |                      |      |               |               |                                                                                                          |
| 2. Cylinder values are based on the source files in packed format. In order to create updates and assemble the files they will need to be unpacked. Disk sizes unpacked will be approximately doubled that which is shown in this table. |                 |                      |      |               |               |                                                                                                          |

The following table contains the DASD requirements for the P684096K and MAINT user IDs in order to install and service uppercase English help files for RSCS.

*Figure 17. DASD Storage Requirements for Uppercase English Help Files*

| Minidisk owner (user ID)                                                                                                                                                            | Default Address | Storage in Cylinders |      | FB-512 Blocks | SFS 4K Blocks | Usage                                                                                                                       |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|----------------------|------|---------------|---------------|-----------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                                                                     |                 | DASD                 | CYLS |               |               | Default SFS Directory Name                                                                                                  |
| P684096K                                                                                                                                                                            | 502             | 9345                 | 8    | 9600          | 1200          | Contains uppercase English help files for RSCS. Format minidisk with 1K block size.<br><br><b>VMSYS:P684096K.RSCS.UHELP</b> |
|                                                                                                                                                                                     |                 | 3390                 | 7    |               |               |                                                                                                                             |
|                                                                                                                                                                                     |                 | 3380                 | 8    |               |               |                                                                                                                             |
|                                                                                                                                                                                     |                 | 3375                 | 13   |               |               |                                                                                                                             |
|                                                                                                                                                                                     |                 | 3350                 | 11   |               |               |                                                                                                                             |
| MAINT                                                                                                                                                                               | 402             | 9345                 | 8    | 9600          | 1200          | Production disk containing uppercase English helps file for RSCS. Format minidisk with 1K block size.                       |
|                                                                                                                                                                                     |                 | 3390                 | 7    |               |               |                                                                                                                             |
|                                                                                                                                                                                     |                 | 3380                 | 8    |               |               |                                                                                                                             |
|                                                                                                                                                                                     |                 | 3375                 | 13   |               |               |                                                                                                                             |
|                                                                                                                                                                                     |                 | 3350                 | 11   |               |               |                                                                                                                             |
| <b>Notes:</b>                                                                                                                                                                       |                 |                      |      |               |               |                                                                                                                             |
| 1. Cylinder values defined in this table are based on a 4K block size unless otherwise stated. FB-512 and SFS block values are derived from the 3380 cylinder values in this table. |                 |                      |      |               |               |                                                                                                                             |
| 2. The help minidisks should be formatted using a 1K block size.                                                                                                                    |                 |                      |      |               |               |                                                                                                                             |
| 3. Sizes for MAINT minidisks are additional storage needed for existing MAINT minidisks.                                                                                            |                 |                      |      |               |               |                                                                                                                             |

The following table contains the DASD requirements for the P684096K and MAINT user IDs in order to install and service Kanji help files for RSCS.

*Figure 18. DASD Storage Requirements for Kanji Help Files*

| Minidisk owner (user ID) | Default Address | Storage in Cylinders |      | FB-512 Blocks | SFS 4K Blocks | Usage                                                                                                             |
|--------------------------|-----------------|----------------------|------|---------------|---------------|-------------------------------------------------------------------------------------------------------------------|
|                          |                 | DASD                 | CYLS |               |               | Default SFS Directory Name                                                                                        |
| P684096K                 | 501             | 9345                 | 8    | 9600          | 1200          | Contains Kanji help files for RSCS. Format minidisk with 1K block size.<br><br><b>VMSYS:P684096K.RSCS.HELPKAN</b> |
|                          |                 | 3390                 | 7    |               |               |                                                                                                                   |
|                          |                 | 3380                 | 8    |               |               |                                                                                                                   |
|                          |                 | 3375                 | 13   |               |               |                                                                                                                   |
|                          |                 | 3350                 | 11   |               |               |                                                                                                                   |
| MAINT                    | 401             | 9345                 | 8    | 9600          | 1200          | Production disk containing Kanji help files for RSCS. Format minidisk with 1K block size.                         |
|                          |                 | 3390                 | 7    |               |               |                                                                                                                   |
|                          |                 | 3380                 | 8    |               |               |                                                                                                                   |
|                          |                 | 3375                 | 13   |               |               |                                                                                                                   |
|                          |                 | 3350                 | 11   |               |               |                                                                                                                   |

**Notes:**

1. Cylinder values defined in this table are based on a 4K block size unless otherwise stated. FB-512 and SFS block values are derived from the 3380 cylinder values in this table.
2. The help minidisks should be formatted using a 1K block size.
3. Sizes for MAINT minidisks are additional storage needed for existing MAINT minidisks.

The following table contains the DASD requirements for the P684096K and MAINT user IDs in order to install and service German help files for RSCS.

*Figure 19 (Page 1 of 2). DASD Storage Requirements for German Help Files*

| Minidisk owner (user ID) | Default Address | Storage in Cylinders |      | FB-512 Blocks | SFS 4K Blocks | Usage                                                                                                              |
|--------------------------|-----------------|----------------------|------|---------------|---------------|--------------------------------------------------------------------------------------------------------------------|
|                          |                 | DASD                 | CYLS |               |               | Default SFS Directory Name                                                                                         |
| P684096K                 | 505             | 9345                 | 8    | 9600          | 1200          | Contains German help files for RSCS. Format minidisk with 1K block size.<br><br><b>VMSYS:P684096K.RSCS.HELPGER</b> |
|                          |                 | 3390                 | 7    |               |               |                                                                                                                    |
|                          |                 | 3380                 | 8    |               |               |                                                                                                                    |
|                          |                 | 3375                 | 13   |               |               |                                                                                                                    |
|                          |                 | 3350                 | 11   |               |               |                                                                                                                    |

**Notes:**

1. Cylinder values defined in this table are based on a 4K block size unless otherwise stated. FB-512 and SFS block values are derived from the 3380 cylinder values in this table.
2. The help minidisks should be formatted using a 1K block size.
3. Sizes for MAINT minidisks are additional storage needed for existing MAINT minidisks.

Figure 19 (Page 2 of 2). DASD Storage Requirements for German Help Files

| Minidisk owner (user ID) | Default Address | Storage in Cylinders |      | FB-512 Blocks | SFS 4K Blocks | Usage                                                                                       |
|--------------------------|-----------------|----------------------|------|---------------|---------------|---------------------------------------------------------------------------------------------|
|                          |                 | DASD                 | CYLS |               |               | Default SFS Directory Name                                                                  |
| MAINT                    | 405             | 9345                 | 8    | 9600          | 1200          | Production disk containing German help files for RSCS. Format minidisk using 1K block size. |
|                          |                 | 3390                 | 7    |               |               |                                                                                             |
|                          |                 | 3380                 | 8    |               |               |                                                                                             |
|                          |                 | 3375                 | 13   |               |               |                                                                                             |
|                          |                 | 3350                 | 11   |               |               |                                                                                             |

**Notes:**

1. Cylinder values defined in this table are based on a 4K block size unless otherwise stated. FB-512 and SFS block values are derived from the 3380 cylinder values in this table.
2. The help minidisks should be formatted using a 1K block size.
3. Sizes for MAINT minidisks are additional storage needed for existing MAINT minidisks.

4 The following table contains the DASD requirements for the RSCSDNS user ID.

4 Figure 20. DASD Storage Requirements for the RSCSDNS user ID

| Minidisk owner (user ID) | Default Address | Storage in Cylinders |      | FB-512 Blocks | SFS 4K Blocks | Usage                      |
|--------------------------|-----------------|----------------------|------|---------------|---------------|----------------------------|
|                          |                 | DASD                 | CYLS |               |               | Default SFS Directory Name |
| RSCSDNS                  | 191             | 9345                 | 1    | 180           | 150           | Server's 191 minidisk.     |
|                          |                 | 3390                 | 1    |               |               |                            |
|                          |                 | 3380                 | 1    |               |               |                            |
|                          |                 | 3375                 | 1    |               |               |                            |
|                          |                 | 3350                 | 1    |               |               |                            |

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## 6.0 Installation Instructions

This chapter describes the installation methods and the step-by-step procedures to install and activate RSCS.

The step-by-step procedures are in a two-column format. The steps to be performed are in bold large numbers. Commands for these steps are on the left-hand side of the page in bold print. Additional information for a command may exist to the right of the command. For more information about the two-column format see "Understanding Dialogs with the System" in the appropriate *VM Installation Guide*.

Each step of the installation instructions must be followed. Do not skip any step unless otherwise directed. All instructions showing accessing of disks assumes the use of default minidisk addresses or SFS directories. If different minidisk addresses or SFS directory names are used, change the instructions appropriately.

### Note!

5 The sample console output presented throughout these instructions was produced on a VM/ESA 1.2.1 system using minidisks. If you are installing RSCS on a different VM/ESA or z/VM system, or are using shared file directories, the results obtained for some commands may differ from those depicted here.

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## 6.1 VMSES/E Installation Process Overview

The following is a brief description of the main steps in installing RSCS using VMSES/E.

- Plan Your Installation

Use the VMFINS command to load several VMSES/E files from the product tape and to obtain RSCS resource requirements.

- Allocate Resources

The information obtained from the previous step is used to allocate the appropriate minidisks (or SFS directories) and user IDs needed to install and use RSCS.

- Install the RSCS Product

Use the VMFINS command to load the RSCS product files from tape to the test Build and Base minidisks/directories. VMFINS is then used to update the VM SYSBLDS file used by VMSES/E for software inventory management.

- Perform Post-installation Tasks

Information about file tailoring and initial activation of the program is presented in 6.8, "Post Installation" on page 47.

- Place the RSCS Files into Production

Once the product files have been tailored and the operation of RSCS is satisfactory, the product files are copied from the test Build disk(s) or directories to production Build disk(s) or directories.

For a complete description of all VMSES/E installation options refer to *VMSES/E Introduction and Reference* manual.

## 6.2 Plan Your Installation

- 5 — **VM/ESA 2.3.0, 2.4.0, or z/VM Details**
- 5 • If installing VM/ESA 2.3.0, 2.4.0, or z/VM, and you **are already** licensed for RSCS 3.2.0, most of  
6 the install steps for RSCS are complete. You will only need to complete steps 1 on page 28  
6 through 5 on page 29 in this section, then continue with:
    - 4 – 6.8, “Post Installation” on page 47,
    - 4 – Appendix A, “Test the Installation/Service for RSCS” on page 79, and
    - 4 – 6.9, “Place RSCS Into Production” on page 58.
  - 5 • If installing VM/ESA 2.3.0, 2.4.0, or z/VM, and you **are not** licensed for RSCS 3.2.0, the installation  
4 of RSCS is complete. You will only need to complete instructions in 6.9, “Place RSCS Into  
4 Production” on page 58 starting with 6.9.3, “Copy the Server Code to the Server Minidisks or  
2 Directories” on page 60, then continue with the following:
    - 2 – Review the “Printing with the RSCS Server” chapter of the *TCP/IP for VM Planning and*  
2 *Customization* manual, SC24-5847
    - 2 – Make sure the GCS recovery machine is autologged by the TCPIP server (the TCPIP  
2 configuration file has an autolog statement for GCS).
    - 2 – Make sure the RSCS and RSCSDNS server's are autologged by the GCS recovery machine  
2 (the PROFILE GCS file has an autolog statement for RSCS and RSCSDNS).
  - 5 • If installing VM/ESA 2.3.0, 2.4.0, or z/VM, and you **are planning** to license RSCS 3.2.0, you  
2 should contact your IBM marketing representative and order RSCS as described in 2.0, “Program  
2 Materials” on page 3. Remember to check the area which indicates to suppress media shipment,  
2 which will order you a set of manuals, and license you, for RSCS 3.2.0. After ordering the product,  
6 You will only need to complete steps 1 on page 28 through 5 on page 29 in this section, then  
2 continue with 6.8, “Post Installation” on page 47.

The VMFINS command will be used to plan the installation. This is a two step process that will:

- load the first tape file, containing RSCS PPF and PRODPART files
- generate a 'PLANINFO' file listing:
  - all user ID/mdisks requirements
  - required products

To obtain planning information for your environment:

**1** Log on as the RSCS installation planner.

2 This user ID can be any ID that has the following:

- 5 • Privilege **class E** authority required for VM/ESA 2.3.0, 2.4.0, or z/VM
- 5 installations.
- 2 • read access to MAINT's 5E5 minidisk
- 2 • write access to MAINT's 51D minidisk

**2** Establish read access to VMSES/E code.

**link maint 5e5 5e5 rr**  
**access 5e5 b**

The 5E5 disk is where VMSES/E resides.

**3** Establish write access to the Software Inventory disk (MAINT 51D).

**link maint 51d 51d mr**  
**access 51d d**

The MAINT 51D disk is where the VMSES/E system level software inventory files reside.

**Note:** If another user already has the MAINT 51D minidisk linked in write mode (R/W), you will only obtain read access (R/O) to this minidisk. If this occurs, you will need to have that user re-link the 51D in read-only mode (RR), and then re-issue the above LINK and ACCESS commands. Do not continue with these procedures until a write link is established to the 51D minidisk. Do not use *mw* mode.

2 **What's Next?**

5 RSCS 3.2.0 is pre-installed on VM/ESA 2.3.0, 2.4.0, or z/VM, using VMSES/E, in a DISABLED  
2 state. **If, and only if**, you have a license for RSCS 3.2.0, you need to enable it for use. If you  
2 are:

- 5 • running on VM/ESA 2.3.0, 2.4.0, or z/VM, and
- 2 • are licensed for RSCS

2 then continue with step 4 on page 29.

2 Otherwise, continue with step 6 on page 30.

5

VM/ESA 2.3.0, 2.4.0, or z/VM Licensed Users of RSCS 3.2.0 only!

5

**4** Set RSCS to the enabled state. VMFINS ENABLE will set RSCS as ENABLED in VMSES/E, and issue the CP SET PRODUCT ENABLE command. The results are later used by RSCS to determine whether the entire product is available or just the TCP/IP-related functions.

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**vmfins enable ppf 5684096K {RSCSIRSCSSFS}**

Use RSCS if installing using minidisk or RSCSSFS if installing using SFS.

2

5

This command will create a 5684096K PRODSYS file on the A-disk that contains the CP system configuration PRODUCT statement with a state of ENABLED.

5

5

5

4

**5** In order to **retain the ENABLED state** for RSCS, **update the CP system configuration file** with the information in the 5684096K PRODSYS file; which was created in the previous step.

4

4

4

You need to update the CP system config file so that the next time you IPL your system RSCS will be in the ENABLED state. If you are not authorized to update the CP system configuration file then contact your CP System Administrator. The CP system configuration file default name is SYSTEM CONFIG and it resides on the CP parm disk (MAINTs CF1, CF2 and CF3 minidisks). The section, PRODUCT ENABLE/DISABLE INFORMATION, in the SYSTEM CONFIG file, needs to be updated. You will need to replace the current DISABLED entry for PROPID 5684096K (RSCS) with the entry from the 5684096K PRODSYS file. Once the SYSTEM CONFIG is working, it should be backed up to the CF2 and CF3 disks. The CF3 disk is new with z/VM 4.1.0. If necessary, refer to the *Planning and Administration* manual for more information.

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**What's Next?**

Continue with 6.8, "Post Installation" on page 47.

2

2

**Notes:**

2

1. If, in the future, you are no longer licensed for RSCS 3.2.0, you **must** follow the instructions in Appendix G, "Disabling RSCS" on page 192 to disable RSCS.

2

2

2. If you do not have a set of manuals for RSCS 3.2.0, you should contact your IBM marketing representative and order RSCS as described in 2.0, "Program Materials" on page 3.

2

2

Remember to check the area which indicates to suppress media shipment.

2

End of VM/ESA 2.3.0, 2.4.0, or z/VM Licensed Users of RSCS 3.2.0 only!

2  
2  
2

**6** Mount the RSCS installation tape and attach it to this user ID at virtual address 181. The VMFINS EXEC requires the tape drive to be at virtual address 181.

**7** Load RSCS specific files to the 51D disk.

#### **vmfins install info (nomemo)**

The NOMEMO option will load the memos but will not issue a prompt to send them to the system printer. Use MEMO if you wish to be prompted for printing the memo.

This command will perform the following:

- Loads the Memo-to-Users
- Loads the product installation files (PPF and PRODPART)
- Creates the VMFINS PRODLIST on your A-disk. The VMFINS PRODLIST contains a list of products on the installation tape.

```
VMFINS2767I Reading VMFINS DEFAULTS B for additional options
VMFINS2760I VMFINS processing started
VMFINS1909I VMFINS PRODLIST created on your A-disk
VMFINS2760I VMFINS processing completed successfully
Ready;
```

**8** Obtain resource planning information for RSCS

**Note:** The product will not be loaded by the VMFINS command at this time.

#### **vmfins install ppf 5684096K {RSCSIRSCSSFS} (plan nomemo)**

Use **RSCS** if installing using minidisks or **RSCSSFS** if installing using SFS.

The PLAN option indicates that you want VMFINS to perform requisite checking, plan system resources, and provide an opportunity to override the defaults in the product parameter file.

**You can override the following:**

- the name of the product parameter file
- the default user IDs
- minidisk/directory definitions



**Notes:**

- a. If you change the PPF name, a default user ID, or other parameters via a PPF override, you will need to use your changed values instead of those indicated (when appropriate), throughout the rest of the installation instructions, as well as those indicated for servicing RSCS. For example, you will need to specify your PPF override file name instead of 5684096K for certain VMSES/E commands. For more information about changing the VMSYS file pool name see Appendix D, "Overriding the VMSYS File Pool Name" on page 107
- b. If you are not familiar with creating PPF overrides using VMFINS, you should review the 'Using the Make Override Panel' section in Chapter 3 of the *VMSES/E Introduction and Reference* before you continue.
- c. If you do choose to make overrides, be sure they are filed on the 51D disk.

```
VMFINS2767I Reading VMFINS DEFAULTS B for additional options
VMFINS2760I VMFINS processing started
VMFINS2601R Do you want to create an override for :PPF 5684096K RSCS :PRODID
5684096K%RSCS?
Enter 0 (No), 1 (Yes) or 2 (Exit)
0
VMFINS2603I Processing product :PPF 5684096K RSCS :PRODID 5684096K%RSCS
VMFREQ1909I 5684096K PLANINFO created on your A-disk
VMFREQ2805I Product :PPF 5684096K RSCS :PRODID 5684096K%RSCS has passed
requisite checking
VMFINT2603I Planning for the installation of product :PPF 5684096K RSCS :PRODID
5684096K%RSCS
VMFRMT2760I VMFRMT processing started
VMFRMT2760I VMFRMT processing completed successfully
VMFINS2760I VMFINS processing completed successfully
Ready;
```

- 9 Review the install message log (\$VMFINS \$MSGLOG). If necessary, correct any problems before going on. For information about handling specific error messages, see the applicable *System Messages and Codes*, or use online HELP.

**vmfview install**

---

## 6.3 Allocate Resources for Installing RSCS

Use the planning information in the 5684096K PLANINFO file, created in the PLAN step, to:

- Create the following user ID directories:
  - P684096K
  - RSCS
  - XCHANGE (if using Data Interchange Manager)
  - 4 – RSCSDNS (see F.2, “Domain Name Server Support” on page 136 for information on the
  - 4 RSCSDNS user ID).

4 **Note:** There is no need to create the RSCS and XCHANGE user IDs if they already exist. Minidisk  
4 sizes may need to be increased to match sizes defined in 5.3, “DASD Storage Requirements” on  
4 page 18.

- Place the new directory online

**1** Obtain the directory entries from the 5684096K PLANINFO file.

**Note:** The user directory entries are located at the bottom of the PLANINFO file. This will contain all of the necessary links and privilege classes necessary for all of the user IDs. Use the directory entry found in PLANINFO as model input to your system directory.

**2** If you are using minidisks, add the MDISK statements to the directory entry for the P684096K and XCHANGE user IDs. If appropriate, also place passwords on the MDISK statements. Use Figure 13 on page 19 to obtain the minidisk requirements.

**Note:**

You should obtain minidisk requirements at this time for all optional installation features for RSCS you intend to use. These requirements can be obtained as follows:

- Obtain Data Interchange Manager requirements from Figure 15 on page 22.
- Obtain MAINT user ID American English help file requirements from Figure 14 on page 22.
- Obtain optional source requirements from Figure 16 on page 23.
- Obtain uppercase English help file requirements from Figure 17 on page 23.
- Obtain Kanji help file requirements from Figure 18 on page 24.
- Obtain German help file requirements from Figure 19 on page 24.

All minidisks should be formatted at this time.

**3** If you are using SFS then you will need to do the following:

- a** Determine the number of 4K blocks that are required for SFS directories. From the 5684096K PLANINFO file add up all of the 4K blocks for all of the SFS directories listed or add up all of the SFS blocks in Figure 13 on page 19. This will give you the total number of 4K blocks that are required to install RSCS. This information will be used when enrolling the P684096K user ID to the VMSYS filepool. Note that the 400 and 401 minidisks cannot be placed in a SFS directory.

**Note:** You should obtain SFS/disk requirements at this time for all optional installation features for RSCS you intend to use. These requirements can be obtained as follows:

- Obtain Data Interchange Manager requirements from Figure 15 on page 22. You should also grant write authority to P684096K for the Data Interchange Manager production SFS directory:  
grant auth xchange. to P684096K (write
- Obtain MAINT user ID American English help file requirements from Figure 14 on page 22.
- Obtain optional source requirements from Figure 16 on page 23.
- Obtain uppercase English help file requirements from Figure 17 on page 23.
- Obtain Kanji help file requirements from Figure 18 on page 24.
- Obtain German help file requirements from Figure 19 on page 24.

- b** Enroll user P684096K in the VMSYS filepool using the ENROLL USER command:

**enroll user P684096K vmsys (blocks *blocks***

where *blocks* is the number of 4K blocks that you calculated in the previous step.

**Notes:**

1. This must be done from a user ID that is an administrator for the VMSYS filepool.
2. If you will be using Data Interchange Manager, you should also enroll the XCHANGE user in the VMSYS filepool at this time.

- c** Determine if there are enough blocks available in the filepool to install RSCS. This information can be obtained from the QUERY FILEPOOL STATUS command. Near the end of the output from this command is a list of minidisks in the filepool and the number of blocks free. If the

5  
5

number of blocks free is smaller than the total 4K blocks needed to install RSCS you will need to add space to the filepool. See the *SFS and CRR Planning, Administration, and Operation* manual (VM/ESA Version 1) or the *CMS File Pool Planning, Administration, and Operation* manual (VM/ESA Version 2 or z/VM Version 3 or higher) for information on adding space to a filepool.

- d** Create the necessary subdirectories listed in the 5684096K PLANINFO file using the CREATE DIRECTORY command.

**set filepool vmsys:  
create directory *dirid***

*dirid* is the name of the SFS directory you are creating, such as:

```
create directory vmsys:P684096K.RSCS.object  
create directory vmsys:P684096K.RSCS.localsam  
:
```

If necessary, see the *CMS Command Reference* manual for more information about the CREATE DIRECTORY command.

A complete list of default RSCS SFS directories is provided in Figure 13 on page 19.

- e** Create the P684096K 400 and 401 minidisks. These must remain minidisks since GCS does not support SFS directories. Add the MDISK statements for each disk allocated to the P684096K user ID directory.

**Note:** These minidisks should be formatted at this time.

- f** If you intend to use an SFS directory as the work space for the P684096K used ID, include the following IPL control statement in the P684096K directory entry:

```
IPL CMS PARM FILEPOOL VMSYS
```

This will cause CMS to automatically access the VMSYS:P684096K directory as file mode A.

**Note:** If you will be using Data Interchange Manager, you should do the same for the XCHANGE user ID.

- 4** Change the passwords for the RSCS, XCHANGE, and P684096K user IDs from NOLOG to a valid one of your choice. Any virtual machine whose password is NOLOG cannot be logged on.
- 5** If VTAM is not installed, remove the link to MAINT's 29A from the installation directory.

2  
2

**6** If VTAM 4.2 is installed, then change the link to MAINT's 29A in the installation directory to the VTAM install ID's (5654010A) 29A minidisk.

**7** Add all of the user ID directories to the user directory.

**8** Place the new directories online using IBM Directory Maintenance for VM/ESA (DirMaint) 1.5 or an equivalent CP directory maintenance method.

**Notes:**

- a. DIRMAINT 1.4 requires 80-byte fixed length directory entries. DirMaint 1.5 does not have this requirement.
- b. All minidisks for the P684096K user ID must be formatted before installing RSCS.

---

## 6.4 Install RSCS

The *ppfname* used throughout these instructions is **5684096K**, which assumes you are using the PPF supplied by IBM for VM/RSCS. If you have your own PPF override file for VM/RSCS, you should use your file's *ppfname* instead of 5684096K. The *ppfname* you use should be used **throughout** the rest of this procedure.

**1** Log on to the installation user ID **P684096K**.

**2** Create a PROFILE EXEC that will contain the access of MAINT's 5E5 and 51D minidisks.

**xedit profile exec a**

====> input /\*\*/

====> input address command 'ACCESS 5E5 B'

====> input address command 'ACCESS 51D D'

====> file

**3** Establish write access to the Software Inventory Disk (MAINT 51D) if it is not already linked R/W.

**Note:** If the MAINT 51D minidisk was accessed R/O, you will need to have the user who has it linked R/W link it as R/O. You then can issue the following command to obtain R/W access to it.

**link maint 51d 51d mr**

The MAINT 51D disk is where the VMSES/E system level software inventory files reside.

**4** Execute the profile to access the 5E5 and 51D disks.

**profile**

**5** Have the RSCS installation tape mounted and attached to **P684096K** at virtual address 181. The VMFINS EXEC requires the tape drive to be at virtual address 181.

**6** Install RSCS

**Notes:**

- a. You may be prompted for additional information during VMFINS INSTALL processing depending on your installation environment. If you are unsure how to respond to a prompt, refer to the “Installing Products with VMFINS” and “Install Scenarios” chapters in the *VMSES/E Introduction and Reference* to decide how to proceed.

**vmfins install ppf 5684096K {RSCSIRSCSSFS} (nomemo nolink**

Use **RSCS** if installing using minidisks or **RSCSSFS** if installing using SFS.

The NOLINK option indicates that you don't need VMFINS to link to the appropriate minidisks, only access them if not accessed.

```

VMFINS2767I Reading VMFINS DEFAULTS B for additional options
VMFINS2760I VMFINS processing started
VMFINS2601R Do you want to create an override for :PPF 5684096K RSCS :PRODID
5684096K%RSCS?
Enter 0 (No), 1 (Yes) or 2 (Exit)
0
VMFINS2603I Processing product :PPF 5684096K RSCS :PRODID 5684096K%RSCS
VMFREQ2805I Product :PPF 5684096K RSCS :PRODID 5684096K%RSCS has passed
requisite checking
VMFREQ2805I Installing product :PPF 5684096K RSCS :PROD ID 5684096K%RSCS
VMFSET2760I VMFSETUP processing started
VMFUTL2205I Minidisk|Directory Assignments:
String Mode Stat Vdev Label/Directory
VMFUTL2205I LOCALSAM E R/W 2C2 P682C2
VMFUTL2205I APPLY F R/W 2A6 P682A6
VMFUTL2205I G R/W 2A2 P682A2
VMFUTL2205I DELTA H R/W 2D2 P682D2
VMFUTL2205I BUILD0 I R/W 400 P68400
VMFUTL2205I BUILD2 J R/W 29D P6829D
VMFUTL2205I BUILD3 K R/W 402 P68402
VMFUTL2205I BUILD6 L R/W 406 P68406
VMFUTL2205I BASE1 M R/W 2B2 P682B2
VMFUTL2205I ----- A R/W 191 P68191
VMFUTL2205I ----- B R/O 5E5 MNT5E5
VMFUTL2205I ----- D R/W 51D MNT51D
VMFUTL2205I ----- S R/O 190 MNT190
VMFUTL2205I ----- Y/S R/O 19E YDISK
VMFSET2760I VMFSETUP processing completed successfully
VMFREC2760I VMFREC processing started
VMFREC1852I Volume 1 of 1 of INS TAPE 9500
VMFREC1851I (1 of 10) VMFRCAXL processing AXLIST
VMFRCX2159I Loading n part(s) to DELTA 2D2 (H)
VMFREC1851I (2 of 10) VMFRCPTF processing PARTLST
VMFRCP2159I Loading n part(s) to DELTA 2D2 (H)
.
.
.
VMFREC1851I (10 of 10) VMFRCCOM processing XCHANGE
VMFRCA2159I Loading part(s) to BUILD3 402 (K)
VMFRCC2159I Loaded n part(s) to BUILD3 402 (K)
VMFREC2760I VMFREC processing completed successfully
VMFINT2603I Product installed
VMFINS2760I VMFINS processing completed successfully
Ready;

```

**7** Review the install message log (\$VMFINS \$MSGLOG). If necessary, correct any problems before going on. For information about handling specific error

messages, see the applicable *System Messages and and Codes*, or use online HELP.

## vmfview install

---

### 6.5 Load the Recommended Service Upgrade Tape

Included with the RSCS product tape may be a tape volume referred to as the IBM Recommended Service Upgrade Tape (RSU). This tape includes recommended service that was not included on the RSCS product tape that should also be installed.

If this tape has not been included with RSCS, then an RSU has not yet been made available. In this case, continue on with step 6.6, "Optional Installation Steps" on page 41.

The *ppfname* used throughout these instructions is **5684096K**, which assumes you are using the PPF supplied by IBM for VM/RSCS. If you have your own PPF override file for VM/RSCS, you should use your file's *ppfname* instead of 5684096K. The *ppfname* you use should be used **throughout** the rest of this procedure.

- 1** Log on to the installation user ID **P684096K**.
  
- 2** Establish write access to the Software Inventory Disk (MAINT 51D) if it is not already linked R/W.  
**Note:** If the MAINT 51D minidisk was accessed R/O, you will need to have the user who has it linked R/W link it as R/O. You then can issue the following commands to obtain R/W access to it.

**link maint 51d 51d mr  
access 51d d**

The MAINT 51D disk is where the VMSES/E system level software inventory files reside.

- 4 **3** Have the RSCS RSU tape mounted and attached to **P684096K** at virtual address 181. The VMFINS EXEC requires the tape drive to be at virtual address 181.
  
- 4 **4** Receive the documentation  
Receive the documentation on the tape for the RSU. This step will also load the cumulative Apply Status Table (RSCS SRVAPPS) which identifies all preapplied service contained on the tape. These files are loaded to the 51D disk.

## vmfins install info (nomemo)



**5** Determine DASD sizes for disks to receive service:

In order to receive the service from the RSU tape, you need to have adequate space available on the alternate APPLY, Delta, and Build disks or directories. The required sizes are identified in the RSCS documentation (5684096K MEMO D) received in the previous step.

**6** Enter the VMFINS command to load the contents of the RSU tape.

**vmfins install ppf 5684096K {RSCSIRSCSSFS} (nomemo nolink**

Refresh the RSCS service disks by loading new service from the RSU tape.

Use **RSCS** if installing using minidisks or **RSCSSFS** if installing using SFS.

The NOLINK option indicates that you don't need VMFINS to link to the appropriate minidisks, only access them if not accessed.

When prompted for creating an override enter a **0**.

```

VMFINS2767I Reading VMFINS DEFAULTS B for additional options
VMFINS2760I VMFINS processing started
VMFINS2601R Do you want to create an override for :PPF 5684096K RSCS :PRODID
5684096K%RSCS?
Enter 0 (No), 1 (Yes) or 2 (Exit)
0
VMFINS2603I Processing product :PPF 5684096K RSCS :PRODID 5684096K%RSCS
VMFREQ2805I Product :PPF 5684096K RSCS :PRODID 5684096K%RSCS has passed
requisite checking
VMFREQ2805I Installing product :PPF 5684096K RSCS :PRODID 5684096K%RSCS
VMFSET2760I VMFSETUP processing started
VMFUTL2205I Minidisk|Directory Assignments:
String Mode Stat Vdev Label/Directory
VMFUTL2205I LOCALSAM E R/W 2C2 P682C2
VMFUTL2205I APPLY F R/W 2A6 P682A6
VMFUTL2205I G R/W 2A2 P682A2
VMFUTL2205I DELTA H R/W 2D2 P682D2
VMFUTL2205I BUILD0 I R/W 400 P68400
VMFUTL2205I BUILD2 J R/W 29D P6829D
VMFUTL2205I BUILD3 K R/W 402 P68402
VMFUTL2205I BUIDL6 L R/W 406 P68406
VMFUTL2205I BASE1 M R/W 2B2 P682B2
VMFUTL2205I ----- A R/W 191 P68191
VMFUTL2205I ----- B R/O 5E5 MNT5E5
VMFUTL2205I ----- D R/W 51D MNT51D
VMFUTL2205I ----- S R/O 190 MNT190
VMFUTL2205I ----- Y/S R/O 19E MNT19E
VMFSET2760I VMFSETUP processing completed successfully
VMFREC2760I VMFREC processing started
VMFREC1852I Volume 1 of 1 of INS TAPE yynn
.
.
.
VMFREC2760I VMFREC processing completed successfully
VMFINT2603I Product installed
VMFINS2760I VMFINS processing completed successfully
Ready;

```

- 7 Review the install message log (\$VMFINS \$MSGLOG). If necessary, correct any problems before going on. For information about handling specific error messages, see the applicable *System Messages and Codes*, or use online HELP.

## vmfview install

---

## 6.6 Optional Installation Steps

This section describes optional install steps that include uppercase English help files, optional source, NLS features, and local modifications.

If you plan on doing any of the following:

- 6.6.1, “Create Uppercase English Help Files”
- 6.6.2, “Install NLS features”
- 6.6.3, “Install Optional Source Files”
- 6.6.4, “Local Modifications to RSCS”

Then continue with all applicable steps. Otherwise continue with 6.7, “Update Build Status Table for RSCS.”

### 6.6.1 Create Uppercase English Help Files

- 1** Make sure you are logged on to P684096K and have write access to the 51D disk.

**Note:** You should have already obtained the necessary resources in the plan section. If not, resource requirements are obtained from Figure 17 on page 23.

- 2** Create uppercase English help files from American English Help Files.

**a** If installing using minidisks

```
access 29d e
access 502 f
vmfcopy * * e = f (prodid 5684096K%RSCS upcase olddate
```

**b** If installing using SFS

```
access VMSYS:P684096K.RSCS.HELP e
access VMSYS:P684096K.RSCS.UHELP f
vmfcopy * * e = f (prodid 5684096K%RSCS upcase olddate
```

## 6.6.2 Install NLS features

The RSCS NLS features will be installed through VMSES/E support using the same user ID, P684096K, as the base. French, Canadian French, and German languages are already built into the RSCS LOADLIB. Only the help files are shipped on the NLS feature tapes. If the help files are desired then follow the steps in this section.

### Notes:

1. Kanji has been translated for help files only.
- 4 2. French and Canadian French have been translated for messages only. No NLS feature is available.
3. German has been translated for messages and help files.
4. The install steps have to be repeated for each NLS feature you are installing.
  - 1** Make sure you are logged on to P684096K and have write access to the 51D disk.

**Note:** You should have already obtained the necessary resources in the plan section. If not, resource requirements are obtained from Figure 18 on page 24 for Kanji and Figure 19 on page 24 for German.
  - 2** Have the NLS Feature installation tape mounted and attached to **P684096K** at virtual address 181.
  - 3** Load RSCS specific files to the 51D disk.

### vmfins install info (nomemo)

The NOMEMO option will load the memos but will not issue a prompt to send them to the system printer. Use MEMO if you wish to be prompted for printing the memo.

This command will perform the following:

- Loads the Memo-to-Users
- Loads the product installation files (PPF and PRODPART)
- Creates the VMFINS PRODLIST on your A-disk. The VMFINS PRODLIST contains a list of products on the installation tape.

```
VMFINS2767I Reading VMFINS DEFAULTS B for additional options
VMFINS2760I VMFINS processing started
VMFINS1909I VMFINS PRODLIST created on your A-disk
VMFINS2760I VMFINS processing completed successfully
Ready;
```

## 4 Install NLS Feature

**vmfins install ppf *ppfname* {RSCS|RSCSSFS} (nomemo nolink**

***ppfname*** will be either **5684096M** when installing Kanji or **5684096L** when installing German.

Use **RSCS** if installing using minidisks or **RSCSSFS** if installing using SFS.

When prompted for creating an override either enter a **0** if you do not want to create an override, or enter a **1** to create one.

### 6.6.3 Install Optional Source Files

The *ppfname* used to install optional source is **5684096K**, which assumes you are using the PPF supplied by IBM for VM/RSCS. If you have your own PPF override file for VM/RSCS, you should use your file's *ppfname* instead of 5684096K.

#### 4 — RSCS/VTAM Interface Information —

4 IBM recommends that RSCS system administrators who will be defining and using SNA links should  
4 work with the RSCSTAB ASSEMBLE file from the VTAM service ID. After appropriate modification,  
4 this file may be assembled and incorporated in a VTAM user load library using either VMFLKED or  
6 VTAM VMSES/E service techniques. See informational APAR II09266 for VTAM VMSES/E tips.

**1** Make sure you are logged on to P684096K and have write access to the 51D disk.

**Notes:**

- a. You should have already obtained the necessary resources in the plan section. If not, resource requirements are obtained from Figure 16 on page 23.
- b. DASD sizes in the referenced table are for source files in packed format. If you plan on creating updates for this source, then you will need to unpack the files. DASD space for all source unpacked will be approximately double that shown in the referenced table. To unpack the source on the 2B3 minidisk, issue:

copy fn ft fm = = = (rep oldd unpack

**2** If you do not have VTAM installed on your system, or if your VTAMAC MACLIB file is on a minidisk other than the MAINT 29A disk, you must create

a PPF override to remove or change the BASE7 disk from the RSCSSRC or RSCSSSFS component override in the 5684096K file.

2 Below are two examples of creating PPF overrides, one to change the  
2 minidisk location and the other to remove the minidisk. Choose one of the  
2 examples and type them in, as shown, to a file with a filename of your choice  
2 and a filetype of \$PPF. Compile this override using the VMFPPF command  
2 (**VMFPPF** *ppfname compname*). See the *VMSES/E Introduction and*  
2 *Reference* manual for further details on creating PPF overrides.

2 An example of a PPF override to change the MAINT 29A disk to 5654010A  
2 29A (VTAM 4.2's install ID) is:

```
| :OVERLST. RSCSSRC  
| :RSCSSRC. RSCSSRC 5684096K  
| :DCL. UPDATE  
| ./DELETE &BAS7Z  
| ./INSERT &BAS6Z AFTER  
2 &BAS7Z LINK 5654010A 29A 29A RR * VTAM MacLib disk  
| ./END  
| :EDCL.  
| :END.
```

| An example of a PPF override to remove the MAINT 29A disk:

```
| :OVERLST. RSCSSRC  
| :RSCSSRC. RSCSSRC 5684096K  
| :DCL. UPDATE  
| ./DELETE &BAS7Z  
| :EDCL.  
| :MDA. UPDATE  
2 ./DELETE BASE7  
| :EMDA.  
| :END.
```

**3** Have the product tape mounted and attached to **P684096K** at virtual address 181.

**4** Install Optional Source Using VMFINS

**vmfins install ppf 5684096K {RSCSSRC|RSCSSSFS} (nomemo nolink**

Use **RSCSSRC** if installing using minidisks or  
**RSCSSSFS** if installing using SFS.

When prompted for creating an override enter a **0**.

## 6.6.4 Local Modifications to RSCS

If any local modifications to RSCS are needed at this time, refer to chapter 7 in the *Service Guide*. Follow the steps that are applicable for your local modification.

The following substitutions need to be made in the service guide when doing local modifications to RSCS:

- 5 • **esa** or **zvm** should be **5684096K**
- *compname* should be **RSCSSRC** (minidisk) or **RSCSSSFS** (SFS) if modifying any part on the 2B3 minidisk or directory, otherwise use **RSCS** (minidisk) or **RSCSSFS** (SFS) for modifying any part on the 2B2 minidisk or directory.
- *appid* should be **5684096K**
- 6 • *fm-local* should be the filemode where the 2C2 is accessed
- 6 • *fm-applyalt* should be the filemode where the of 2A6 is accessed
- 5 • **outmode localmod** should be **outmode localsam**

A couple of things that you need to keep in mind are:

- The "Compile National Language Files" section is not applicable to RSCS. RSCS languages are compiled using the MCOMP EXEC through the local modification procedure instructions in Appendix B, "Local Modification Example: Assemble File" on page 97.
- When you get to the "Rebuilding Objects" step in the *Service Guide* you should return back to this program directory at 6.7, "Update Build Status Table for RSCS."
- There is a local modification assemble file example in Appendix B, "Local Modification Example: Assemble File" on page 97.

---

## 6.7 Update Build Status Table for RSCS

- 1** Make sure you are logged on to P684096K and have write access to the 51D disk.
- 2** Update the VM SYSBLDS software inventory file for RSCS

**vmfins build ppf 5684096K {RSCS|RSCSSFS} (serviced nolink**

Use **RSCS** if installing using minidisks or **RSCSSFS** if installing using SFS.

The **serviced** option will update the software inventory build status table showing that 5684096K has been built.

**Note**

If the \$PPF files have been serviced you will get the following prompt:

```
VMFBLD2760I VMFBLD processing started
VMFBLD1851I Reading build lists
VMFBLD2182I Identifying new build requirements
VMFBLD2185R The following source product parameter files have been
serviced:
VMFBLD2185R 5684096K $PPF
VMFBLD2185R When source product parameter files are serviced, all
product parameter files built from them must be recompiled
using VMFPPF before VMFBLD can be run.
VMFBLD2185R Enter zero (0) to have the serviced source product
parameter files built to your A-disk and exit VMFBLD so
you can recompile your product parameter files with VMFPPF
Enter one (1) to continue only if you have already
recompiled your product parameter files with VMFPPF
```

**0** Enter a 0 and complete the following steps before you continue.

```
VMFBLD2188I Building 5684096K $PPF on 191 (A) from level $PFnnnnn
```

**vmfppf 5684096K {RSCSIRSCSSFS}**

Use component name **RSCS** if installing using minidisks or **RSCSSFS** if installing using SFS

**Note:** If you've created your own PPF override then use your PPF name instead of 5684096K.

You should recompile all overrides to ensure they are at the proper level for future use.

**copyfile 5684096K \$ppf a = d (olddate replace  
erase 5684096K \$ppf a**

**Note:** Do not use your own PPF name in place of 5684096K for the COPY and ERASE commands.

**vmfins build ppf 5684096K {RSCSIRSCSSFS} (serviced nolinek**

**1**

This will complete updating the build status table. When you receive the prompt that was previously displayed, enter a 1 to continue.



---

## 6.8 Post Installation

This section is required. You will initialize the server machines minidisks with RSCS code. Additionally you will tailor the server machines for your operating environment.

4 For a list of all sample configuration files and exit packages supplied with RSCS 3.2.0, see Appendix E,  
4 “Supplied Sample Packages” on page 111. These samples will be referenced during the following post  
4 installation tailoring steps. This section will have you copy some of the sample files to a form usable by  
5 RSCS. For example, the RSCS CONFSAMP file becomes RSCS CONFIG in its usable form.

### 5 **VM/ESA 2.3.0, 2.4.0, or z/VM Installations**

There are several RSCS sample configuration files located on the TCPMAINT 198 minidisk:

- 4 • RSCSTCP SCONFIG which contains sample LINKDEFINE and PARM statements for a LPR-,  
4 LPD-, TN3270E-, and UFT-type links
- RSCSLPR SCONFIG which contains a sample LPRXONE exit configuration file.
- RSCSLPRP SCONFIG which contains a sample LPRXPSE exit configuration file.
- 4 • RSCSLPD SCONFIG which contains a sample LPDXMANY exit configuration file.
- 4 • RSCSUFT SCONFIG which contains a sample UFTXOUT exit configuration file.

Choose one of the following sections based on your installation:

- 6.8.1, “Tailor the RSCS Server Machines (Initial Installation)” if this is a first time install of RSCS 3.2.0 or if you are migrating from RSCS Version 1.
- 6.8.2, “Tailor the RSCS Server Machines (RSCS Version 2 or 3.1.0)” on page 51 if you are migrating from RSCS Version 2 or RSCS 3.1.0.
- 6.8.3, “Tailor the RSCS Server Machines (Migration from RSCS 3.1.1)” on page 53 if you are migrating from RSCS 3.1.1.
- 2 • 6.8.4, “Tailor the RSCS Server Machines (Migration from RSCS 3.2.0)” on page 55 if you are  
5 migrating from a VM/ESA release with RSCS 3.2.0 already installed to VM/ESA 2.3.0, 2.4.0, or  
5 z/VM.

### 6.8.1 Tailor the RSCS Server Machines (Initial Installation)

If you are installing RSCS for the first time you will copy and tailor sample files for each program that you will be using.

Select any or all of the following based on the functions that you will be using:

- 6.8.1.1, “Tailor the RSCS Virtual Machine” on page 48
- 6.8.1.2, “Tailor the XCHANGE Virtual Machine” on page 48

### 6.8.1.1 Tailor the RSCS Virtual Machine

**1** Log on to P684096K if you are not already logged on to it.

**2** Access the RSCS samples

**a** If installing using minidisks

**access 406 t**

The sample files were loaded to the 406 minidisk.

**b** If installing using SFS

**access VMSYS:P684096K.RSCS.PACKAGE t**

The sample files were loaded to the SFS directory.

**3** Access the RSCS production disk (401).

**access 401 v**

RSCS links the P684096K's 401 minidisk as its 191 minidisk. Sample files will be copied to their usable form on this disk.

**4** Copy the sample files to the 401 minidisk.

**copyfile rscs confsamp t = config v (olddate**

**copyfile profile gcssamp t = gcs v (olddate**

**copyfile nothere tempsamp t = template v (olddate**

**copyfile unknown tempsamp t = template v (olddate**

**5** Tailor each of the files that you just copied. See "Customizing RSCS" in the *RSCS Planning and Installation* for details on configuring these files.

### 6.8.1.2 Tailor the XCHANGE Virtual Machine

**1** Log on to P684096K if you are not already logged onto it.

**Note:** You should have already obtained necessary resources in the plan section. Resource requirements are obtained from Figure 15 on page 22.

**2** Access the RSCS samples

**a** If installing using minidisks

| **access 406 t**

The sample files were loaded to the 406 minidisk.

| **b** If installing using SFS

| **access VMSYS:P684096K.RSCS.PACKAGE t** The sample files were loaded to the SFS directory.

| **3** Access the RSCS production disk (401).

| **access 401 v** RSCS links the P684096K's 401 minidisk as its  
| 191 minidisk. Sample files will be copied to their  
| usable form on this disk for the RSCS Data  
| Interchange Manager.

**4** Access XCHANGE's production disk or directory. The sample files must be copied to their usable form to this disk or directory

**a** If installing using minidisks

**access 403 u**

**b** If installing using SFS

**access VMSYS:XCHANGE. u**

**5** The ACHAMAIN EXEC is shipped interpretive (filetype = EXEC) and compiled (filetype = CEXEC). If you would rather use the compiled exec instead of interpretive, copy the CEXEC as EXEC on the Data Interchange Manager test disk or SFS directory. Otherwise skip this step.

**a** If installing using minidisks

**access 402 w**  
**copy achamain cexec w = exec = (rep oldd**

**b** If installing using SFS

**access VMSYS:P684096K.RSCS.XCHTEST w**  
**copy achamain cexec w = exec = (rep oldd**

- 6** Copy the sample Data Interchange Manager files to the 401 and XCHANGE production disk or directory.

**copyfile profile excsamp t = exec u (olddate**

**copyfile xchange confsamp t = config u (olddate**

**copyfile achafail tempsamp t = template u (olddate**

**copyfile acharscs confsamp t = config v (olddate**

- 7** Tailor each of the files that you just copied.

| **XCHANGE CONFIG** Located on the P684096K 403 minidisk. Ensure  
5 DOMAIN and RSCSLINK are specified and contain the correct  
5 information. See the Installation Considerations section of the  
Installation and Service Considerations chapter in the *RSCS Data  
Interchange Manager Installing, Managing, and Using*, for specific  
information.

| **PROFILE EXEC** Located on the P684096K 403 minidisk. Add any Data  
Interchange Manager server profile information as appropriate for your  
system, such as special links, accesses and console setup.

| **ACHAFAIL TEMPLATE** Located on the P684096K 403 minidisk. Change  
"support person" to the user ID of the system administrator for Data  
Interchange Manager.

| **ACHARSCS CONFIG** Located on the P684096K 401 minidisk. Ensure the  
LINKDEF, LINKTYPE, and PARM statements reflect the linkid of the  
Data Interchange Manager link from RSCS.

| **RSCS CONFIG** Located on the P684096K 401 minidisk. Place an IMBED  
ACHARSCS CONFIG statement at the bottom of the configuration file,  
or copy the ACHARSCS CONFIG file into the RSCS configuration file.

| **PROFILE GCS** Located on the P684096K 401 minidisk. Ensure the  
GLOBAL LOADLIB statement contains the RSCSEXIT loadlib:  
GLOBAL LOADLIB ... RSCS RSCSEXIT ...

See "Installing RSCS Interchange" in the *RSCS Data Interchange Manager  
Installing, Managing, and Using* manual for details on modifying these files.

#### What's Next?

You have now finished tailoring the RSCS virtual machines. Continue with Appendix A, "Test the Installation/Service for RSCS" on page 79. You will return to 6.9, "Place RSCS Into Production" to place the new RSCS code into production.

## 6.8.2 Tailor the RSCS Server Machines (RSCS Version 2 or 3.1.0)

If you are migrating from RSCS Version 2 or Version 3 Release 1.0, then you will copy your tailored files to the new server machines 191 minidisks. The tailored files for RSCS are upwardly compatible with RSCS 3.2.0.

### Note!

These instructions are for migrating from RSCS Version 2 and Version 3 Release 1.0. If migrating from Version 1 then follow the instructions in 6.8.1, "Tailor the RSCS Server Machines (Initial Installation)."

Select any or all of the following based on the functions that you will be using:

- 6.8.2.1, "Tailor the RSCS Virtual Machine"
- 6.8.2.2, "Tailor the XCHANGE Virtual Machine" on page 52

### 6.8.2.1 Tailor the RSCS Virtual Machine

**1** Log on to P684096K if you are not already logged onto it.

4  
4  
4  
4

**2** Create a link to the maint 59F minidisk, which contains your tailored files for RSCS 3.1.0, as virtual address 59F. For example, if you have RSCS 3.2.0 installed on a second level system, link to the first level's maint 59F minidisk as 59F. Then access this disk as filemode t.

**access 59F t**

**3** Access the 401 minidisk.

**access 401 u**

The P684096K 401 minidisk is RSCS's 191 minidisk.

**4** Copy your tailored files to the 401 minidisk.

**Note:** If you have tailored more than the files listed below, or if the files have different names, then you will also need to copy them to the 401 minidisk.

**copyfile \* config t = = u (olddate**

**copyfile \* gcs t = = u (olddate**

**copyfile \* dest t = = u (olddate**

**copyfile \* template t = = u (olddate**

## 6.8.2.2 Tailor the XCHANGE Virtual Machine

### Warning!

ACHARSCS must be changed to RSCSEXIT in the *GLOBAL LOADLIB* statement of the PROFILE GCS file on the P684096K's 401 disk. The ACHARSCS LOADLIB no longer exists. It has been merged into the RSCSEXIT LOADLIB.

**1** Log on to P684096K if you are not already logged onto it.

**Note:** You should have already obtained necessary resources in the plan section. Resource requirements are obtained from Figure 15 on page 22.

**2** Access XCHANGE's production disk or directory.

**a** If installing using minidisks

**access 403 u**

**b** If installing using SFS

**access VMSYS:XCHANGE. u**

4 **3** Create a link to the maint 5AF minidisk, which contains your tailored files for  
4 XCHANGE, as virtual address 5AF. For example, if you have RSCS 3.2.0  
4 installed on a second level system, link to the first level's maint 5AF minidisk  
4 as 5AF. Then access this disk as filemode t.

**access 5AF t**

**4** Copy your tailored files to the XCHANGE production disk or directory.

**copyfile xchange config t = = u (olddate replace**

**copyfile profile exec t = = u (olddate replace**

**copyfile xchange table t = = u (olddate replace**

**copyfile achafail template t = = u (olddate replace**

- 5** The ACHAMAIN EXEC is shipped interpretive (filetype = EXEC) and compiled (filetype = CEXEC). If you would rather use the compiled exec instead of interpretive, copy the CEXEC as EXEC on the Data Interchange Manager test disk or SFS directory. Otherwise skip this step.

**a** If installing using minidisks

```
access 402 w
copy achamain cexec w = exec = (rep oldd
```

**b** If installing using SFS

```
access VMSYS:P684096K.RSCS.XCHTEST w
copy achamain cexec w = exec = (rep oldd
```

#### What's next?

You have now finished tailoring the XCHANGE virtual machine. Continue with Appendix A, "Test the Installation/Service for RSCS" on page 79. You will return to 6.9, "Place RSCS Into Production" to place the new RSCS code into production.

### 6.8.3 Tailor the RSCS Server Machines (Migration from RSCS 3.1.1)

If you are migrating from RSCS 3.1.1, you will copy your tailored files to the new server machines 191 minidisks. The tailored files for RSCS are upwardly compatible with RSCS 3.2.0.

Select any or all of the following based on the functions that you will be using:

- 6.8.3.1, "Tailor the RSCS Virtual Machine"
- 6.8.3.2, "Tailor the XCHANGE Virtual Machine" on page 54

#### 6.8.3.1 Tailor the RSCS Virtual Machine

**1** Log on to P684096K if you are not already logged onto it.

4 **2** Create a link to the current production disk, which contains your tailored files  
4 for RSCS 3.1.1, as virtual address 901. For example, if you have RSCS  
4 3.2.0 installed on a second level system, link to the first level's P684096E  
4 401 minidisk as 901. Then access this disk as filemode t.

4 **access 901 t**

**3** Access the 401 minidisk.

**access 401 u**

The P684096K 401 minidisk is RSCS's 191 minidisk.

**4** Copy your tailored files to the 401 minidisk.

**Note:** If you have tailored more than the files listed below, or if the files have different names, then you will also need to copy them to the 401 minidisk.

**copyfile \* config t = = u (olddate**

**copyfile \* gcs t = = u (olddate**

**copyfile \* dest t = = u (olddate**

**copyfile \* template t = = u (olddate**

### 6.8.3.2 Tailor the XCHANGE Virtual Machine

**Warning!**

ACHARSCS must be changed to RSCSEXIT in the *GLOBAL LOADLIB* statement of the PROFILE GCS file on the P684096K's 401 disk. The ACHARSCS LOADLIB no longer exists. It has been merged into the RSCSEXIT LOADLIB.

**1** Log on to P684096K if you are not already logged onto it.

**Note:** You should have already obtained necessary resources in the plan section. Resource requirements are obtained from Figure 15 on page 22.

**2** Access XCHANGE's production disk or directory.

**a** If installing using minidisks

**access 403 u**

**b** If installing using SFS

**access VMSYS:XCHANGE. u**



4  
4  
4  
4

**3** Create a link to the current production disk, which contains your tailored files for XCHANGE, as virtual address 503. For example, if you have RSCS 3.2.0 installed on a second level system, link to the first level's P684096E 403 minidisk as 503. Then access this disk as filemode t.

**access 503 t**

**4** Copy your tailored files to the XCHANGE production disk or directory.

**copyfile xchange config t = = u (olddate replace**

**copyfile profile exec t = = u (olddate replace**

**copyfile xchange table t = = u (olddate replace**

**copyfile achafail template t = = u (olddate replace**

**5** The ACHAMAIN EXEC is shipped interpretive (filetype = EXEC) and compiled (filetype = CEXEC). If you would rather use the compiled exec instead of interpretive, copy the CEXEC as EXEC on the Data Interchange Manager test disk or SFS directory. Otherwise skip this step.

**a** If installing using minidisks

**access 402 w**

**copy achamain cexec w = exec = (rep oldd**

**b** If installing using SFS

**access VMSYS:P684096K.RSCS.XCHTEST w**

**copy achamain cexec w = exec = (rep oldd**

#### **What's next?**

You have now finished tailoring the XCHANGE virtual machine. Continue with Appendix A, "Test the Installation/Service for RSCS" on page 79. You will return to 6.9, "Place RSCS Into Production" to place the new RSCS code into production.

## **2 6.8.4 Tailor the RSCS Server Machines (Migration from RSCS 3.2.0)**

5 If you have RSCS 3.2.0 already installed on a VM/ESA release prior to VM/ESA 2.3.0, and are migrating  
5 to VM/ESA 2.3.0, 2.4.0, or z/VM (which already has RSCS 3.2.0 installed), you will copy your tailored files  
2 to the new server machines 191 minidisks.

2 Select any or all of the following based on the functions that you will be using:

- 2 • 6.8.4.1, "Tailor the RSCS Virtual Machine" on page 56
- 2 • 6.8.4.2, "Tailor the XCHANGE Virtual Machine" on page 56

### 2 6.8.4.1 Tailor the RSCS Virtual Machine

2 **1** Log on to P684096K if you are not already logged onto it.

4 **2** Create a link to the current production disk, which contains your tailored files  
5 for RSCS 3.2.0, as virtual address 901. For example, if you have VM/ESA  
5 2.3.0, 2.4.0, or z/VM installed as a second level system, link to the first level's  
4 P684096K 401 minidisk as 901. Then access this disk as filemode t.

4 **access 901 t**

2 **3** Access the 401 minidisk.

2 **access 401 u**

The P684096K 401 minidisk is RSCS's 191 minidisk.

2 **4** Copy your tailored files to the 401 minidisk.

2 **Note:** If you have tailored more than the files listed below, or if the files have  
2 different names, then you will also need to copy them to the 401 minidisk.

2 **copyfile \* config t = = u (olddate replace**

2 **copyfile \* gcs t = = u (olddate replace**

2 **copyfile \* dest t = = u (olddate replace**

2 **copyfile \* template t = = u (olddate replace**

### 2 6.8.4.2 Tailor the XCHANGE Virtual Machine

2 **1** Log on to P684096K if you are not already logged onto it.

2 **Note:** You should have already obtained necessary resources in the plan  
2 section. Resource requirements are obtained from Figure 15 on page 22.

2 **2** Access XCHANGE's production disk or directory.

2 **a** If installing using minidisks

2 **access 403 u**

2 **b** If installing using SFS

2 **access VMSYS:XCHANGE. u**

5 **3** Create a link to the current production disk, which contains your tailored files  
5 for XCHANGE, as virtual address 503. For example, if you have VM/ESA  
5 2.3.0, 2.4.0, or z/VM installed as a second level system, link to the first level's  
2 P684096K 403 minidisk as 503. Then access this disk as filemode t.

2 **access 503 t**

2 **4** Copy your tailored files to the XCHANGE production disk or directory.

2 **copyfile xchange config t = = u (olddate replace**

2 **copyfile profile exec t = = u (olddate replace**

2 **copyfile xchange table t = = u (olddate replace**

2 **copyfile achafail template t = = u (olddate replace**

2 **5** The ACHAMAIN EXEC is shipped interpretive (filetype = EXEC) and compiled  
2 (filetype = CEXEC). If you would rather use the compiled exec instead of  
2 interpretive, copy the CEXEC as EXEC on the Data Interchange Manager test  
2 disk or SFS directory. Otherwise skip this step.

2 **a** If installing using minidisks

2 **access 402 w**

2 **copy achamain cexec w = exec = (rep oldd**

2 **b** If installing using SFS

2 **access VMSYS:P684096K.RSCS.XCHTEST w**

2 **copy achamain cexec w = exec = (rep oldd**

2 **What's next?**

2 You have now finished tailoring the XCHANGE virtual machine. Continue with Appendix A, "Test the  
2 Installation/Service for RSCS" on page 79. You will return to 6.9, "Place RSCS Into Production" to  
2 place the new RSCS code into production.

---

## 6.9 Place RSCS Into Production

### Important note

This procedure should only be done after you have successfully tested RSCS installation.

Placing the RSCS code into production is a two or three step process:

- If migrating from RSCS Version 2 or Version 3, then you will need to change the directory statements of the server machines so that they point to the new RSCS 3.2.0 code.
- The test code is moved from the test Build disks or directories to the server production Build disks or directories.
- The help and DVF code is placed onto MAINT minidisks.

Choose one of the following sections based on your installation:

- 2  
5
- 6.9.3, “Copy the Server Code to the Server Minidisks or Directories” on page 60 if migrating from a VM/ESA release with RSCS 3.2.0 already installed to VM/ESA 2.3.0, 2.4.0, or z/VM.
  - 6.9.1, “Change Directory LINK Statements for RSCS and XCHANGE (Migration from RSCS Version 2 or 3.1.0)” if migrating from RSCS Version 2 or Version 3 Release 1.0.
  - 6.9.2, “Change Directory LINK Statements for RSCS and XCHANGE (Migration from RSCS 3.1.1)” on page 60 if migrating from RSCS 3.1.1.
  - 6.9.3, “Copy the Server Code to the Server Minidisks or Directories” on page 60 if migrating from RSCS Version 1 or a new installation.

### 6.9.1 Change Directory LINK Statements for RSCS and XCHANGE (Migration from RSCS Version 2 or 3.1.0)

#### Note!

- 5
- Before reclaiming MAINT's 5BF disk (used as the XCHANGE logging disk), you may want to copy the contents of this minidisk to an existing disk to preserve the logging files for future reference.

Select any of the following based on the programs that you are using:

- Update the user directory entry for RSCS.
  - Change the LINK MAINT 59F 191 RR statement to LINK P684096K 401 191 RR.  
The RSCS 191 minidisk is now P684096K's 401 minidisk.
- Update the user directory entry for XCHANGE.
  - If using minidisks for XCHANGE:
    - Change the LINK MAINT 5AF 191 RR statement to LINK P684096K 403 191 RR.  
The XCHANGE 191 minidisk is now P684096K's 403 minidisk.
    - If you would like to continue to use the current 5BF minidisk, transfer the disk resource to the XCHANGE user ID.
  - If using SFS directories for XCHANGE:
    - Make sure you have added the correct IPL statement so CMS will access the XCHANGE's top directory as file mode A.  
IPL CMS PARM FILEPOOL VMSYS
- When you feel confident enough to do so, reclaim MAINT's minidisks that were used for your previous level of RSCS since they are no longer needed. You can remove the following minidisks from the MAINT user ID.
  - 29F** Previously used as service minidisk
  - 39F** Previously used for source code.
  - 49F** Previously used as base minidisk
  - 59F** Previously used for the RSCS 191 minidisk.
  - 5AF** Previously used for the XCHANGE 191 minidisk.
  - 5BF** Previously used for the XCHANGE 5BF minidisk (if you have not transferred it to the XCHANGE user ID)
- Place the updated directories online using IBM Directory Maintenance for VM/ESA (DirMaint) 1.5 or an equivalent CP directory maintenance method.

#### What's Next?

Continue with 6.9.3, "Copy the Server Code to the Server Minidisks or Directories" on page 60 to place RSCS into production.

## 6.9.2 Change Directory LINK Statements for RSCS and XCHANGE (Migration from RSCS 3.1.1)

### Note!

5 Before reclaiming P684096E's 404 disk (used as the XCHANGE logging disk), you may want to copy the contents of this minidisk to an existing disk to preserve the logging files for future reference.

Select any of the following based on the programs that you are using:

- Update the user directory entry for RSCS.
  - Change the LINK P684096E 401 191 RR statement to LINK P684096K 401 191 RR.  
The RSCS 191 minidisk is now P684096K's 401 minidisk.
- Update the user directory entry for XCHANGE.
  - If using minidisks for XCHANGE:
    - Change the LINK P684096E 403 191 RR statement to LINK P684096K 403 191 RR.  
The XCHANGE 191 minidisk is now P684096K's 403 minidisk.
    - If you would like to continue to use the current 5BF minidisk, transfer the disk resource to the XCHANGE user ID.
  - If using SFS directories for XCHANGE:
    - Make sure you have added the correct IPL statement so CMS will access the XCHANGE's top directory as file mode A.  
IPL CMS PARM FILEPOOL VMSYS
- When you feel confident enough to do so, delete the P684096E user ID and all resources it owns.
- Place the updated directories online using IBM Directory Maintenance for VM/ESA (DirMaint) 1.5 or an equivalent CP directory maintenance method.

## 6.9.3 Copy the Server Code to the Server Minidisks or Directories

This step will be accomplished by using the IN2PROD EXEC. The IN2PROD EXEC uses a default *ppfname* of **5684096K** and a default *compname* of **RSCS**. If either the *ppfname* or *compname* being used is different, you will have to tell the IN2PROD EXEC the names you are using. For example, if installing using SFS, then use a *compname* of **RSCSSFS**. To find out more information on the IN2PROD EXEC, issue **in2prod {?!help}** after setting up the minidisk access order.

**1** Log on to P684096K, if you are not already logged on to it.

**2** Access the disk where the IN2PROD EXEC resides

**access 400 i**

**3** If you are using RSCS, copy server code to P684096K's 401 disk

6 `in2prod rscs 5684096K {RSCSIRSCSSFS}`

**Note:** The RSCS server machine links to the 401 disk as it's 191.

4

**4** If you are using XCHANGE or RSCSDNS, copy server code to the production disk or directory.

6 `in2prod xchange 5684096K {RSCSIRSCSSFS}`

**Note:** The XCHANGE server machine links to the 403 disk, or VMSYS:XCHANGE. directory, as it's A-disk.

## 6.9.4 Copy RSCS to the MAINT Minidisks for Production

**1** Log on as **MAINT**

**Note:** The following steps should be done from the MAINT user ID.

**2** Copy Dump Viewing Facility TEXT code to MAINT's 193 and 493 disks

*addr* is any free MAINT address

`link P684096K 400 addr rr`

`access addr e`

`access 193 f`

`vmfcopy * text e = f (prodid 5684096K%RSCS olddate replace`

`access 493 f`

`vmfcopy * text e = f (prodid 5684096K%RSCS olddate replace`

**Note:** DVF facilities for RSCS require the 193 disk.

**Note:** If these files are not copied to the 493 disk, they will be lost when VM places it's serviced code into production.

**3** Copy American English help files to MAINT's 19D disk

**Note:** The CMS HELP segment will have to be resaved after the help files have been copied.

**a** If installing using minidisks

`link P684096K 29d addr2 rr`

`access addr2 e`

`access 19d f`

`vmfcopy * * e = f (prodid 5684096K%RSCS replace olddate`

*addr2* is any free disk address on the MAINT user ID

**Note:** Users wishing to access RSCS help files require the 19D disk. Get the minidisk space required for RSCS help files on MAINT's 19D minidisk from Figure 14 on page 22.

**b** If installing using SFS

```
access VMSYS:P684096K.RSCS.HELP e
access 19d f
vmfcopy * * e = = f (prodid 5684096K%RSCS replace olddate
```

**Note:** Users wishing to access RSCS help files require the 19D disk. Get the minidisk space required for RSCS help files on MAINT's 19D minidisk from Figure 14 on page 22.

2 **c** Rebuild the CMS HELP logical saved segment, to include RSCS's help  
2 files from the AMENG Help (MAINT's 19D) disk. See the 'Placing  
2 (Serviced) Components into Production' section of the *Service Guide* for  
2 detailed information about how these segments should be saved on  
2 your system. (Note that you will need to use ( **all** instead of ( **serviced**  
2 on the VMSES/E VMFBLD command when rebuilding any segments.)

**4** If uppercase English help files have been installed, place into production on the MAINT 402 disk

**a** If installing using minidisks

```
link P684096K 502 addr rr          addr is any free disk address on the MAINT user
access addr e                      ID
access 402 f
vmfcopy * * e = = f (prodid 5684096K%RSCS replace olddate
```

**b** If installing using SFS

```
access VMSYS:P684096K.RSCS.UHELP e
access 402 f
vmfcopy * * e = = f (prodid 5684096K%RSCS replace olddate
```



**5** If the Kanji feature help files have been installed, place into production on the MAINT 401 disk

**a** If installing using minidisks

```
link P684096K 501 addr rr addr is any free disk address on the MAINT user
access addr e ID
access 401 f
vmfcopy * * e = = f (prodid 5684096M%RSCS replace olddate
```

**b** If installing using SFS

```
access VMSYS:P684096K.RSCS.HELPKAN e
access 401 f
vmfcopy * * e = = f (prodid 5684096M%RSCS replace olddate
```

**6** If the German feature help files have been installed, place into production on the MAINT 405 disk

**a** If installing using minidisks

```
link P684096K 505 addr rr addr is any free disk address on the MAINT user
access addr e ID
access 405 f
vmfcopy * * e = = f (prodid 5685096L%RSCS replace olddate
```

**b** If installing using SFS

```
access VMSYS:P684096K.RSCS.HELPGER e
access 405 f
vmfcopy * * e = = f (prodid 5684096L%RSCS replace olddate
```

## 6.9.5 Log On to the Server Machines.

Bring up your server machines by logging on to them. Logging on to them will restart them with the production code. First ensure that the installation user ID is not logged on.

**Note:** If you are migrating from a previous level of RSCS you will first need to log the server machines off and then back on as they are currently running the old level of RSCS.

**The RSCS product is now installed and built on your system.**

---

## 7.0 Service Instructions

### z/VM Version 4 Express Users

If you installed z/VM using the Express Installation and Service Procedure then you need to follow the service instructions as documented in the *z/VM Express Installation and Service Procedures* pamphlet (that came with the *z/VM Installation Guide*) in order to install an RSU or COR service on an Express system. Or you can go to the instructions in Appendix H, "Service Instructions for z/VM Express Users Only" on page 194 of this program directory.

### RSU Warning

If applying a RSCS RSU, go to the instructions in Appendix C, "Applying a Recommended Service Upgrade (RSU) Tape For RSCS" on page 100. You will return to a step in this chapter specified in that appendix.

This section of the Program Directory contains the procedure to install **CORrective service** to RSCS with VMSES/E.

To become more familiar with service using VMSES/E, you should read the introductory chapters in the *VMSES/E Introduction and Reference* manual before you begin the procedures in this section. This manual also contains the command syntax for the VMSES/E commands listed in the procedure.

#### Notes:

1. Each step of the servicing instructions must be followed. Do not skip any step unless otherwise directed. All instructions showing accessing of disks assumes the use of default minidisk addresses or SFS directories. If different minidisk addresses or SFS directory names are used, change the instructions appropriately.
2. If the service instructions are not completed at one time, you can issue VMFSETUP and continue with the step you left off at.

---

## 7.1 VMSES/E Service Process Overview

This overview gives a brief description of the main steps in servicing 5684096K using VMSES/E.

- Merge Service

Use the VMFMRDSK command to clear the alternate apply disk before receiving new service. This allows you to remove the new service if a serious problem is found.

- Receive Service

The VMFREC command receives service from the delivery media and places it on the Delta disk.

- Apply Service

The VMFAPPLY command updates the version vector table (VVT), which identifies the service level of all the serviced parts. In addition, AUX files are generated from the VVT for parts that require them.

- Reapply Local Service (if applicable)

All local service must be entered into the software inventory to allow VMSES/E to track the changes and build them into the system. See Chapter 7 in the *Service Guide* for this procedure.

- Build a New Level

The build task generates the serviced level of an object and places the new object on a Build disk or directory.

- Place the New Service into Production

Once the service is satisfactorily tested it should be put into production by copying the new service to the production disk, re-saving the DCSS (Discontiguous Saved Segments), etc.

## 7.2 Servicing RSCS Using VMSES/E

### RSU Warning

If applying a RSCS RSU, go to the instructions in Appendix C, "Applying a Recommended Service Upgrade (RSU) Tape For RSCS" on page 100. You will return to a step in this chapter specified in that appendix.

### 7.2.1 Prepare to Receive Service

#### Electronic Service (envelope file)

If you have received the service electronically or on CD-ROM, follow the appropriate instructions to retrieve and decompress the envelope file to your A-disk. The decompression is currently done by using the DETERSE MODULE. The file names of the decompressed files will be of the format:

- VLST $num$  for the documentation envelope
- VPTF $num$  for the service envelope

The file type for both of these files must be SERVLINK. You will need to enter the file name on the VMFREC commands that follow.

The *ppfname* used throughout these instructions is **5684096K**, which assumes you are using the PPF supplied by IBM for VM/RSCS. If you have your own PPF override file for VM/RSCS, you should use your file's *ppfname* instead of 5684096K. The *ppfname* you use should be used **throughout** the rest of this procedure, unless otherwise stated.

**1** Log on to the RSCS service user ID **P684096K**

- 2 Establish write access to the Software Inventory Disk (MAINT 51D) if it is not already linked R/W.

**Note:** If the MAINT 51D minidisk was accessed R/O, you will need to have the user who has it linked R/W link it as R/O. You then can issue the following commands to obtain R/W access to it.

**link maint 51d 51d mr  
access 51d d**

The MAINT 51D disk is where the VMSES/E system level software inventory files reside.

- 3 Have the RSCS CORrective service tape mounted and attached to **P684096K** as 181.

- 4 Receive the documentation.

5                   **a** If receiving the service from tape

5 **vmfrec info**

5                   The INFO option loads the documentation  
5                   (including the product service memo) to the 191  
5                   disk and displays a list of products on the tape.

5                   **b** If receiving the service from an envelope file

5 **vmfrec info (env vlstnum**

5                   The INFO option loads the documentation  
5                   (including the product service memo) to the 191  
5                   disk and displays a list of products on the tape.

- 5 Review the receive message log (\$VMFMRD \$MSGLOG). If necessary, correct any problems before going on. For information about handling specific error messages, see the applicable *System Messages and Codes* or use online HELP.

**vmfview receive**

Also, make note of which products and components have service on the tape. To do this, use the PF5 key to show all status messages which identify the components on the tape.

- 6 Read the product memo (5684096K MEMO) before going on. This memo is loaded to the A-disk.

- 7 Setup the correct minidisk access order

**vmfsetup 5684096K {RSCSIRSCSSFS}**

Use component name **RSCS** if the product is installed on minidisks or **RSCSSFS** if the product is installed in SFS.

```
VMFSET2760I VMFSETUP processing started
VMFUTL2205I Minidisk|Directory Assignments:
          String  Mode  Stat  Vdev  Label/Directory
VMFUTL2205I LOCALSAM  E    R/W  2C2  P682C2
VMFUTL2205I APPLY    F    R/W  2A6  P682A6
VMFUTL2205I          G    R/W  2A2  P682A2
VMFUTL2205I DELTA    H    R/W  2D2  P682D2
VMFUTL2205I BUILD0    I    R/W  400  P68400
VMFUTL2205I BUILD2    J    R/W  29D  P6829D
VMFUTL2205I BUILD3    K    R/W  402  P68402
VMFUTL2205I BUILD6    L    R/W  406  P68406
VMFUTL2205I BASE1    M    R/W  2B2  P682B2
VMFUTL2205I -----  A    R/W  191  P68191
VMFUTL2205I -----  B    R/O  5E5  MNT5E5
VMFUTL2205I -----  D    R/W  51D  MNT51D
VMFUTL2205I -----  S    R/O  190  MNT190
VMFUTL2205I -----  Y/S  R/O  19E  YDISK
VMFSET2760I VMFSETUP processing completed successfully
READY;
```

**8** Clear the alternate APPLY disk for the new service. This command will copy the contents of 2A6 to 2A2.

**vmfmrdsn 5684096K {RSCSIRSCSSFS} apply**

Use component name **RSCS** if the product is installed on minidisks or **RSCSSFS** if the product is installed in SFS.

This command clears the alternate APPLY disk.

```
VMFMRD2760I VMFMRDSK processing started
VMFMRD1937I Merge of APPLY started
VMFMRD1938I Merging APPLY 2A6 to 2A2
VMFMRD2065I APPLY 2A2 is now n percent full
VMFMRD1939I Merge of APPLY completed
VMFMRD2760I VMFMRDSK processing completed successfully
READY;
```

**9** Review the merge message log (\$VMFMRD \$MSGLOG). If necessary, correct any problems before going on. For information about handling

specific error messages, see the applicable *System Messages and Codes* or use online HELP.

**vmfview mrd**

## 7.2.2 Receive the Service

6 **Note:** If you are installing multiple service tapes, you can receive all of the service for this product before  
6 applying and building it.

6 For **each** service tape or electronic envelope you want to receive, do the following:

5                           **1** Receive the service.

5                           **a** If receiving the service from tape

5 **vmfrec ppf 5684096K {RSCS | RSCSSFS}**

Use **RSCS** if the product is installed on minidisks  
or **RSCSSFS** if the product is installed in Shared  
File System directories.

5  
5

This command receives service from your service  
tape. All new service is loaded to the DELTA disk.

5  
5

5                           **b** If receiving the service from the PTF envelope file

5 **vmfrec ppf 5684096K {RSCS | RSCSSFS} (env vptfnum**

Use **RSCS** if the product is installed on minidisks  
or **RSCSSFS** if the product is installed in Shared  
File System directories.

5  
5  
5

This command receives service from your service  
envelope. All new service is loaded to the DELTA  
disk.

5  
5  
5

```

VMFREC2760I VMFREC processing started
:
VMFREC1852I Volume 1 of 1 of COR nnnn created on 11 March 95
VMFREC1851I (1 of 3) VMFRCAXL processing AXLIST
VMFRXC2159I Loading n part(s) to DELTA 2D2 (H)
VMFREC1851I (2 of 3) VMFRCPTF processing PARTLST
VMFRCP2159I Loading n part(s) to DELTA 2D2 (H)
VMFREC1851I (3 of 3) VMFRCCOM processing DELTA
VMFRCC2159I Loading n part(s) to DELTA 2D2 (H)
VMFREC2189I Updating Requisite table 5684096K SRVREQT, Description table
5684096K SRVDESCT and Receive Status table 5684096K SRVRECS with n
new PTFs from COR nnnn
VMFREC2760I VMFREC processing completed successfully
READY;

```

- 2 Review the receive message log (\$VMFREC \$MSGLOG). If necessary, correct any problems before going on. For information about handling specific error messages, see the applicable *System Messages and Codes*, or use online HELP.

**vmfview receive**

## 7.2.3 Apply the Service

- 1 Apply the new service

**vmfapply ppf 5684096K {RSCSIRSCSSFS}**

Use component name **RSCS** if the product is installed on minidisks or **RSCSSFS** if the product is installed in SFS.

This command applies the service that you just received. The version vector table (VVT) is updated with all serviced parts and all necessary AUX files are generated on the alternate apply disk.

A return code of 4 may mean a local modification has been serviced by this PTF. Review the apply message log by using VMFVIEW. Sample files have been registered as local modifications by IBM to alert you of any changes made.

```
VMFAPP2760I VMFAPPLY processing started
VMFAPP2106I Apply list 5684096K contains n PTFs that need to be applied and m
PTFs that are already applied
VMFAPP2102I n of p PTFs processed
VMFAPP2105I VMFAPPLY processing completed successfully.
The Apply list 5684096K contains n PTFs.
p PTFs were already applied.
n PTFs applied successfully.
0 PTFs were included.
0 PTFs were excluded or require excluded PTFs.
0 PTFs failed
VMFAPP2103I The Software Inventory has been updated on the 2A6 (F) disk
READY;
```

- 2** Review the apply message log (\$VMFAPP \$MSGLOG). If necessary, correct any problems before going on. For information about handling specific error messages, see the applicable *System Messages and Codes*, or use online HELP.

## vmfview apply



## Note

If you get the message VMFAPP2120W then re-apply any local modifications, or make any necessary changes to your usable copy of the sample tailorable files, before building the new RSCS.

You will see this message when any of the sample tailorable files have been serviced. You do not need to make any changes to the local modifications on the sample files on the 2C2 disk. Instead you should make any necessary applicable changes to the usable sample file. The usable sample files are not touched when servicing RSCS. The usable file name and file type for all sample files can be obtained from figures in Appendix E, "Supplied Sample Packages" on page 111. To see what has been changed, compare the local modification on the 2C2 (LOCALSAM) disk to the serviced part on the 2D2 (DELTA) disk. When VMFBLD is run, the copy of the sample file on the 2C2 disk is copied to the 406 disk. The sample files are not used by RSCS.

For further information on the local modification process, refer to the "Installing Local Service" chapter of the *Service Guide*. Follow the steps that are applicable to your local modification.

The following substitutions need to be made in the service guide when doing local modifications to RSCS:

- 5 • **esa** or **zvm** should be **5684096K**
- *compname* should be **RSCSSRC** (minidisk) or **RSCSSSFS** (SFS) if modifying any part on the 2B3 minidisk or directory, otherwise use **RSCS** (minidisk) or **RSCSSFS** (SFS) for modifying any part on the 2B2 minidisk or directory.
- *appid* should be **5684096K**
- 6 • *fm-local* should be the filemode where the 2C2 is accessed
- 6 • *fm-applyalt* should be the filemode where the of 2A6 is accessed
- 5 • **outmode localmod** should be **outmode localsam**

A couple of things that you need to keep in mind are:

- The 'Compile National Language Files' section is not applicable to RSCS. RSCS languages are compiled using the MCOMP EXEC through the local modification procedure instructions in Appendix B, "Local Modification Example: Assemble File" on page 97.
- When you get to the "Rebuilding Objects" step in the *Service Guide* you should return back to this program directory at 7.2.4, "Update the Build Status Table" on page 72.

### Notes:

1. There is a local modification assemble file example in Appendix B, "Local Modification Example: Assemble File" on page 97.

## 7.2.4 Update the Build Status Table

**1** Update the Build Status Table with serviced parts.

**vmfbld ppf 5684096K {RSCSIRSCSSFS} (status**

Use component name **RSCS** if the product is installed on minidisks or **RSCSSFS** if the product is installed in SFS.

This command updates the build status table.

**Note**

If the \$PPF files have been serviced you will get the following prompt:

```
VMFBLD2760I VMFBLD processing started
VMFBLD1851I Reading build lists
VMFBLD2182I Identifying new build requirements
VMFBLD2185R The following source product parameter files have been
serviced:
VMFBLD2185R 5684096K $PPF
VMFBLD2185R When source product parameter files are serviced, all
product parameter files built from them must be recompiled
using VMFPPF before VMFBLD can be run.
VMFBLD2185R Enter zero (0) to have the serviced source product
parameter files built to your A-disk and exit VMFBLD so
you can recompile your product parameter files with VMFPPF
Enter one (1) to continue only if you have already
recompiled your product parameter files with VMFPPF
```

**0** Enter a 0 and complete the following steps before you continue.

```
VMFBLD2188I Building 5684096K $PPF on 191 (A) from level $PFnnnnn
```

**vmfppf 5684096K {RSCSIRSCSSFS}**

**Note:** If you've created your own PPF override then use your PPF name instead of 5684096K.

You should recompile all overrides to ensure they are at the proper level for future use.

**copyfile 5684096K \$ppf a = = d (olddate replace  
erase 5684096K \$ppf a**

**Note:** Do not use your own PPF name in place of 5684096K for the COPY and ERASE commands.

**vmfbld ppf 5684096K {RSCSIRSCSSFS} (status** This will complete updating the build status  
**1** table. When you receive the prompt that was previously displayed, enter a 1 to continue.

**2** View the build status messages and see what objects need to be built.

**vmfview build**

## 7.2.5 Build Service Objects

- 1 Rebuild RSCS serviced parts.

**vmfbld ppf 5684096K {RSCSIRSCSSFS} (serviced** Use component name **RSCS** if the product is installed on minidisks or **RSCSSFS** if the product is installed in SFS.

- 2 Review the build message log (\$VMFBLD \$MSGLOG). If necessary, correct any problems before going on. For information about handling specific error messages, see the applicable *System Messages and Codes* or use online HELP.

**vmfview build**

---

## 7.3 Optional Service Steps (depending on what was installed)

### 7.3.1 Servicing the Uppercase English Files

- 1 Rebuild uppercase English serviced parts

**vmfbld ppf 5684096K {RSCSUCNGIRSCSUSFS} (serviced setup**

Use component name **RSCSUCNG** if servicing uppercase English help files using minidisks or **RSCSUSFS** if servicing using SFS.

The SETUP option sets up the minidisk/directory access order using the :MDA section of the PPF.

---

## 7.4 Test the New RSCS Service

At this point you can test the service that was applied. Go to Appendix A, "Test the Installation/Service for RSCS" on page 79 for the minimum steps necessary for ensuring that your new code is functional. When your testing is complete you will return to 7.5, "Place Serviced RSCS into Production" to place the service into production.

---

## 7.5 Place Serviced RSCS into Production

### Important note

This procedure should only be done when you have successfully tested the new service. Once you perform this step you can not easily back off to your previous production code. See the "Removing Service Levels" chapter in the *Service Guide* for further details regarding backing off service levels.

Placing the RSCS code into production is a two step process:

- The test code is moved from the test Build disks or directories to the server production disks or directories
- The help and DVF code is placed onto MAINT minidisks.

### 7.5.1 Copy the Server Code to the Production Minidisks or Directories

This step will be accomplished by using the IN2PROD EXEC. The IN2PROD EXEC uses a default *ppfname* of **5684096K** and a default *compname* of **RSCS**. If either the *ppfname* or *compname* being used is different, you will have to tell the IN2PROD EXEC the names you are using. For example, if the product is installed in SFS, then use a *compname* of **RSCSSFS**. To find out more information on the IN2PROD EXEC issue **in2prod {?!help}** after setting up the access order.

You must log off the XCHANGE server before logging on the P684096K virtual machine so that P684096K can link the server machine minidisks in write mode.

**1** Log on to P684096K, if you are not already logged on to it.

**2** Access the disk where the IN2PROD EXEC resides

**access 400 i**

**3** If you are using RSCS, copy server code to P684096K's 401 disk

**6 in2prod rscs 5684096K {RSCSIRSCSSFS}**

**Note:** The RSCS server machine links to the 401 disk as its 191.

**4**

**4** If you are using XCHANGE or RSCSDNS, copy server code to the production disk or directory

**6 in2prod xchange 5684096K {RSCSIRSCSSFS}**

**Note:** The XCHANGE server machine links to the 403 disk, or VMSYS:XCHANGE. directory, as its A-disk.

- 5 Log off of P684096K so that the server machines can gain R/W access to their 191 minidisks when re-establishing your production environment.

logoff

## 7.5.2 Copy the RSCS Production Code to MAINT's Minidisks

- 1 Log on as MAINT

**Note:** The following steps should be done from the MAINT user ID.

- 2 Copy Dump Viewing Facility TEXT code from P684096K's 400 disk to MAINT's 193 and 493 disks

*addr* is any free MAINT address

```
link P684096K 400 addr rr
access addr e
access 193 f
vmfcopy * text e = = f (prodid 5684096k%rscs olddate replace
```

**Note:** DVF facilities for RSCS require the 193 disk.

```
access 493 f
vmfcopy * text e = = f (prodid 5684096k%rscs olddate replace
```

**Note:** If these files are not copied to the 493 disk, they will be lost when VM places its serviced code into production.

- 3 Copy American English help files to MAINT's 19D disk

**Note:** The CMS HELP segment will have to be re-saved after the help files have been copied.

**a** If servicing using minidisks

```
link P684096K 29d addr2 rr
access addr2 e
access 19d f
vmfcopy * * e = = f (prodid 5684096K%RSCS replace olddate
```

*addr2* is any free disk address on the MAINT user ID

**Note:** Users wishing to access RSCS help files require the 19D disk. Get the minidisk space required for RSCS help files on MAINT's 19D minidisk from Figure 14 on page 22.

**b** If servicing using SFS

```
access VMSYS:P684096K.RSCS.HELP e
access 19d f
vmfcopy * * e = = f (prodid 5684096K%RSCS replace olddate
```

**Note:** Users wishing to access RSCS help files require the 19D disk. Get the minidisk space required for RSCS help files on MAINT's 19D minidisk from Figure 14 on page 22.

2 **c** Rebuild the CMS HELP logical saved segment, to include RSCS's help  
2 files from the AMENG Help (MAINT's 19D) disk. See the 'Placing  
2 (Serviced) Components into Production' section of the *Service Guide* for  
2 detailed information about how these segments should be saved on  
2 your system. (Note that you will need to use ( **all** instead of ( **serviced**  
2 on the VMSES/E VMFBLD command when rebuilding any segments.)

**4** If uppercase English help files have been installed, place into production on the MAINT 402 disk

**a** If installing using minidisks

```
link P684096K 502 addr rr          addr is any free disk address on the MAINT user
access addr e                    ID
access 402 f
vmfcopy * * e = = f (prodid 5684096K%RSCS replace olddate
```

**b** If installing using SFS

```
access VMSYS:P684096K.RSCS.UHELP e
access 402 f
vmfcopy * * e = = f (prodid 5684096K%RSCS replace olddate
```

### 7.5.3 Reinitialize the Server Machines.

The server machines will be reinitialized in order for them to use the new production code.

**Note:** Ensure that the installation user ID P684096K is not logged on. If the installation user ID is logged on it will prevent the XCHANGE server from accessing its 191 minidisk R/W.

### 7.5.3.1 Reinitialize the RSCS Server Machine

**1** Log on to RSCS.

**2** Shutdown the RSCS server machine and restart it.

**rscs shutdown cp i gcs**

After the server initializes, disconnect from it.

**3** Disconnect from the server machine.

4 **rscs disc**

The server is now ready for use.

### 7.5.3.2 Reinitialize the XCHANGE Server Machine

**1** Log on to XCHANGE.

**2** Shutdown the XCHANGE server machine.

**stop**

**3** IPL CMS to reset the server machine.

**ipl cms**

After the server initializes, disconnect from it.

**4** Disconnect from the server machine.

**cp disc**

The server is now ready for use.

### 4 7.5.3.3 Reinitialize the RSCSDNS Server Machine

4 **1** Log on to RSCSDNS.

4 **2** IPL CMS to reset the server machine.

4 **#cp ipl cms**

After the server initializes, disconnect from it.

4 **3** Disconnect from the server machine.

4 **#cp disc**

The server is now ready for use.

**You have now finished servicing RSCS**



---

## Appendix A. Test the Installation/Service for RSCS

This appendix is used for testing the initial installation of RSCS and its related server machines. It will also be used prior to placing new service into production. You should follow these steps to test each of the server machines that you are using.

### 5 — Important VM/ESA 2.3.0, 2.4.0, or z/VM Information —

5 With VM/ESA 2.3.0, 2.4.0, or z/VM, RSCS 3.2.0 will check if it is enabled during initialization and start  
5 command processing. While disabled, **only** support for new functions provided in the TCP/IP feature  
5 of VM/ESA 2.3.0, 2.4.0, or z/VM are available. All other RSCS functions are disabled, and attempts to  
4 use them will result in the issuance of either message DMT257I or DMT258I. If you receive either of  
4 these messages and you are licensed for RSCS 3.2.0, then you need to complete the RSCS  
4 enablement steps starting with step 4 on page 29.

### Notes

1. This procedure will require the RSCS server machines to be shutdown. Therefore, you should only test when it will least disrupt your production environment.
2. The install ID does not need to be logged off during testing as the server machines only need R/O links to its disks.
3. Once these instructions have been completed, logging the servers off and back on will cause them to be running the old level of RSCS code.
4. A successful installation of RSCS does not mean that your customization is correct. The installation complete messages only mean that everything from the tape has been properly installed onto the disk (or disks).
5. Follow the instructions and enter the commands, as shown after each **Step**, substituting *variable* information where required.

---

### A.1 Test the RSCS Server Machine

This procedure will test the new RSCS code to see that it functions properly. You will log the RSCS server machine on and access the appropriate disks.

The procedures for each part depends on your implementation of the product. Because every customization is different, examples are used that correspond to the sample configuration file shown in the *RSCS Planning and Installation* book. Note that the messages you see may differ from those shown in this section if your link definitions differ from the IBM sample link definitions. Beyond that, this section offers general guidelines to help you get started.

**Notes:**

- 1. The prefix RSCS is used in the the command examples shown in this section. The command prefix is determined by the name you specified for RSCS when loaded in the PROFILE GCS using the LOADCMD command. See the *RSCS Operation and Use* book for more information.
- 2. If you attempt to bring up the RSCS LOADLIB on a back level GCS (such as SP6), an abend 778 will occur during initialization.

**1** Log on to RSCS server user ID **RSCS**.

The RSCS virtual machine should be running GCS (if just logging on it should have IPLed GCS). In addition, the PROFILE GCS should have the following record entries.

- a GLOBAL LOADLIB for the RSCS (and optionally RSCSEXIT) LOADLIB
- LOADCMD RSCS DMTMAN
- RSCS INIT

**2** Shutdown the RSCS server machine.

This command shuts down any active links, sessions, and RSCS itself. Because the QUICK operand is not used, RSCS will shut down links after all active files have finished transmission.

**Notes:**

- a. Use care when issuing the SHUTDOWN command. If you accidentally enter it *without* the appropriate prefix, it is treated as a CP command and passed to CP for execution. Extreme caution must be used with CP privilege classes on the RSCS machine so you do not accidentally shutdown your VM system.
- b. If the RSCS SHUTDOWN command is rejected or an unknown command, then RSCS is not running and you can skip to step 4 on page 81.

**rscs shutdown**

The command also produces messages along the way.

**a** For each link that has been started you will see:

```
14:48:54 DMTMAN002I Link linkid deactivated
```

**b** If the RSCS/VTAM interface had been started, you will see:

```
14:48:54 DMTSCT772I RSCS/VTAM interface stopping
14:48:54 DMTSCT773I RSCS/VTAM interface stopped
```

**C** And finally, you would see:

```
14:48:54 DMTPRD779I TCP Port redirector stopped
14:48:54 DMTMAN100I RSCS Networking terminated
```

**3** Remove the old RSCS code from memory.

**hx**

**4** Access the test Build disk.

**link P684096K 400 vaddr rr**  
**access vaddr a**

*vaddr* is any free virtual address. This disk contains the code to be tested. It needs to be accessed ahead of the RSCS 191 minidisk which contains the production code.

**5** Access the RSCS production disk as 191

**detach 191**  
**link P684096K 401 191 mr**  
**access 191 c**

The P684096K 401 minidisk contains the production code and configuration files which must be accessed after the test Build disk. This is to allow the new RSCS code to be executed for testing.

**6** Bring up RSCS on the server machine.

If RSCS finds any errors in configuration file statements or in starting links, you will see error messages explaining the problem (or problems). For example, if you requested RSCS to use the MSGNOH command, but the USER statement for RSCS in the directory did not specify the correct privilege class, an error will result.

The RSCS load address and address range displayed when starting RSCS help to diagnose any RSCS system problems that might arise later. To display the RSCS load address and address range after installation, use the RSCS QUERY SYSTEM LOADADDRESS command described in the *RSCS Operation and Use* book.

**profile**

```

:
14:48:54 DMTMAN010I RSCS Networking loaded at 00016000-000BC7A8,
CVT at 00018520, initialization time was 03/15/95 14:48:54
14:48:54 DMTPRD778I TCP Port redirector ready
:
14:48:54 DMTMAN000I RSCS Networking Version 3, Release 2.0-yynn ready
Ready;

```

**a** If your GCS profile initiates communications with VTAM, you will see the following messages:

```

14:48:54 DMTSCT770I RSCS/VTAM interface starting
14:48:54 DMTAXM109I File queue reordered
14:48:54 DMTSCT771I RSCS/VTAM interface ready

```

If your GCS profile does not start communications with VTAM and you wish to do so, issue the following command:

## rscs network start

**b** If your GCS profile calls an exec to start various links, you will see one of the following messages when each link starts:

### 1 Non-SNA link:

```

14:48:54 DMTCMY700I Activating link linkid type line=n class=c queuing=qtype

```

### 2 SNA link:

```

14:48:54 DMTCMY700I Activating link linkid type LUNAME=luname class=c
queuing=qtype LOGMODE=logmode

```

The variable data includes the following:

- Link ID
- Link type
- Virtual line address (non-SNA) or logical unit name (SNA)
- Class of files the link will handle
- Queueing type (FIFO, priority, or size)
- Logmode name (SNA only).

Check to see whether the information in the message text matches what you expected (as specified on LINKDEFINE or LINK statements in your configuration file).

- c** For each printer and workstation link started, you will see the following message:

```
14:48:54 DMTAXM109I File queue reordered
```

- d** For each system and workstation link which receives a signon request from the remote node, you will see the following message:

```
Signon of link linkid complete, buffer size=nnnn
```

## **7** Issue various RSCS Query commands

The QUERY command has many operands, filters, and SHOW options that let you display information about a link and the RSCS system in general. For example, you can use the QUERY *linkid* command to find out information about a specific link, the QUERY QUEUES command to see a list of files in the link's file queue, and so forth. See the *RSCS Operation and Use* book for a description of the QUERY command and instructions on how to use it.

- a** Query the RSCS service level

**rscs query system level**

*yynn* will be the year and number of the latest RSU applied to RSCS. If *0000* is displayed, then there have not been any RSUs applied to RSCS.

```
14:48:54 RSCS Networking Version 3, Release 2.0-yynn  
Ready;
```

- b** Query the status of RSCS/VTAM interface

**rscs query system network**

- 1** If your GCS profile did not initiate communications with VTAM, you will see the following message:

```
14:48:54 RSCS/VTAM interface stopped  
Ready;
```

- 2** If your GCS profile initiates communications with VTAM, you will see the following message:

```
14:48:54 RSCS/VTAM interface ready
Ready;
```

**c** Query the status of the RSCS TCP port redirector task:

**rscs query system tcpip**

```
14:48:54 TCP Port redirector ready
Ready;
```

**d** Query all system links

This will give you a message about each link you have defined to RSCS. Check to see that all links are present and appear as you expected (from LINKDEFINE or LINK statements in your configuration file).

For each link, RSCS displays the current status (active, connect, inactive, and so forth).

**Note:** You may not want to perform this step if many RSCS links are defined at your installation.

**rscs query system links**

**1** If you did not define any links in your configuration file, you will see:

```
14:48:54 No links defined
Ready;
```

**2** Otherwise you will see:

```

14:48:54 Link
14:48:54 Name      Status   Type     Addr LU Name  Logmode  Queuing
14:48:54 BOSTON    inactive SNANJE   0000 TN2RSCS  ...      size
14:48:54 CHICAGO   inactive SNANJE   0000 N051ZRSC RSCSNJE0 size
14:48:54 CLEVELND  inactive SNANJE   0000 TNARSCS  ...      size
14:48:54 DALLAS    inactive SNANJE   0000 TNHRSCS  ...      size
14:48:54 LONDON    inactive SNANJE   0000 TNBRSCS  ...      size
14:48:54 RALEIGH   inactive SNANJE   0000 TN7RSCS  RSCS07   size
14:48:54 TOKYO     inactive SNANJE   0000 QHARSCS  RSCSNJE0 size
14:48:54 TORONTO   inactive SNANJE   0000 OVCVRSCS RSCSNJE0 size
14:48:54 NYDEVSYS  inactive NJE      00A4 ...    ...      size
14:48:54 RESLAB    inactive NJE      0581 ...    ...      size
14:48:54 HQARTRS   inactive SNANJE   0000 WZ2RSCS  RSCSNJE0 size
14:48:54 ENDICOTT  inactive TCPNJE   0000 ...    ...      size
14:48:54 GLENDALE  inactive TCPNJE   0000 ...    ...      size
14:48:54 *LIST     inactive LISTPROC 0000 ...    ...      size
14:48:54 *UNKNOWN  inactive NOTIFY  0000 ...    ...      FIFO
14:48:54 *NOTHERE  inactive NOTIFY  0000 ...    ...      FIFO
14:48:54 LNKMRJE   inactive MRJE     0002 ...    ...      size
14:48:54 LNKRJE    inactive RJE      0003 ...    ...      size
14:48:54 PRT3812A  inactive 3270P   0DFA ...    ...      size
14:48:54 PRT3812B  inactive 3270P   0DFB ...    ...      size
14:48:54 PRT3812C  inactive 3270P   0DFC ...    ...      size
14:48:54 PRT38001  inactive SNA3270P 0000 PRT1RSCS SCS3800 size
14:48:54 PRT38002  inactive SNA3270P 0000 PRT2RSCS SCS3800 size
14:48:54 PRT38003  inactive SNA3270P 0000 PRT3RSCS SCS3800 size
14:48:54 PRT3820A  inactive SNA3270P 0000 PRTARSCS SCS3820 size
14:48:54 PRT3820B  inactive SNA3270P 0000 PRTBRSCS SCS3820 size
14:48:54 PRT3820C  inactive SNA3270P 0000 PRTCRCSCS SCS3820 size
14:48:54 PRT4250A  inactive SNA3270P 0000 ACRRCRSCS SCS4250 FIFO
14:48:54 PRT4250B  inactive SNA3270P 0000 BCRRCRSCS SCS4250 FIFO
14:48:54 PRT4250C  inactive SNA3270P 0000 CCRRCRSCS SCS4250 FIFO
14:48:54 PROPRINT  inactive TCPASCII 0000 ...    ...      FIFO
14:48:54 PROPRNTA  inactive TCPASCII 0000 ...    ...      FIFO
14:48:54 PROPRNTB  inactive TCPASCII 0000 ...    ...      FIFO
14:48:54 AIXDAEMN  inactive LPR      0000 ...    ...      FIFO
14:48:54 34 links found
Ready;

```

### e Query all system ports

This will give you a message about each port you have defined to RSCS. Check to see that all ports are present and appear as expected (from PORT statements defined in your configuration file).

The second column gives you information about the status of each port. This example shows that all three ports are not currently being used. The other states are *disabling*, *enabled* (for auto-answer links), and *in use*.

The QUERY command displays information about the ports that are defined by the PORTS configuration file statement. These are not the ports defined by the PARM statements for various links (for example, TCPASCII or LPR).

**Note:** You may not want to perform this step if many RSCS ports are defined at your installation.

## rscs query system ports

**1** If you did not define any ports in your configuration file, you will see:

```
14:48:54 No ports available
Ready;
```

**2** Otherwise you will see:

```
14:48:54 Port          Auto
14:48:54 Address State      Dial Trace Link
14:48:54 0080 free        no  none  ...
14:48:54 0081 free        no  none  ...
14:48:54 0082 free        yes none  ...
14:48:54 3 ports found
Ready;
```

**f** Query all link defaults

This will give you a message about each link you have defined to RSCS and the associated link default definitions. Check to see that all links are present and appear as you expected (from LINKDEFINE or LINK statements in your configuration file).

For each link, RSCS displays defaults such as type, line address, SNA LU name, SNA logmode, transmission spool class, type of queuing, and dispatching priority.

**Note:** You may not want to perform this step if many RSCS links are defined at your installation.

## rscs query system links show default

**1** If you did not define any links in your configuration file, you will see:

```
14:48:54 No links defined
Ready;
```

**2** Otherwise you will see:



```

14:48:54 Link      Default Def Default Default Def Default Dispatch
14:48:54 Name      Type   Line LU Name Logmode Class Queueing Priority
14:48:54 BOSTON    SNANJE 0000 TN2RSCS ... * size 5
14:48:54 CHICAGO   SNANJE 0000 N051ZRSC RSCSNJE0 * size 5
14:48:54 CLEVELND  SNANJE 0000 TNARSCS ... * size 5
14:48:54 DALLAS    SNANJE 0000 TNHRSCS ... * size 5
14:48:54 LONDON    SNANJE 0000 TNBRSCS ... * size 5
14:48:54 RALEIGH   SNANJE 0000 TN7RSCS RSCS07 * size 5
14:48:54 TOKYO     SNANJE 0000 QHARSCS RSCSNJE0 * size 5
14:48:54 TORONTO   SNANJE 0000 OVCVRSCS RSCSNJE0 * size 5
14:48:54 NYDEVSYS  NJE     00A4 ... ... * size 5
14:48:54 RESLAB    NJE     0581 ... ... * size 4
14:48:54 HQARTRS   SNANJE 0000 WZ2RSCS RSCSNJE0 * size 5
14:48:54 ENDICOTT  TCPNJE 0000 ... ... * size 5
14:48:54 GLENDALE  TCPNJE 0000 ... ... * size 5
14:48:54 *LIST     LISTPROC 0000 ... ... * size 5
14:48:54 *UNKNOWN  NOTIFY 0000 ... ... * FIFO 5
14:48:54 *NOTHERE  NOTIFY 0000 ... ... * FIFO 5
14:48:54 LNKMRJE   MRJE    0002 ... ... * size 5
14:48:54 LNKRJE    RJE     0003 ... ... * size 5
14:48:54 PRT3812A  3270P  0DFA ... ... * size 5
14:48:54 PRT3812B  3270P  0DFB ... ... * size 5
14:48:54 PRT3812C  3270P  0DFC ... ... * size 5
14:48:54 PRT38001  SNA3270P 0000 PRT1RSCS SCS3800 * size 5
14:48:54 PRT38002  SNA3270P 0000 PRT2RSCS SCS3800 * size 5
14:48:54 PRT38003  SNA3270P 0000 PRT3RSCS SCS3800 * size 5
14:48:54 PRT3820A  SNA3270P 0000 PRTARSCS SCS3820 * size 5
14:48:54 PRT3820B  SNA3270P 0000 PRTBRSCS SCS3820 * size 5
14:48:54 PRT3820C  SNA3270P 0000 PRTCRCSCS SCS3820 * size 5
14:48:54 PRT4250A  SNA3270P 0000 ACRCRSCS SCS4250 * FIFO 5
14:48:54 PRT4250B  SNA3270P 0000 BCRCRSCS SCS4250 * FIFO 5
14:48:54 PRT4250C  SNA3270P 0000 CCRCRSCS SCS4250 * FIFO 5
14:48:54 PROPRINT  TCPASCII 0000 ... ... * FIFO 5
14:48:54 PROPRNTA  TCPASCII 0000 ... ... * FIFO 5
14:48:54 PROPRNTB  TCPASCII 0000 ... ... * FIFO 5
14:48:54 AIXDAEMN  LPR     0000 ... ... * FIFO 5
14:48:54 34 links found
Ready;

```

## g Query destination identifiers

This will give you a message for each PSF destination defined to RSCS in the DEST file. Check to see that all the destination identifiers are present (from DEST statements in your configuration file or from entries in your destination identifier file).

**Note:** You may not want to perform this step if many identifiers are defined at your installation.

### rscs query system dest

**1** If you did not define any destination identifiers, you will see:

```
14:48:54 No destination identifiers defined
Ready;
```

**2** Otherwise you will see:

```
14:48:54 PSF
14:48:54 Destination
14:48:54 PSFPRT1
14:48:54 PSFPRT2
14:48:54 PSFPRT3
14:48:54 PSFPRT4
14:48:54 PSFPRT5
14:48:54 5 dests found
Ready;
```

**h** Query exit points

This will give you a message for each exit point defined to RSCS. Check the addresses at which RSCS loaded the various exit routines and compare the difference to the size of your load module. The address of the entry points should relate to the location of the entry points in the source module. If not, the entry points are in separate copies of the load module.

**rscs query system exits**

**1** If you did not define any exits in your configuration file, you will see:

```
14:48:54 No exit routines loaded
Ready;
```

**2** Otherwise you will see:

```

14:48:54 Exit      Entry Point
14:48:54 Number Name      Address  Status
14:48:54    0 SSSECU00 01221016 on
14:48:54    1 SSSECU01 012212B8 on
14:48:54    2 SASPOL02 0121FB96 on
14:48:54    3 SASPOL03 0121FC4E on
14:48:54    4 SASPOL04 0121FCF0 on
14:48:54    5 SASPOL05 0121FD96 on
14:48:54   14 SSSECU14 01221382 on
14:48:54   15 SSSECU15 01221588 on
14:48:54   19 SSSECU19 012217CC on
14:48:54   21 SSSECU21 01221ABC on
14:48:54   32 SSSECU32 01221C08 on
14:48:54 11 exits found
Ready;

```

## 8 Disconnect the RSCS user ID

### 4 rscs disc

If you defined any system-authorized or link-authorized alternate operators in your configuration file, have them try to perform some privileged operations.

## 9 Logon to a separate user ID which is authorized to issue restricted RSCS commands.

From a system-authorized or link-authorized alternate operator, try to perform some privileged operations. Unless specifically authorized, system-authorized alternate operators should not be able to use the RSCS CP command. Link-authorized alternate operators should be able to enter commands that affect a specific link, but not commands that affect RSCS operation. (The *RSCS Operation and Use* book lists the authorization categories for commands.)

- a** Test to see that it is possible to communicate over each connected link.
- b** Test to see whether messages include CP headers or not (whichever you requested).

### **msg rscs msg *nodeid userid* testing for msgnoh**

Where *nodeid* is the node ID on the RSCS local configuration statement, and *userid* is the user ID you are testing from. If the response includes a CP message header, RSCS is not using MSGNOH and thus is not suppressing CP headers.

If you specified MSGNOH (as recommended), you will see:

```
From nodeid(userid): TESTING FOR MSGNOH
```

- c** For printer links, you can send a message to (print at) the printer. Someone near the device can tell you if the message arrives.
- d** Try defining some links or routes (using the DEFINE and ROUTE commands) and verify them (using the QUERY command). Enter some REROUTE commands and query the results. (See the *RSCS Operation and Use* book for command formats.) For example, enter the following command:

### msg rscs query system reroutes

- 1** If you did not define any reroutes in your configuration file or you used the REROUTE command to remove them, you will see:

```
14:48:54 No reroutes in effect
```

- 2** Otherwise you will see:

```
14:48:54      For
14:48:54 Node   User   Type   Node   User   Quiet
14:48:54 DEVSYS  *     all    NYDEVSYS =  yes
14:48:54 DEVSYS  SYSTEM commands NYDEVSYS SYSTEM  yes
14:48:54 NEWYORK OP1    not-rec NEWYORK OPER1  yes
14:48:54 NEWYORK OP2    not-rec NEWYORK OPER2  yes
14:48:54 NEWYORK OP3    not-rec NEWYORK OPER3  yes
14:48:54 NEWYORK JANETM files  NEWYORK JANETF  no
14:48:54 6 reroutes found
```

- e** You can send files back and forth on some links and verify the link status by entering:

### msg rscs query system queues

```
14:48:54 Link
14:48:54 Name      Status      Sending Receiving Queued Looping Held
14:48:54 BOSTON    connect     0         0         3         3         0
14:48:54 CHICAGO   inactive    0         0         8         0         0
14:48:54 CLEVELND  inactive    0         0         1         0         0
```

**f** Any other verification you do will depend on your installation's particular setup. Do enough verification to guarantee that RSCS is functioning in your environment the way you planned it.

### A.1.1 Restarting RSCS After Modifying Your Configuration.

If you need to modify your RSCS configuration (such as to change the definition of a port or link) after starting RSCS, use the following procedure to place the changes online:

**1** Log on to the installation user ID, P684096K

**2** Access the 401 minidisk.

**access 401 e**

The P684096K 401 minidisk is RSCS's 191 minidisk.

**3** Make the appropriate configuration changes

**4** Log off the installation user ID.

**logoff**

**5** Log on to the RSCS virtual machine.

**a** If RSCS is running, enter:

**rscs shutdown cp ipl gcs**

**b** If RSCS is not running, enter:

**ipl gcs**

---

## A.2 Test the Data Interchange Manager Server Machine (XCHANGE)

This procedure will test the new Data Interchange Manager code to see that it functions properly. You will log the XCHANGE server machine on and access the appropriate disks. A second user ID is needed in order to verify the Data Interchange Manager server. You will also need to ensure that the paths to RSCS and SMTP are available.

**1** Log on to the Data Interchange Manager server user ID **XCHANGE**.

**2** Shutdown the XCHANGE server machine.

**Note:** If you are installing RSCS, the server machine will be just coming up. When it has initialized you then can issue the stop command.

**stop**

**3** Define a temporary minidisk that will be used as XCHANGE's A-disk.

**define tdasd vaddr 5**

*dasd* is the DASD type of the temporary disk that you are going to define.

*vaddr* is any free virtual address on this user ID.

**4** Format the temporary minidisk.

**format vaddr a**

*vaddr* is the virtual address that you defined.

DMSFOR603R FORMAT will erase all files on disk A(*vaddr*). Do you wish to continue?  
Enter 1 (YES) or 0 (NO).

**1**

DMSFOR605R Enter disk label:

**tmp191**

DMSFOR733I Formatting disk A  
DMSFOR732I *n* {cylinders|blocks} formatted on A(*vaddr*)

**5** Detach the current disk or directory used as XCHANGE's log-disk.

**a** If using minidisks

**detach 5BF**

The 5BF disk contains the production XCHANGE logging files. It needs to be detached in order to define a temporary one for testing purposes. That way testing logs will not be intermixed with production ones.

**b** If using SFS

**release** *logfm*

*logfm* is the filemode where the VMSYS:XCHANGE.LOG directory is accessed. This SFS directory contains the production XCHANGE logging files. It needs to be released in order to define a temporary disk for testing purposes. That way testing logs will not be intermixed with production ones.

**6** Define a temporary minidisk that will be used as XCHANGE's log-disk.

**define** *tdasd* **5BF** **5**

*dasd* is the DASD type of the temporary disk that you are going to define.

**7** Format the temporary minidisk.

**format** **5BF** **b**

DMSFOR603R FORMAT will erase all files on disk B(5BF). Do you wish to continue?  
Enter 1 (YES) or 0 (NO).

**1**

DMSFOR605R Enter disk label:

**tmp5BF**

DMSFOR733I Formatting disk B  
DMSFOR732I *n* {cylinders|blocks} formatted on B(5BF)

**8** Access the test Build disk or directory.

**a** If using minidisks

**link** **P684096K 402** *vaddr1* **rr**  
**access** *vaddr1* *freefm*

*vaddr1* is any free virtual address. This disk contains the code to be tested. It needs to be accessed ahead of the XCHANGE disk containing the production code. *freefm* is any free access mode for the XCHANGE user ID.

**b** If using SFS

**access VMSYS:P684096K.RSCS.XCHTEST** *freefm* This SFS directory contains the code to be tested. It needs to be accessed ahead of the XCHANGE directory containing the production code. *freefm* is any free access mode for the XCHANGE user ID.

**9** Access the production Build disk or directory.

**a** If using minidisks

**access 191** *freefm1*

Where *freefm1* is any free access mode for the XCHANGE user ID. The production Build disk containing the production code and configuration files must be accessed after the test Build disk. This is to allow the new Data Interchange Manager code to be executed for testing.

**b** If using SFS

**access VMSYS:XCHANGE.** *freefm1*

Where *freefm1* is any free access mode for the XCHANGE user ID. This SFS directory contains the production code and configuration files must be accessed after the test Build directory. This is to allow the new Data Interchange Manager code to be executed for testing.

**10** Start the XCHANGE server machine using the new code.

**profile**

```
⋮
ACHAMA010I RSCS Interchange Version 3.2 - 0000 initializing on 15 Mar 1995 15:22:34
ACHAMA001I Reading configuration file XCHANGE CONFIG *
ACHAMA000I IBM VM RSCS Data Interchange Manager Release 3.2.yynn Ready
⋮
```



## 11 Issue a QUERY command

**query system**

*yynn* will be the year and number of the latest RSU applied to RSCS. If *0000* is displayed, then there have not been any RSUs applied to RSCS.

An example of the system response might be:

```
ACHAMA621I Files processed = 0, rejected = 0
ACHAMA619I Nick Override is All
ACHAMA620I Nick Priv is 'Off'
ACHAMA000I IBM VM RSCS Data Interchange Manager Release 3.2.yynn Ready
```

## 12 Disconnect the XCHANGE user ID

4 **cp disc**

## 13 Log on to any other valid CMS user ID. This needs to be done so that you can send a message through the XCHANGE server.

**a** Obtain a list of valid XCHANGE nicknames.

4 **msg xchange query nick all**

**Note:** If you do not have any nicknames established, you can use the NICK ADD command to add a valid XCHANGE nickname. See *RSCS Data Interchange Manager Installing, Managing, and Using*, Chapter 6, "Using RSCS Interchange" under "Working with Nicknames", and the "NICK" command in Appendix A for information on adding nicknames.

**b** Send a message to a valid XCHANGE nickname

**note** *nickname*

*nickname* is any valid nickname returned by XCHANGE from the Query NICK ALL command.

### What's Next?

Verification of RSCS is now complete.

Proceed with:

| 6.9, "Place RSCS Into Production" on page 58 to place the new RSCS code into production for initial  
| installations.

| **OR**

| 7.5, "Place Serviced RSCS into Production" on page 75 to **replace** the RSCS 3.2 code running in  
| production with the new code when servicing your system.

6 **OR**

6 z/VM 4.1.0 express users should proceed with step 6 on page 195 to place the new service in  
6 production.

---

## Appendix B. Local Modification Example: Assemble File

### Notes!

- This appendix provides an example for updating the DMTMAN ASSEMBLE part. You should substitute the file name of the part you are modifying for DMTMAN in the instructions. Since the output of the instructions is to create a TEXT file type with an abbreviation of TXT, you should substitute the abbreviation of the file type you are modifying for TXT. You can use these instructions to create local modifications to a RSCS message repository, conversion repository, exec, or any other RSCS part.
  - If you wish to use one of your own exits instead of a sample one provided by IBM, then you can do so in a couple of different ways:
    1. Add your exits to the DMTBLELL build list as a local modification and rebuild the RSCSEXIT LOADLIB.
    2. Build your own exit LOADLIB and add it to the list of LOADLIBs specified on the GLOBAL statement of the PROFILE GCS file.
  - If you wish to change the language of messages issued by Data Interchange Manager to uppercase English, then you will need to do the following:
    1. Update the DMTBLELL build list as a local modification changing the line **:PARTID. ACHAMENG TXT** to **:PARTID. ACHAUENG TXT**.
    2. Run VMFBLD to pick up the changes in the build lists.
  - VMFASM cannot be used to reassemble RSCS modules due to the use of BASR and BAS operation codes which VMFASM does not support. Use VMFHASM, VMFHLASM, or a follow on assembler when reassembling RSCS modules.
- Note:** In order to assemble cleanly with HLASM, RSCS APAR VM61946 must be applied, or the OPTABLE(XA) assembly option must be used.

- 5 If you are running a lower or higher level VM/ESA or z/VM system you can still use this example. Some of the steps may be in a different order so you can cross reference the example against the *Service Guide*, Chapter 7, to help with the correct order.

### 1 Set up the required access order

**vmfsetup 5684096K {RSCSSRCIRSCSSSFS}**

Use component name **RSCSSRC** if servicing using minidisks or **RSCSSSFS** if servicing using SFS.

### 2 Update the local service level (VVTLCL) of the software inventory to create a record of the local modification

vmfsim logmod 5684096K vvtlcl *fmlocal* tdata :part dmtman txt :mod lcl0001.updt0001

*fmlocal* is the fm of the local modification and sample disk or directory

**3** Create/Edit the AUXLCL file for the part to update

**Note:** This step can be skipped when applying a local modification to a full part replacement part.

```
xedit dmtman auxlcl fmlocal (noprof
====> input UPDT0001 LCL LCL0001 * comment
====> file
```

*fmlocal* is the fm of the local modification and sample disk or directory

**4** XEDIT Source file to create the update file

**Note:** You do not need the XEDIT control (CTL) option when editing a full part replacement part.

```
xedit dmtman assemble (ctl rscsv3
====> fm fmlocal
```

*fmlocal* is the fm of the local modification and sample disk or directory

**5** Make your desired changes

**6** Issue the XEDIT file command

```
====> file
```

2  
2 **7** Use VMFHLASM to generate the text deck with the changes. The following is a list of execs which can be substituted for VMFHLASM when doing local modifications to RSCS parts other than ASSEMBLE:

- MCOMP to compile a message repository (see the *VM/RSCS Exit Customization* manual for details). This EXEC is shipped interpretive (filetype = EXEC) and compiled (filetype = CEXEC). If you would rather use the compiled exec instead of interpretive, copy the CEXEC as EXEC on the RSCS test disk (400), replacing the interpretive copy.
- MCONV to compile a conversion repository (see the *VM/RSCS Exit Customization* manual for details). This EXEC is shipped interpretive (filetype = EXEC) and compiled (filetype = CEXEC). If you would rather

use the compiled exec instead of interpretive, copy the CEXEC as EXEC on the RSCS test disk (400), replacing the interpretive copy.

- EXECUPTD to update a \$EXEC part
- This step may be skipped for other RSCS parts such as full part replacement parts or build lists.

## 2 vmfhlasm dmtman 5684096K {RSCSSRC|RSCSSSFS} (hlasm optable(xa) ehiasm

Use component name **RSCSSRC** if using minidisks or **RSCSSSFS** if using SFS.

| **8** Copy the updated text deck to the local modification and sample disk or  
| directory

```
copyfile dmtman txtl0001 a = = fmlocal (olddate replace  
erase dmtman txtl0001 a
```

*fmlocal* is the fm of the local modification and sample disk or directory

**9** Create or update and edit the 5684096K \$SELECT file on the alternate apply disk

```
xedit 5684096K $select fmapply  
====> top  
====> input :APPLYID.mm/dd/yy hh:mm:ss  
====> input DMTMAN TXT  
====> file
```

*fmapply* is the fm of the alternate apply minidisk or directory. *mm/dd/yy hh:mm:ss* is the current date and time and must be unique.

**10** Build the RSCS product by issuing VMFBLD

vmfbld ppf 5684096K {RSCS|RSCSSFS} (serviced Use component name **RSCS** if using minidisks or **RSCSSFS** if using SFS.

---

## Appendix C. Applying a Recommended Service Upgrade (RSU) Tape For RSCS

### z/VM Version 4 Express Users

If you installed z/VM using the Express Installation and Service Procedure then you need to follow the service instructions as documented in the *z/VM Express Installation and Service Procedures* pamphlet (that came with the *z/VM Installation Guide*) in order to install an RSU or COR service on an Express system. Or you can go to the instructions in Appendix H, "Service Instructions for z/VM Express Users Only" on page 194 of this program directory.

### Note!

You should first read through the RSU hard copy memo contained with the tape before continuing with these instructions.

The RSU tape is structured to install all PTFs included on the tape plus the tape files containing the preapplied service and prebuilt objects. All PTF-related files are loaded to the Delta disk. The tape file containing the preapplied service, i.e. containing the results of VMFAPPLY, is loaded to the alternate apply disk and the contents of the tape files containing prebuilt objects are loaded to the appropriate Build disks.

Points to consider about using the Product Service Upgrade procedure are:

- This process will not alter any of your tailored flat files (files serviced by full part replacement only such as RSCS CONFIG) in any way. Sample files which may have been updated using update files will have to have those updates reapplied.
- Planning must be done (such as determining any DASD size changes, and determining what service, if any, on your existing system is not contained on the RSU tape) prior to actually loading the service from the RSU tape. These tasks will be discussed.

The following outline is an overview of what tasks need to be performed during the PSU procedure:

- Prepare System

In this task, you will receive the documentation contained on the RSU tape and determine the DASD required to install the RSU tape.

- Merge Service

Use the VMFMRDSK command to clear the alternate apply disk before receiving the RSU tape. This allows you to remove the new service if a serious problem is found.

- Receive Service

The VMFINS command receives service from the RSU tape and places it on the Delta disk.

- Apply Additional Service

The VMFAPPLY command updates the version vector table (VVT), which identifies the service level of all the serviced parts. In addition, AUX files are generated from the VVT for parts that require them. These steps are used to reapply service that was not contained on the refresh tape that was already installed for RSCS.

- Reapply Local Service (if applicable)

All local service must be entered into the software inventory to allow VMSES/E to track the changes and build them into the system.

- Build a New Level

The build task generates the serviced level of an object and places the new object on a Build disk.

- Place the New Service into Production

Once the service is satisfactorily tested it should be put into production by copying the new service to the production disk, re-saving the DCSS (Discontiguous Saved Segments), etc.

---

## C.1 Apply RSCS RSU

### C.1.1 Prepare Your System for Service Refresh

5 **Electronic Service (envelope file)**

5 If you have received the RSU electronically or on CD-ROM, follow the appropriate instructions to  
5 retrieve and decompress the envelope file to your A-disk. The decompression is currently done by  
5 using the DETERSE MODULE. The file name of the decompressed file will be

- RPTF*num* for the service envelope

5 The file type for both of these files must be SERVLINK. You will need to enter the file name on the  
5 VMFREC commands that follow.

The *ppfname* used throughout these instructions is **5684096K**, which assumes you are using the PPF supplied by IBM for RSCS. If you have your own PPF override file for RSCS you should use your file's *ppfname* instead of **5684096K**. The *ppfname* you use should be used **throughout** the rest of this procedure.

**1** Log on to the VM/RSCS service user ID P684096K

**2** Establish write access to the Software Inventory Disk (MAINT 51D) if it is not already linked R/W.

**Note:** If the MAINT 51D minidisk was accessed R/O, you will need to have the user who has it linked R/W link it as R/O. You then can issue the following commands to obtain R/W access to it.

**link maint 51d 51d mr  
access 51d d**

The MAINT 51D disk is where the VMSES/E system level software inventory files reside.

**3** Mount the RSU tape on the tape drive as virtual device 181. You must use 181.

**4** Receive the documentation:

Receive the documentation on the tape for the RSU tape. This step will also load the cumulative Apply Status Table (RSCS SRVAPPS) which identifies all preapplied service contained on the tape. These files are loaded to the 51D disk.

2 **a** If receiving the RSU from tape

2 **vmfins install info (nomemo**

2 **b** If receiving the RSU from an envelope file

2 **vmfins install info (nomemo env rptfnum**

**5** Determine DASD sizes for disks to receive service:

In order to receive the service from the RSU tape, you need to have adequate space available on the alternate APPLY, Delta, and Build disks or directories. The required sizes are identified in the RSCS documentation (5684096K MEMO D) received in the previous step.

**6** Setup the correct minidisk access order

**vmfsetup 5684096K {RSCS|RSCSSFS}**

Use component name **RSCS** if the product is installed on minidisks or **RSCSSFS** if the product is installed in SFS.

**7** Merge the APPLY disks for RSCS:

Next, you must prepare your system to receive the service from the RSU tape. To do this, you must first clear the alternate apply disk for receipt of the service from the RSU tape.

Enter the VMFMRDSK command to merge the alternate apply disk to the apply disk. This will clear the alternate apply disk.



**vmfmrdsk 5684096K {RSCSIRSCSSFS} apply**

Use component name **RSCS** if the product is installed on minidisks or **RSCSSFS** if the product is installed in SFS.

- 8** If RSCS is installed on VM/ESA 1.2.2 or higher, you can obtain additional information about the service on the RSU and how it will affect your local modifications by invoking the VMFPSU command. This command creates an output file, **5684096K PSUPLAN**, which you can review. See *Service Guide* for an explanation of this file.

**Warning!**

If a local modification has been made for a part which has not been serviced and the part is in a buildlist for a higher level part (like the RSCS LOADLIB), the higher level part will have to be rebuilt after installing the RSU. The VMFPSU command will not warn of this situation. After installing the RSU, update the 5684096K \$SELECT file to cause any parts in this situation to be built which you have made local modifications for.

**vmfpsu 5684096K {RSCSIRSCSSFS}**

Use component name **RSCS** if the product is installed on minidisks or **RSCSSFS** if the product is installed in SFS.

This command produces an output file that contains information about the service on the RSU compared against the service and local modifications on your system. The file name is **5684096K PSUPLAN**,

## C.1.2 Receive the Preapplied, Prebuilt Service

- 1** Refresh the RSCS service disks by loading new service from the RSU tape:

- 2 **a** If receiving the RSU from tape

2 **vmfins install ppf 5684096K {RSCSIRSCSSFS} (nomemo nolink**

- 2 Use component name **RSCS** if the product is  
2 installed on minidisks or **RSCSSFS** if the product is  
2 installed in SFS.

- 2 **b** If receiving the RSU from an envelope file

**2 vmfins install ppf 5684096K {RSCSIRSCSSFS} (nomemo nolink env rptfnnnn**

2 Use component name **RSCS** if the product is  
2 installed on minidisks or **RSCSSFS** if the product is  
2 installed in SFS.

```
VMFINS2767I Reading VMFINS DEFAULTS B for additional options
VMFINS2760I VMFINS processing started
VMFINS2601R Do you want to create an override for :PPF 5684096K RSCS :PRODID
5684096K%RSCS?
Enter 0 (No), 1 (Yes) or 2 (Exit)
0
```

**2** Check the install message log (\$VMFINS \$MSGLOG) for warning and error messages. If necessary, correct any problems before going on. For information about handling specific install messages, see the applicable *System Messages and Codes*, or use online HELP.

**vmfview install**

### **C.1.3 Process Additional Service**

**1** Apply additional service:

The VMFAPPLY command is used to reapply service that was not contained on the refresh tape that was already installed for the component.

Applying service with preapplied, prebuilt service will reapply any reach-ahead service that may be on the system **or** indicate that there are no reach-ahead PTFs to be applied.

**vmfapply ppf 5684096K {RSCSIRSCSSFS}**

Use component name **RSCS** if the product is installed on minidisks or **RSCSSFS** if the product is installed in SFS.

Messages VMFAPP2122E and VMFAPP2109R will be displayed only if you have reach-ahead service that needs to be reapplied.

VMFAPP2122E The set of PTFs in the Apply Status Table (5684096K SRVAPPS) on the 2A2 (G) disk is not a subset of the PTFs in the highest Level Apply Status Table on the 2A6 (F) disk. This is an inconsistent state.

VMFAPP2109R VMFAPPLY will automatically correct the problem identified by message 2122E by including the missing PTFs in the current Apply List. Enter (1) to continue; (0) to quit.

1

If you receive these messages, enter **1** for VMFAPPLY to reapply the reach-ahead service.

- 2 Check the apply message log (\$VMFAPP \$MSGLOG) for warning and error messages. If necessary, correct any problems before going on. For information about handling specific apply messages, see the applicable *System Messages and Codes*, or use online HELP.

#### vmfview apply

- 3 If necessary, rework local service

If RSCS is installed on VM/ESA 1.2.2 or higher, the **5684096K PSUPLAN** (output from running the VMFPSU command), can be used to indicate what local service or modifications are affected by the RSU tape. If a PTF is applied and it contains service to a part for which you have a local modification, you will need to rework the local modification. Refer to the *Service Guide*.

This also applies to any of the sample tailorable files which have been serviced. You do not need to make any changes to the local modifications on the sample files on the 2C2 disk. Instead you should make any necessary applicable changes to the usable sample file. The usable sample files are not touched when servicing RSCS. The usable file name and file type for all sample files can be obtained from figures in Appendix E, "Supplied Sample Packages" on page 111. To see what has been changed, compare the local modification on the 2C2 (Localsam) disk to the serviced part on the 2D2 (Delta) disk. When VMFBLD is run, the copy of the sample file on the 2C2 disk is copied to the 406 disk. The sample files are not used by RSCS.

#### Note!

If on VM/ESA 1.2.1, you need to look at your local modifications on the 2C2 disk and rework them if applicable (see if the update will apply, correct if not, then reassemble (or equivalent) with the new service.

### **C.1.3.1 Build the New Service Level:**

The last task is to rebuild all objects that were affected by reach-ahead service that was reapplied, local modifications, and saved segments. Choose one of the following sections to proceed with based on whether there is any reach-ahead service or local modifications to be reapplied.

- If there is no reach-ahead service (the VMFAPPLY step indicated no additional PTF's have been applied) or local modifications to be reapplied, then all objects or parts have been built and received to the test Build disks during the receive of the RSU. Installation of the RSU is complete. It is not necessary to do the build step since there will not be any objects or parts flagged to be built. Continue with step 7.3, "Optional Service Steps (depending on what was installed)" on page 74.
- If there is reach-ahead service or a local modification that needs to be reapplied, continue with step 7.2.4, "Update the Build Status Table" on page 72.

---

## Appendix D. Overriding the VMSYS File Pool Name

### Note!

This procedure is only necessary for VM/ESA 1.2.1. For VM/ESA 1.2.2 and above, see "Changing the Shared File System Directory File Pool Name" section of the *VMSES/E Introduction and Reference* manual. However, the general concept of creating a PPF override as shown within this section, can be used as an example on any VM/ESA or z/VM system.

This section provides information to help you change the name of the file pool where RSCS files will reside when RSCS is installed using SFS directories.

During the VMFINS installation process, you are presented with an opportunity to override the default installation parameters defined in the 5684096K \$PPF file. If you choose to do this, the 'Make Override Panel' will be displayed, from which you can then change various installation parameters, including the SFS directory names used to organize the RSCS files. However, this panel does not support changing the name of the file pool with which these directories are associated—VMSYS.

VMSYS is the IBM default name for a file pool that's intended to be used for system data and programs that are to be shared among users. See the *Planning and Administration* manual for more information about the VMSYS file pool and its characteristics.

If you intend to change *only* the VMSYS file pool name, you will need to manually create a PPF override for the :DCL. section of the 5684096K \$PPF file *before* you install RSCS, as described in 6.4, "Install RSCS" on page 35.

If you intend to change the VMSYS file pool name in addition to other installation parameters, you should first create a PPF override file during the installation process to change those parameters, then modify the resulting \$PPF override file to account for the VMSYS-related changes.

**Note:** Do **not** modify the product supplied 5684096K \$PPF or 5684096K PPF files to change the VMSYS file pool name or any other installation parameters. If the 5684096K \$PPF file is serviced, the existing \$PPF file will be replaced, and any changes to that file will be lost; by creating your own \$PPF override, your updates will be preserved. This should be done after the install planning step, do not reissue that step.

The following process describes changing the default file pool name from VMSYS to MYPOOL1:

- 1 Create a new \$PPF override file, or edit the override file created via the 'Make Override Panel' function.

**xedit** *overname* \$PPF *fm2*

*overname* is the PPF override file name (such as "MYRSCS") that you want to use.

*fm2* is an appropriate file mode. If you create this file yourself, specify a file mode of A.

If you modify an existing override file, specify a file mode of A or D, based on where the file currently resides (A being the file mode of a R/W 191 minidisk, or equivalent; D, that of the MAINT 51D minidisk).

- 4
- 2 Create the override list by inserting the following:  
:OVERLST. RSCSSFS RSCSUSFS RSCSSSFS
  - 3 Create (or modify as required) the Variable Declarations (:DCL.) section for each override used when installing and servicing RSCS. RSCSSFS is used to install and service RSCS. A sample :DCL. section is shown in step 3a. RSCSUSFS is used to service RSCS uppercase English help files. A sample :DCL. section is shown in step 3b. RSCSSSFS is used to install RSCS source files. A sample :DCL. section is shown in step 3c on page 109.
    - a. Create (or modify as required) the Variable Declarations (:DCL.) section for the RSCSSFS override area, so that it resembles the :DCL. section shown below.

|

```
:RSCSSFS. RSCSSFS 5684096K
:DCL. UPDATE
&INST191 DIR MYPPOOL1:P684096K
&BAS1Z DIR MYPPOOL1:P684096K.RSCS.OBJECT
&BLD3Z DIR MYPPOOL1:P684096K.RSCS.XCHTEST
&BLD4Z DIR MYPPOOL1:XCHANGE.
&BLD6Z DIR MYPPOOL1:P684096K.RSCS.PACKAGE
&SAMPZ DIR MYPPOOL1:P684096K.RSCS.LOCALSAM
&DELTZ DIR MYPPOOL1:P684096K.RSCS.DELTA
&APPLX DIR MYPPOOL1:P684096K.RSCS.APPLYALT
&APPLY DIR MYPPOOL1:P684096K.RSCS.APPLYPROD
&BLD2Z DIR MYPPOOL1:P684096K.RSCS.HELP
:EDCL.
:END.
```

(This override will update the :DCL. section of the RSCSSFS override area of the 5684096K \$PPF file.)

- b. Create (or modify as required) the Variable Declarations (:DCL.) section for the RSCSUSFS override area, so that it resembles the :DCL. section shown below.

```

|
:RSCSUSFS. RSCSUSFS 5684096K
:DCL. UPDATE
&INST191 DIR MYPPOOL1:P684096K
&BAS1Z DIR MYPPOOL1:P684096K.RSCS.OBJECT
&BLD3Z DIR MYPPOOL1:P684096K.RSCS.XCHTEST
&BLD4Z DIR MYPPOOL1:XCHANGE.
&BLD6Z DIR MYPPOOL1:P684096K.RSCS.PACKAGE
&SAMPZ DIR MYPPOOL1:P684096K.RSCS.LOCALSAM
&DELTZ DIR MYPPOOL1:P684096K.RSCS.DELTA
&APPLX DIR MYPPOOL1:P684096K.RSCS.APPLYALT
&APPLY DIR MYPPOOL1:P684096K.RSCS.APPLYPROD
&BLD2Z DIR MYPPOOL1:P684096K.RSCS.UHELP
:EDCL.
:END.

```

(This override will update the :DCL. section of the RSCSUSFS override area of the 5684096K \$PPF file.)

- c. Create (or modify as required) the Variable Declarations (:DCL.) section for the RSCSSSFS override area, so that it resembles the :DCL. section shown below.

```

|
:RSCSSSFS. RSCSSSFS 5684096K
:DCL. UPDATE
&INST191 DIR MYPPOOL1:P684096K
&BAS1Z DIR MYPPOOL1:P684096K.RSCS.OBJECT
&BLD3Z DIR MYPPOOL1:P684096K.RSCS.XCHTEST
&BLD4Z DIR MYPPOOL1:XCHANGE.
&BLD6Z DIR MYPPOOL1:P684096K.RSCS.PACKAGE
&SAMPZ DIR MYPPOOL1:P684096K.RSCS.LOCALSAM
&DELTZ DIR MYPPOOL1:P684096K.RSCS.DELTA
&APPLX DIR MYPPOOL1:P684096K.RSCS.APPLYALT
&APPLY DIR MYPPOOL1:P684096K.RSCS.APPLYPROD
&BLD2Z DIR MYPPOOL1:P684096K.RSCS.HELP
&BAS2Z DIR MYPPOOL1:P684096K.RSCS.SOURCE
:EDCL.
:END.

```

(This override will update the :DCL. section of the RSCSSSFS override area of the 5684096K \$PPF file.)

- 4** If your \$PPF override file was created at file mode A, copy it to file mode D—the Software Inventory minidisk (MAINT 51D).

**file**

**copyfile** *overname* \$PPF *fm* = = **d** (**olddate**)

**erase** *overname* \$PPF *fm*

**5** Compile your changes to create the usable *overname* PPF file.

**vmfppf** *overname compname*

where *overname* is the file name of your \$PPF override file, and *compname* is **RSCSSF**, **RSCSUSFS**, and **RSCSSSFS**. Each override created in step 2 on page 108 must be compiled.

**Note:** Make sure the created *overname* PPF file is on the D (MAINT 51D) minidisk, not the A minidisk.

**6** Update the IPL directory control statement in the P684096K directory entry:

```
IPL CMS PARM FILEPOOL MYP00L1
```

This will cause CMS to access the P684096K's top directory as file mode A using the MYPOOL1 file pool name instead of VMSYS.

Now that the *overname* PPF file has been created, you should specify *overname* instead of 5684096K as the PPF name to be used for those VMSES/E commands that require a PPF name.



## Appendix E. Supplied Sample Packages

This appendix has tables showing all the sample packages provided with RSCS 3.2.0, what each file is for, and what disk they are installed on.

### E.1 Samples for Configuring RSCS and Data Interchange Manager

Data Interchange Manager uses RSCS exit points 0, 21, and 24. The following table shows sample files installed on the P684096K's 406 disk used to configure and operate RSCS and Data Interchange Manager.

| <i>Figure 21. RSCS 3.2.0 Supplied Sample Files</i> |                          |                                                                                                                                                                                                                                           |
|----------------------------------------------------|--------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Sample File Name</b>                            | <b>Disk Installed to</b> | <b>Sample Description</b>                                                                                                                                                                                                                 |
| ACHARSCS CONFSAMP                                  | 406                      | Sample RSCS configuration file for XCHANGE, use as ACHARSCS CONFIG on the P684096K 401 disk imbedded in RSCS CONFIG.                                                                                                                      |
| RSCS CONFSAMP                                      | 406                      | Sample RSCS configuration file, use as RSCS CONFIG on the P684096K 401 disk.                                                                                                                                                              |
| XCHANGE CONFSAMP                                   | 406                      | Sample XCHANGE configuration file, use as XCHANGE CONFIG on the P684096K 403 disk.                                                                                                                                                        |
| PROFILE GCSSAMP                                    | 406                      | Sample PROFILE GCS file for the RSCS virtual machine, use as PROFILE GCS on the P684096K 401 disk.                                                                                                                                        |
| PROFILE EXEC SAMP                                  | 406                      | Sample PROFILE EXEC file for the XCHANGE virtual machine, use as PROFILE EXEC on the P684096K 403 disk.                                                                                                                                   |
| ACHAFAIL TEMPSAMP                                  | 406                      | Sample XCHANGE failure template, use as ACHAFAIL TEMPLATE on the P684096K 403 disk.                                                                                                                                                       |
| NOTHERE TEMPSAMP                                   | 406                      | Sample RSCS unknown user ID template, use as NOTHERE TEMPLATE on the P684096K 401 disk.                                                                                                                                                   |
| UNKNOWN TEMPSAMP                                   | 406                      | Sample RSCS unknown node ID template, use as UNKNOWN TEMPLATE on the P684096K 401 disk.                                                                                                                                                   |
| RSCSTAB ASSEMBLE                                   | 406                      | Sample VTAM MODE tables for the RSCS virtual machine.                                                                                                                                                                                     |
| RSCSTAB TEXT                                       | 406                      | Assembled version.                                                                                                                                                                                                                        |
| RSCSTAB LKEDCTRL                                   | 406                      | Used to build LOADLIB for use by VTAM.                                                                                                                                                                                                    |
| RSCSNET VTAMLST                                    | 406                      | Sample VTAM definitions for the RSCS application.                                                                                                                                                                                         |
| LKEDCHK EXEC                                       | 406                      | Exec to check a LKEDIT file for any error messages.                                                                                                                                                                                       |
| RSCSV3EX CNTRL                                     | 406                      | Control file for the sample exits.                                                                                                                                                                                                        |
| PPS EXEC                                           | 406                      | This exec is intended to be used to send postscript files to RSCS links using either the LPR driver with the LPRXPSE exit module or the TCPASCII or ASCII drivers using the ASCXPSE exit module.                                          |
| PPS XEDIT                                          | 406                      | This XEDIT macro is intended to be used to send postscript files from within the XEDIT environment to RSCS links using either the LPR driver with the LPRXPSE exit module or the TCPASCII or ASCII drivers using the ASCXPSE exit module. |

---

## E.2 Planning and Install Configuration Files

The following table shows sample configuration files installed on the P684096K's 406 disk which match the configuration examples in Appendix B of the *RSCS Planning and Installation* book.

*Figure 22. RSCS 3.2.0 Supplied Sample Files*

| Sample File Name  | Disk Installed to | Sample Description                                                                                                                                                       |
|-------------------|-------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ITRACE CONFSAMP   | 406               | Sample ITRACE entries, use as ITRACE CONFIG on the P684096K 401 disk.                                                                                                    |
| EXITS CONFSAMP    | 406               | Sample EXIT entries, use as EXITS CONFIG on the P684096K 401 disk.                                                                                                       |
| AUTHS CONFSAMP    | 406               | Sample AUTH statement entries, use as AUTHS CONFIG on the P684096K 401 disk.                                                                                             |
| TRAILER CONFSAMP  | 406               | Statements to be placed after link and node specifications, use as TRAILER CONFIG on the P684096K 401 disk.                                                              |
| ROUTES CONFSAMP   | 406               | Sample ROUTE statements, use as ROUTES CONFIG on the P684096K 401 disk.                                                                                                  |
| DEST CONFSAMP     | 406               | Sample DEST statements, use as DEST CONFIG on the P684096K 401 disk.                                                                                                     |
| RSCSSMPL CONFSAMP | 406               | Sample MASTER configuration file which contains IMBEDs for the other configuration files in this table, among other things. Use as RSCS CONFIG on the P684096K 401 disk. |
| PRINTERS CONFSAMP | 406               | Sample LINKDEFINE and PARMS for printers links, use as PRINTERS CONFIG on the P684096K 401 disk.                                                                         |
| NETLINKS CONFSAMP | 406               | Sample LINKDEFINE and PARMS for networking links, use as NETLINKS CONFIG on the P684096K 401 disk.                                                                       |
| FRONT CONFSAMP    | 406               | Statements to be placed before link definitions, use as FRONT CONFIG on the P684096K 401 disk.                                                                           |

---

## E.3 CRI Package

The following table shows the files included with the RSCS Command Response Interface package.

*Figure 23. CRI Package*

| Sample File Name | Disk Installed to | Sample Description                                                                                                      |
|------------------|-------------------|-------------------------------------------------------------------------------------------------------------------------|
| CRIPARSE EXEC    | 406               | This exec can be imbedded in another exec to separate the fields in a single line of an RSCS CRI response.              |
| CRITEST EXEC     | 406               | This exec allows you to issue a command to an RSCS system, trap the response and then write it out to the terminal.     |
| CRITRAP EXEC     | 406               | This exec can be imbedded in another exec to trap synchronous responses to queries and other synchronous RSCS commands. |

## E.4 GPSAMP Package

The following table shows the files included with the Sample GPI Link Driver package.

*Figure 24. GPSAMP Package*

| Sample File Name | Disk Installed to | Sample Description.                                            |
|------------------|-------------------|----------------------------------------------------------------|
| GPSAMP OVERVIEW  | 406               | Description of the sample gateway program interface package.   |
| GPSAMP ASSEMBLE  | 2B3               | Mainline routine of sample gateway program.                    |
| GPSAMP TEXT      | 2B2               | Assembled version, built into RSCSEXIT LOADLIB.                |
| GPSBLK ASSEMBLE  | 2B3               | IUCV communications utilities for use with the GPSAMP package. |
| GPSBLK TEXT      | 2B2               | Assembled version, built into RSCSEXIT LOADLIB.                |
| GPSREC ASSEMBLE  | 2B3               | NJE Gateway interface to Gateway Sample Record Interface.      |
| GPSREC TEXT      | 2B2               | Assembled version, built into RSCSEXIT LOADLIB.                |
| GPSMSG MSGS      | 2B3               | Message repository for sample GPSAMP package.                  |
| GPSMSG TEXT      | 2B2               | Compiled version, built into RSCSEXIT LOADLIB.                 |
| GPSMGC MCONV     | 2B3               | Message conversion repository for sample GPSAMP package.       |
| GPSMGC TEXT      | 2B2               | Compiled version, built into RSCSEXIT LOADLIB.                 |
| GPIUCV MACRO     | 2B2               | Macro for use with GPSAMP package, built into RSCSV3EX MACLIB. |
| GPLISTB MACRO    | 2B2               | Macro for use with GPSAMP package, built into RSCSV3EX MACLIB. |
| GPLISTR MACRO    | 2B2               | Macro for use with GPSAMP package, built into RSCSV3EX MACLIB. |

## E.5 GSM Exit Package

The GSM package uses RSCS exit points 0, 1, 14, 15, 19, 21, 29, and 32. The following table shows the files included with the gateway security modifications exit package.

*Figure 25 (Page 1 of 2). GSM Package*

| Sample File Name | Disk Installed to | Sample Description                                                                                                             |
|------------------|-------------------|--------------------------------------------------------------------------------------------------------------------------------|
| GSM31 SCRIPT     | 406               | Description of the Gateway Security Modifications exit package.                                                                |
| GSM CONFSAMP     | 406               | Sample RSCS configuration file, use as GSM CONFIG on the P684096K 401 disk imbedded in RSCS CONFIG.                            |
| CONFIG EXEC      | 406               | This exec converts a security direct file into a security configuration file. Output should go to the P684096K 401 disk.       |
| TSORT MODULE     | 406               | Used by the CONFIG EXEC.                                                                                                       |
| SECURITY SAMPDIR | 406               | Use as SECURITY DIRECT on the P684096K 406 disk. This file is input to the CONFIG EXEC which creates the SECURITY CONFIG file. |
| GSMCOM ASSEMBLE  | 2B3               | Common task services subroutines for GSM package.                                                                              |

Figure 25 (Page 2 of 2). GSM Package

| Sample File Name | Disk Installed to | Sample Description                                           |
|------------------|-------------------|--------------------------------------------------------------|
| GSMCOM TEXT      | 2B2               | Assembled version, built into RSCSEXIT LOADLIB.              |
| GSMQSA ASSEMBLE  | 2B3               | Queue-based storage allocation for GSM package.              |
| GSMQSA TEXT      | 2B2               | Assembled version, built into RSCSEXIT LOADLIB.              |
| GSMSEC ASSEMBLE  | 2B3               | Security checking interface routines for GSM package.        |
| GSMSEC TEXT      | 2B2               | Assembled version, built into RSCSEXIT LOADLIB.              |
| GSM000 ASSEMBLE  | 2B3               | GSM initialization routine for GSM package.                  |
| GSM000 TEXT      | 2B2               | Assembled version, built into RSCSEXIT LOADLIB.              |
| GSM001 ASSEMBLE  | 2B3               | User exit 1 for GSM package.                                 |
| GSM001 TEXT      | 2B2               | Assembled version, built into RSCSEXIT LOADLIB.              |
| GSM014 ASSEMBLE  | 2B3               | SYSIN files security checker for GSM package.                |
| GSM014 TEXT      | 2B2               | Assembled version, built into RSCSEXIT LOADLIB.              |
| GSM015 ASSEMBLE  | 2B3               | SYSOUT files security checker for GSM package.               |
| GSM015 TEXT      | 2B2               | Assembled version, built into RSCSEXIT LOADLIB.              |
| GSM019 ASSEMBLE  | 2B3               | Command security checker for GSM package.                    |
| GSM019 TEXT      | 2B2               | Assembled version, built into RSCSEXIT LOADLIB.              |
| GSM021 ASSEMBLE  | 2B3               | Local files security checker for GSM package.                |
| GSM021 TEXT      | 2B2               | Assembled version, built into RSCSEXIT LOADLIB.              |
| GSM029 ASSEMBLE  | 2B3               | Command executor and syntax catcher for GSM package.         |
| GSM029 TEXT      | 2B2               | Assembled version, built into RSCSEXIT LOADLIB.              |
| GSM032 ASSEMBLE  | 2B3               | Remote command and message security checker for GSM package. |
| GSM032 TEXT      | 2B2               | Assembled version, built into RSCSEXIT LOADLIB.              |
| GSMMMSG MSGS     | 2B3               | Message repository for GSM package.                          |
| GSMMMSG TEXT     | 2B2               | Compiled version, built into RSCSEXIT LOADLIB.               |
| GSMMGC MCONV     | 2B3               | Message conversion repository for GSM package.               |
| GSMMGC TEXT      | 2B2               | Compiled version, built into RSCSEXIT LOADLIB.               |
| EXITWA MACRO     | 2B2               | Macro for use with GSM package, built into RSCSV3EX MACLIB.  |
| ACCNTGSM MACRO   | 2B2               | Macro for use with GSM package, built into RSCSV3EX MACLIB.  |
| GSMCVT MACRO     | 2B2               | Macro for use with GSM package, built into RSCSV3EX MACLIB.  |
| SECRMAMP MACRO   | 2B2               | Macro for use with GSM package, built into RSCSV3EX MACLIB.  |
| SECENT MACRO     | 2B2               | Macro for use with GSM package, built into RSCSV3EX MACLIB.  |
| SECWA MACRO      | 2B2               | Macro for use with GSM package, built into RSCSV3EX MACLIB.  |

---

## E.6 SAC Exit Package

The SAC package uses RSCS exit points 24, 25, and 29. The following table shows the files included with the spool manager command echoing exit package.

*Figure 26. SAC Package*

| Sample File Name | Disk Installed to | Sample Description                                                                                  |
|------------------|-------------------|-----------------------------------------------------------------------------------------------------|
| SAC OVERVIEW     | 406               | Description of the spool manager command echoing exit package.                                      |
| SAC CONFSAMP     | 406               | Sample RSCS configuration file, use as SAC CONFIG on the P684096K 401 disk imbedded in RSCS CONFIG. |
| SACPCM ASSEMBLE  | 2B3               | Diagnostic routines for SAC package.                                                                |
| SACPCM TEXT      | 2B2               | Assembled version, built into RSCSEXIT LOADLIB.                                                     |
| SACENG MSGS      | 2B3               | Message repository for SAC package.                                                                 |
| SACENG TEXT      | 2B2               | Compiled version, built into RSCSEXIT LOADLIB.                                                      |
| SACMGC MCONV     | 2B3               | Message conversion repository for SAC package.                                                      |
| SACMGC TEXT      | 2B2               | Compiled version, built into RSCSEXIT LOADLIB.                                                      |

---

## E.7 SAS Exit Package

The SAS package uses RSCS exit points 2, 3, 4, and 5. The following table shows the files included with the simple accounting exit package.

*Figure 27. SAS Package*

| Sample File Name | Disk Installed to | Sample Description                                                                                  |
|------------------|-------------------|-----------------------------------------------------------------------------------------------------|
| SAS OVERVIEW     | 406               | Description of the simple accounting exit package.                                                  |
| SAS CONFSAMP     | 406               | Sample RSCS configuration file, use as SAS CONFIG on the P684096K 401 disk imbedded in RSCS CONFIG. |
| SASPOL ASSEMBLE  | 2B3               | Write accounting records to message link for SAS package.                                           |
| SASPOL TEXT      | 2B2               | Assembled version, built into RSCSEXIT LOADLIB.                                                     |

---

## E.8 SBK Exit Package

The SBK package uses RSCS exit points 0, 21, and 24. The following table shows the files included with the back-to-back exit package.

Figure 28. SBK Package

| Sample File Name | Disk Installed to | Sample Description                                                                                  |
|------------------|-------------------|-----------------------------------------------------------------------------------------------------|
| SBK OVERVIEW     | 406               | Description of the the back-to-back exit package.                                                   |
| SBK CONFSAMP     | 406               | Sample RSCS configuration file, use as SBK CONFIG on the P684096K 401 disk imbedded in RSCS CONFIG. |
| SBKBAK ASSEMBLE  | 2B3               | Implements a general back-to-back RSCS configuration for SBK package.                               |
| SBKBAK TEXT      | 2B2               | Assembled version, built into RSCSEXIT LOADLIB.                                                     |
| SBKENG MSGS      | 2B3               | Message repository for SBK package.                                                                 |
| SBKENG TEXT      | 2B2               | Compiled version, built into RSCSEXIT LOADLIB.                                                      |
| SBKMGC MCONV     | 2B3               | Message conversion repository for SBK package.                                                      |
| SBKMGC TEXT      | 2B2               | Compiled version, built into RSCSEXIT LOADLIB.                                                      |

## E.9 SBURST Exit Package

The SBURST package uses RSCS exit points 0, 1, 19, 21, and 24. The following table shows the files included with the secondary RSCS list processor bursting machine exit package.

Figure 29. SBURST Package

| Sample File Name | Disk Installed to | Sample Description                                                                                     |
|------------------|-------------------|--------------------------------------------------------------------------------------------------------|
| SBURST OVERVIEW  | 406               | Description of the secondary RSCS list processor bursting machine exit package.                        |
| SBURST CONFSAMP  | 406               | Sample RSCS configuration file, use as SBURST CONFIG on the P684096K 401 disk imbedded in RSCS CONFIG. |
| SBURST ASSEMBLE  | 2B3               | Generates TBURSTER control block or mapping DSECT for SBURST package.                                  |
| SBURST TEXT      | 2B2               | Assembled version, built into RSCSEXIT LOADLIB.                                                        |
| SBUENG MSGS      | 2B3               | Message repository for SBURST package.                                                                 |
| SBUENG TEXT      | 2B2               | Compiled version, built into RSCSEXIT LOADLIB.                                                         |
| SBUMGC MCONV     | 2B3               | Message conversion repository for SBURST package.                                                      |
| SBUMGC TEXT      | 2B2               | Compiled version, built into RSCSEXIT LOADLIB.                                                         |

## E.10 SFF Exit Package

The SFF package uses RSCS exit points 0, 1, 15, 21, and 29. The following table shows the files included with the selective file filter exit package.

*Figure 30. SFF Package*

| <b>Sample File Name</b> | <b>Disk Installed to</b> | <b>Sample Description</b>                                                                               |
|-------------------------|--------------------------|---------------------------------------------------------------------------------------------------------|
| SFF OVERVIEW            | 406                      | Description of the selective file filter exit package.                                                  |
| SFF CONFSAMP            | 406                      | Sample configuration file for the SFF exit, use as SFF CONFIG on the P684096K 401 disk.                 |
| SFFCONF CONFSAMP        | 406                      | Sample RSCS configuration file, use as SFFCONF CONFIG on the P684096K 401 disk imbedded in RSCS CONFIG. |
| SFFPROT ASSEMBLE        | 2B3                      | Initialization prototype image module for SFF package.                                                  |
| SFFPROT TEXT            | 2B2                      | Assembled version, built into RSCSEXIT LOADLIB.                                                         |
| SFF000 ASSEMBLE         | 2B3                      | Initialization processing exit for SFF package.                                                         |
| SFF000 TEXT             | 2B2                      | Assembled version, built into RSCSEXIT LOADLIB.                                                         |
| SFF001 ASSEMBLE         | 2B3                      | Terminate exit for SFF package.                                                                         |
| SFF001 TEXT             | 2B2                      | Assembled version, built into RSCSEXIT LOADLIB.                                                         |
| SFF015 ASSEMBLE         | 2B3                      | Table lookup exit for SFF package.                                                                      |
| SFF015 TEXT             | 2B2                      | Assembled version, built into RSCSEXIT LOADLIB.                                                         |
| SFF021 ASSEMBLE         | 2B3                      | Table lookup exit for SFF package.                                                                      |
| SFF021 TEXT             | 2B2                      | Assembled version, built into RSCSEXIT LOADLIB.                                                         |
| SFF029 ASSEMBLE         | 2B3                      | Command processing exits for SFF package.                                                               |
| SFF029 TEXT             | 2B2                      | Assembled version, built into RSCSEXIT LOADLIB.                                                         |
| SFFMSG MSGS             | 2B3                      | Message repository for SFF package.                                                                     |
| SFFMSG TEXT             | 2B2                      | Compiled version, built into RSCSEXIT LOADLIB.                                                          |
| SFFMGC MCONV            | 2B3                      | Message conversion repository for SFF package.                                                          |
| SFFMGC TEXT             | 2B2                      | Compiled version, built into RSCSEXIT LOADLIB.                                                          |
| SFFCAL MACRO            | 2B2                      | Macro for use with SFF package, built into RSCSV3EX MACLIB.                                             |
| SFFENT MACRO            | 2B2                      | Macro for use with SFF package, built into RSCSV3EX MACLIB.                                             |
| SFFHDR MACRO            | 2B2                      | Macro for use with SFF package, built into RSCSV3EX MACLIB.                                             |
| SFFMSG MACRO            | 2B2                      | Macro for use with SFF package, built into RSCSV3EX MACLIB.                                             |
| SFFPUR MACRO            | 2B2                      | Macro for use with SFF package, built into RSCSV3EX MACLIB.                                             |

## **E.11 SFL Exit Package**

The SFL package uses RSCS exit points 0, 1, 31, and 33. The following table shows the files included with the shift-based file limiting exit package.

*Figure 31. SFL Package*

| <b>Sample File Name</b> | <b>Disk Installed to</b> | <b>Sample Description</b>                                                                           |
|-------------------------|--------------------------|-----------------------------------------------------------------------------------------------------|
| SFL OVERVIEW            | 406                      | Description of the shift-based file limiting exit package.                                          |
| SFL CONFSAMP            | 406                      | Sample RSCS configuration file, use as SFL CONFIG on the P684096K 401 disk imbedded in RSCS CONFIG. |
| SFLIMIT ASSEMBLE        | 2B3                      | File limiting on shift basis for SFL package.                                                       |
| SFLIMIT TEXT            | 2B2                      | Assembled version, built into RSCSEXIT LOADLIB.                                                     |
| SFLENG MSGS             | 2B3                      | Message repository for SFL package.                                                                 |
| SFLENG TEXT             | 2B2                      | Compiled version, built into RSCSEXIT LOADLIB.                                                      |
| SFLMGC MCONV            | 2B3                      | Message conversion repository for SFL package.                                                      |
| SFLMGC TEXT             | 2B2                      | Compiled version, built into RSCSEXIT LOADLIB.                                                      |

## E.12 SMG Exit Package

The SMG package uses RSCS exit points 0, and 27. The following table shows the files included with the console logging/screening exit package.

*Figure 32. SMG Package*

| <b>Sample File Name</b> | <b>Disk Installed to</b> | <b>Sample Description</b>                                                                           |
|-------------------------|--------------------------|-----------------------------------------------------------------------------------------------------|
| SMG OVERVIEW            | 406                      | Description of the console logging/screening exit package.                                          |
| SMG CONFSAMP            | 406                      | Sample RSCS configuration file, use as SMG CONFIG on the P684096K 401 disk imbedded in RSCS CONFIG. |
| SMGMON ASSEMBLE         | 2B3                      | Initialization exit to define logging link and start it for SMG package.                            |
| SMGMON TEXT             | 2B2                      | Assembled version, built into RSCSEXIT LOADLIB.                                                     |

## E.13 SMS Exit Package

The following table shows the files included with the messenger link driver exit package.

*Figure 33 (Page 1 of 2). SMS Package*

| <b>Sample File Name</b> | <b>Disk Installed to</b> | <b>Sample Description</b>                                                                           |
|-------------------------|--------------------------|-----------------------------------------------------------------------------------------------------|
| SMS OVERVIEW            | 406                      | Description of the messenger link driver exit package.                                              |
| SMS CONFSAMP            | 406                      | Sample RSCS configuration file, use as SMS CONFIG on the P684096K 401 disk imbedded in RSCS CONFIG. |
| SMSDRV ASSEMBLE         | 2B3                      | Messenger line driver main entry point for SMS package.                                             |



| <i>Figure 33 (Page 2 of 2). SMS Package</i> |                          |                                                 |
|---------------------------------------------|--------------------------|-------------------------------------------------|
| <b>Sample File Name</b>                     | <b>Disk Installed to</b> | <b>Sample Description</b>                       |
| SMSDRV TEXT                                 | 2B2                      | Assembled version, built into RSCSEXIT LOADLIB. |
| SMSENG MSGS                                 | 2B3                      | Message repository for SMS package.             |
| SMSENG TEXT                                 | 2B2                      | Compiled version, built into RSCSEXIT LOADLIB.  |
| SMSMGC MCONV                                | 2B3                      | Message conversion repository for SMS package.  |
| SMSMGC TEXT                                 | 2B2                      | Compiled version, built into RSCSEXIT LOADLIB.  |

## E.14 SNM Exit Package

The SNM package uses RSCS exit points 22, and 23. The following table shows the files included with the note selection / modification exit package.

| <i>Figure 34. SNM Package</i> |                          |                                                                                                     |
|-------------------------------|--------------------------|-----------------------------------------------------------------------------------------------------|
| <b>Sample File Name</b>       | <b>Disk Installed to</b> | <b>Sample Description</b>                                                                           |
| SNM OVERVIEW                  | 406                      | Description of the note selection / modification exit package.                                      |
| SNM CONFSAMP                  | 406                      | Sample RSCS configuration file, use as SNM CONFIG on the P684096K 401 disk imbedded in RSCS CONFIG. |
| SNMODI ASSEMBLE               | 2B3                      | Main entry point for SNM package.                                                                   |
| SNMODI TEXT                   | 2B2                      | Assembled version, built into RSCSEXIT LOADLIB.                                                     |

## E.15 SNS Exit Package

The SNS package uses RSCS exit point 36. The following table shows the files included with the notify driver purge exit package.

| <i>Figure 35. SNS Package</i> |                          |                                                                                                     |
|-------------------------------|--------------------------|-----------------------------------------------------------------------------------------------------|
| <b>Sample File Name</b>       | <b>Disk Installed to</b> | <b>Sample Description</b>                                                                           |
| SNS OVERVIEW                  | 406                      | Description of the notify driver purge exit package.                                                |
| SNS CONFSAMP                  | 406                      | Sample RSCS configuration file, use as SNS CONFIG on the P684096K 401 disk imbedded in RSCS CONFIG. |
| SNSAVE ASSEMBLE               | 2B3                      | Main entry point for SNS package.                                                                   |
| SNSAVE TEXT                   | 2B2                      | Assembled version, built into RSCSEXIT LOADLIB.                                                     |

---

## E.16 SPA Exit Package

The SPA package uses RSCS exit points 0, and 29. The following table shows the files included with the pathalias map processing and PAPATH command exit package.

*Figure 36. SPA Package*

| Sample File Name | Disk Installed to | Sample Description                                                                                  |
|------------------|-------------------|-----------------------------------------------------------------------------------------------------|
| SPA OVERVIEW     | 406               | Description of the pathalias map processing and PAPATH command exit package.                        |
| SPA CONFSAMP     | 406               | Sample RSCS configuration file, use as SPA CONFIG on the P684096K 401 disk imbedded in RSCS CONFIG. |
| SPATHA ASSEMBLE  | 2B3               | PAtalias maps treated as RSCS ROUTE table for SPA package.                                          |
| SPATHA TEXT      | 2B2               | Assembled version, built into RSCSEXIT LOADLIB.                                                     |
| SPAENG MSGS      | 2B3               | Message repository for SPA package.                                                                 |
| SPAENG TEXT      | 2B2               | Compiled version, built into RSCSEXIT LOADLIB.                                                      |
| SPAMGC MCONV     | 2B3               | Message conversion repository for SPA package.                                                      |
| SPAMGC TEXT      | 2B2               | Compiled version, built into RSCSEXIT LOADLIB.                                                      |

---

## E.17 SQA Exit Package

The SQA package uses RSCS exit points 0, 1, 3, 26, 31, 33, and 34. The following table shows the files included with the file queue aging exit package.

*Figure 37 (Page 1 of 2). SQA Package*

| Sample File Name | Disk Installed to | Sample Description                                                                                                                                                                            |
|------------------|-------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| SQA OVERVIEW     | 406               | Description of the file queue aging exit package.                                                                                                                                             |
| SQA CONFSAMP     | 406               | Sample RSCS configuration file, use as SQA CONFIG on the P684096K 401 disk imbedded in RSCS CONFIG.                                                                                           |
| SQA PARMSAMP     | 406               | A sample queue aging parms file, read at RSCS initialization time. Use as SQA PARMS on the P684096K 406 disk.                                                                                 |
| SQACSC EXEC      | 406               | Takes a sample tabulated functions file (SQAXMP TABLE) for a descent curve named AGEFUNC and an ascent curve named FILEFUNC and creates the cubic spline coefficients (SQAXMP) ASSEMBLE file. |
| SQAXMP SAMPTABL  | 406               | Is a sample tabulated functions file for a descent curve named AGEFUNC and an ascent curve named FILEFUNC. Use as SQAXMP TABLE on the P684096K 401 disk.                                      |
| SQAFQA ASSEMBLE  | 2B3               | Main entry point for SQA package.                                                                                                                                                             |
| SQAFQA TEXT      | 2B2               | Assembled version, built into RSCSEXIT LOADLIB.                                                                                                                                               |
| SQAXMP ASSEMBLE  | 2B3               | Created by running the SQACSC EXEC.                                                                                                                                                           |
| SQAXMP TEXT      | 2B2               | Assembled version, built into RSCSEXIT LOADLIB.                                                                                                                                               |

| <i>Figure 37 (Page 2 of 2). SQA Package</i> |                          |                                                |
|---------------------------------------------|--------------------------|------------------------------------------------|
| <b>Sample File Name</b>                     | <b>Disk Installed to</b> | <b>Sample Description</b>                      |
| SQAENG MSGS                                 | 2B3                      | Message repository for SQA package.            |
| SQAENG TEXT                                 | 2B2                      | Compiled version, built into RSCSEXIT LOADLIB. |
| SQAMGC MCONV                                | 2B3                      | Message conversion repository for SQA package. |
| SQAMGC TEXT                                 | 2B2                      | Compiled version, built into RSCSEXIT LOADLIB. |

## E.18 SRMVEX Exit Package

The SRMVEX package uses RSCS exit points 21, and 29. The following table shows the files included with the REMOVE Command exit package.

| <i>Figure 38. SRMVEX Package</i> |                          |                                                                                                        |
|----------------------------------|--------------------------|--------------------------------------------------------------------------------------------------------|
| <b>Sample File Name</b>          | <b>Disk Installed to</b> | <b>Sample Description</b>                                                                              |
| SRMVEX OVERVIEW                  | 406                      | Description of the REMOVE Command exit package.                                                        |
| SRMVEX CONFSAMP                  | 406                      | Sample RSCS configuration file, use as SRMVEX CONFIG on the P684096K 401 disk imbedded in RSCS CONFIG. |
| SRMVEX ASSEMBLE                  | 2B3                      | Selective transfer of file to a parking user ID for SRMVEX package.                                    |
| SRMVEX TEXT                      | 2B2                      | Assembled version, built into RSCSEXIT LOADLIB.                                                        |
| SRMENG MSGS                      | 2B3                      | Message repository for SRMVEX package.                                                                 |
| SRMENG TEXT                      | 2B2                      | Compiled version, built into RSCSEXIT LOADLIB.                                                         |
| SRMMGC MCONV                     | 2B3                      | Message conversion repository for SRMVEX package.                                                      |
| SRMMGC TEXT                      | 2B2                      | Compiled version, built into RSCSEXIT LOADLIB.                                                         |

## E.19 SSH Exit Package

The SSH package uses RSCS exit point 29. The following table shows the files included with the SHOW and PATH command exit package.

| <i>Figure 39 (Page 1 of 2). SSH Package</i> |                          |                                                                                                     |
|---------------------------------------------|--------------------------|-----------------------------------------------------------------------------------------------------|
| <b>Sample File Name</b>                     | <b>Disk Installed to</b> | <b>Sample Description</b>                                                                           |
| SSH OVERVIEW                                | 406                      | Description of the SHOW and PATH command exit package.                                              |
| SSH CONFSAMP                                | 406                      | Sample RSCS configuration file, use as SSH CONFIG on the P684096K 401 disk imbedded in RSCS CONFIG. |
| SSHPTH ASSEMBLE                             | 2B3                      | Command processor for SHOW and PATH commands for SSH package.                                       |

*Figure 39 (Page 2 of 2). SSH Package*

| <b>Sample File Name</b> | <b>Disk Installed to</b> | <b>Sample Description</b>                       |
|-------------------------|--------------------------|-------------------------------------------------|
| SSHPTH TEXT             | 2B2                      | Assembled version, built into RSCSEXIT LOADLIB. |
| SSHENG MSGS             | 2B3                      | Message repository for SSH package.             |
| SSHENG TEXT             | 2B2                      | Compiled version, built into RSCSEXIT LOADLIB.  |
| SSHMGC MCONV            | 2B3                      | Message conversion repository for SSH package.  |
| SSHMGC TEXT             | 2B2                      | Compiled version, built into RSCSEXIT LOADLIB.  |

## E.20 SSI Exit Package

The SSI package uses RSCS exit point 0. The following table shows the files included with the set GMT offset for single system image systems exit package.

*Figure 40. SSI Package*

| <b>Sample File Name</b> | <b>Disk Installed to</b> | <b>Sample Description</b>                                                                           |
|-------------------------|--------------------------|-----------------------------------------------------------------------------------------------------|
| SSI OVERVIEW            | 406                      | Description of the set GMT offset for single system image systems exit package.                     |
| SSI CONFSAMP            | 406                      | Sample RSCS configuration file, use as SSI CONFIG on the P684096K 401 disk imbedded in RSCS CONFIG. |
| SSIGMT ASSEMBLE         | 2B3                      | GMT offset correction for SSI package.                                                              |
| SSIGMT TEXT             | 2B2                      | Assembled version, built into RSCSEXIT LOADLIB.                                                     |
| SSIENG MSGS             | 2B3                      | Message repository for SSI package.                                                                 |
| SSIENG TEXT             | 2B2                      | Compiled version, built into RSCSEXIT LOADLIB.                                                      |
| SSIMGC MCONV            | 2B3                      | Message conversion repository for SSI package.                                                      |
| SSIMGC TEXT             | 2B2                      | Compiled version, built into RSCSEXIT LOADLIB.                                                      |

## E.21 SSP Exit Package

The SSP package uses RSCS exit points 17, and 18. The following table shows the files included with the separator page exit package.

*Figure 41 (Page 1 of 2). SSP Package*

| <b>Sample File Name</b> | <b>Disk Installed to</b> | <b>Sample Description</b>                                                                           |
|-------------------------|--------------------------|-----------------------------------------------------------------------------------------------------|
| SSP OVERVIEW            | 406                      | Description of the separator page exit package.                                                     |
| SSP CONFSAMP            | 406                      | Sample RSCS configuration file, use as SSP CONFIG on the P684096K 401 disk imbedded in RSCS CONFIG. |

| <i>Figure 41 (Page 2 of 2). SSP Package</i> |                          |                                                 |
|---------------------------------------------|--------------------------|-------------------------------------------------|
| <b>Sample File Name</b>                     | <b>Disk Installed to</b> | <b>Sample Description</b>                       |
| SSPAGE ASSEMBLE                             | 2B3                      | Generate separator pages for SSP package.       |
| SSPAGE TEXT                                 | 2B2                      | Assembled version, built into RSCSEXIT LOADLIB. |

## E.22 SSS Exit Package

The SSS package uses RSCS exit points 0, 1, 14, 15, 19, 21 and 32. The following table shows the files included with the simple security exit package.

| <i>Figure 42. SSS Package</i> |                          |                                                                                                     |
|-------------------------------|--------------------------|-----------------------------------------------------------------------------------------------------|
| <b>Sample File Name</b>       | <b>Disk Installed to</b> | <b>Sample Description</b>                                                                           |
| SSS OVERVIEW                  | 406                      | Description of the simple security exit package.                                                    |
| SECURE CONFSAMP               | 406                      | Sample configuration file for the SSS exit, use as SECURE CONFIG on the P684096K 401 disk.          |
| SSS CONFSAMP                  | 406                      | Sample RSCS configuration file, use as SSS CONFIG on the P684096K 401 disk imbedded in RSCS CONFIG. |
| SSSECU ASSEMBLE               | 2B3                      | Handles all necessary virtual printer functions for SSS package.                                    |
| SSSECU TEXT                   | 2B2                      | Assembled version, built into RSCSEXIT LOADLIB.                                                     |
| SSSENG MSGS                   | 2B3                      | Message repository for SSS package.                                                                 |
| SSSENG TEXT                   | 2B2                      | Compiled version, built into RSCSEXIT LOADLIB.                                                      |
| SSSMGC MCONV                  | 2B3                      | Message conversion repository for SSS package.                                                      |
| SSSMGC TEXT                   | 2B2                      | Compiled version, built into RSCSEXIT LOADLIB.                                                      |

## E.23 SST Exit Package

The SST package uses RSCS exit points 0, 3, and 21. The following table shows the files included with the statistics-gathering exit package.

| <i>Figure 43 (Page 1 of 2). SST Package</i> |                          |                                                                                                     |
|---------------------------------------------|--------------------------|-----------------------------------------------------------------------------------------------------|
| <b>Sample File Name</b>                     | <b>Disk Installed to</b> | <b>Sample Description</b>                                                                           |
| SST OVERVIEW                                | 406                      | Description of the statistics-gathering exit package.                                               |
| SST CONFSAMP                                | 406                      | Sample RSCS configuration file, use as SST CONFIG on the P684096K 401 disk imbedded in RSCS CONFIG. |
| SSTATS ASSEMBLE                             | 2B3                      | Gather statistics for SST package.                                                                  |

Figure 43 (Page 2 of 2). SST Package

| Sample File Name | Disk Installed to | Sample Description                              |
|------------------|-------------------|-------------------------------------------------|
| SSTATS TEXT      | 2B2               | Assembled version, built into RSCSEXIT LOADLIB. |
| SSTENG MSGS      | 2B3               | Message repository for SST package.             |
| SSTENG TEXT      | 2B2               | Compiled version, built into RSCSEXIT LOADLIB.  |
| SSTMGC MCONV     | 2B3               | Message conversion repository for SST package.  |
| SSTMGC TEXT      | 2B2               | Compiled version, built into RSCSEXIT LOADLIB.  |

## E.24 STR Exit Package

The following table shows the files included with the host transfer agent link driver exit package.

Figure 44. STR Package

| Sample File Name | Disk Installed to | Sample Description                                                                                  |
|------------------|-------------------|-----------------------------------------------------------------------------------------------------|
| STR OVERVIEW     | 406               | Description of the host transfer agent link driver exit package.                                    |
| STR CONFSAMP     | 406               | Sample RSCS configuration file, use as STR CONFIG on the P684096K 401 disk imbedded in RSCS CONFIG. |
| STRDRV ASSEMBLE  | 2B3               | Host transfer agent (sample transfer) for STR package.                                              |
| STRDRV TEXT      | 2B2               | Assembled version, built into RSCSEXIT LOADLIB.                                                     |
| STRENG MSGS      | 2B3               | Message repository for STR package.                                                                 |
| STRENG TEXT      | 2B2               | Compiled version, built into RSCSEXIT LOADLIB.                                                      |
| STRMGC MCONV     | 2B3               | Message conversion repository for STR package.                                                      |
| STRMGC TEXT      | 2B2               | Compiled version, built into RSCSEXIT LOADLIB.                                                      |

## E.25 STY Exit Package

The STY package uses RSCS exit point 29. The following table shows the files included with the sample TYPE command exit package.

Figure 45 (Page 1 of 2). STY Package

| Sample File Name | Disk Installed to | Sample Description                                                                                  |
|------------------|-------------------|-----------------------------------------------------------------------------------------------------|
| STY OVERVIEW     | 406               | Description of the sample TYPE command exit package.                                                |
| STY CONFSAMP     | 406               | Sample RSCS configuration file, use as STY CONFIG on the P684096K 401 disk imbedded in RSCS CONFIG. |
| STYPCM ASSEMBLE  | 2B3               | Simulate the CMS TYPE command for STY package.                                                      |

*Figure 45 (Page 2 of 2). STY Package*

| Sample File Name | Disk Installed to | Sample Description                              |
|------------------|-------------------|-------------------------------------------------|
| STYPCM TEXT      | 2B2               | Assembled version, built into RSCSEXIT LOADLIB. |
| STYENG MSGS      | 2B3               | Message repository for STY package.             |
| STYENG TEXT      | 2B2               | Compiled version, built into RSCSEXIT LOADLIB.  |
| STYMG MCONV      | 2B3               | Message conversion repository for STY package.  |
| STYMG TEXT       | 2B2               | Compiled version, built into RSCSEXIT LOADLIB.  |

## E.26 SVP Exit Package

The following table shows the files included with the virtual printer link driver exit package.

*Figure 46. SVP Package*

| Sample File Name | Disk Installed to | Sample Description                                                                                  |
|------------------|-------------------|-----------------------------------------------------------------------------------------------------|
| SVP OVERVIEW     | 406               | Description of the virtual printer link driver exit package.                                        |
| SVP CONFSAMP     | 406               | Sample RSCS configuration file, use as SVP CONFIG on the P684096K 401 disk imbedded in RSCS CONFIG. |
| SVPDRV ASSEMBLE  | 2B3               | Virtual printer driver for SVP package.                                                             |
| SVPDRV TEXT      | 2B2               | Assembled version, built into RSCSEXIT LOADLIB.                                                     |
| SVPENG MSGS      | 2B3               | Message repository for SVP package.                                                                 |
| SVPENG TEXT      | 2B2               | Compiled version, built into RSCSEXIT LOADLIB.                                                      |
| SVPMGC MCONV     | 2B3               | Message conversion repository for SVP package.                                                      |
| SVPMGC TEXT      | 2B2               | Compiled version, built into RSCSEXIT LOADLIB.                                                      |

## E.27 CRONOWN Package

- 4 The following table shows the files included with the package which can be used to query the owning user  
 4 ID of a PROFS® or Office Vision document.

*Figure 47 (Page 1 of 2). CRONOWN Package*

| Sample File Name   | Disk Installed to | Sample Description                                                                   |
|--------------------|-------------------|--------------------------------------------------------------------------------------|
| CRONOWN PACKAGE    | 406               | List of files included with package.                                                 |
| 4 CRONOWN ASSEMBLE | 2B3               | Returns the owning user ID of a PROFS or Office Vision document for CRONOWN package. |
| CRONOWN MODULE     | 406               | Usable version of assemble file.                                                     |

| <i>Figure 47 (Page 2 of 2). CRONOWN Package</i> |                          |                                        |
|-------------------------------------------------|--------------------------|----------------------------------------|
| <b>Sample File Name</b>                         | <b>Disk Installed to</b> | <b>Sample Description</b>              |
| CRONMAC MACLIB                                  | 406                      | Macro library used by CRONOWN package. |

## E.28 PROFLIST Package

- 4 The following table shows the files included with the package which can be used to allow PROFS or Office  
 4 Vision to send notes via the List Processor Facility. This package also uses the CRONOWN package.

| <i>Figure 48. PROFLIST Package</i> |                          |                                                                                                                        |
|------------------------------------|--------------------------|------------------------------------------------------------------------------------------------------------------------|
| <b>Sample File Name</b>            | <b>Disk Installed to</b> | <b>Sample Description</b>                                                                                              |
| PROFLIST PACKAGE                   | 406                      | List of files included with package.                                                                                   |
| PROFLIST SCRIPT                    | 406                      | Describes how to install, configure, and use package.                                                                  |
| EPRENOTE SENDLIST                  | 406                      | User exit to send notes via *LIST processor for PROFLIST package, use as EPRENOTE EXEC.                                |
| EPREDOCE SENDLIST                  | 406                      | User exit to send documents referenced on notes sent to the List Processor for PROFLIST package, use as EPREDOCE EXEC. |
| EPRERELN SENDLIST                  | 406                      | EPRENOTE user exit for PROFLIST package, use as EPRENOTE EXEC.                                                         |

## E.29 SENDLIST Package

The following table shows the files included with the package which can be used to send files or notes using the RSCS list processor facility.

| <i>Figure 49. SENDLIST Package</i> |                          |                                                                                   |
|------------------------------------|--------------------------|-----------------------------------------------------------------------------------|
| <b>Sample File Name</b>            | <b>Disk Installed to</b> | <b>Sample Description</b>                                                         |
| SENDLIST PACKAGE                   | 406                      | List of files included with package.                                              |
| SENDLIST EXEC                      | 406                      | Exec used to send files or notes via an RSCS list processor for SENDLIST package. |
| SENDLIST HELPCMS                   | 29D                      | Online documentation for package.                                                 |
| X\$SNL\$X XEDIT                    | 406                      | Macro to display file selection screen for SENDLIST package.                      |

## E.30 SPOOLAID Package

The following table shows the files included with the package which can be used to browse spool file internals.



*Figure 50. SPOOLAID Package*

| Sample File Name  | Disk Installed to | Sample Description                                                                               |
|-------------------|-------------------|--------------------------------------------------------------------------------------------------|
| SPOOLAID PACKAGE  | 406               | List of files included with package.                                                             |
| SPOOLAID ANNOUNCE | 406               | Introduction and description of package.                                                         |
| SA EXEC           | 406               | Exec used to invoke SPOOLAID.                                                                    |
| SAELOG EXEC       | 406               | Error logging exec for SPOOLAID package.                                                         |
| SA HELPCMS        | 29D               | Online documentation for the SA command.                                                         |
| SASFB HELPSA      | 29D               | Online documentation for the SFBLOK display.                                                     |
| SASPLINK HELPSA   | 29D               | Online documentation for the SPLINK display.                                                     |
| SAXAB HELPSA      | 29D               | Online documentation for the XAB display.                                                        |
| SADUMPER ASSEMBLE | 2B3               | Base source file for doing viewing spool file internals.                                         |
| DUMPSUB ASSEMBLE  | 2B3               | Internal subroutine called by SADUMPER.                                                          |
| SADUMPER MODULE   | 406               | Usable version of assemble files.                                                                |
| SPOOLAID SAMPPROF | 406               | Sample SPOOLAID PROFILE for altering defaults, use as SPOOLAID PROFILE on the P684096K 406 disk. |
| SACMDS XEDIT      | 406               | Screen manager macro for SPOOLAID package.                                                       |

## E.31 ASCII Exit Package

The following table shows the files included with the ASCII Printer and Plotter exit package.

**Note:** The exit entry name (used on the `EXIT=name` parameter when defining an ASCII type link) is not the same as the exit package name. See the highlighted entry name.

*Figure 51 (Page 1 of 2). ASCII Package*

| Sample File Name              | Disk Installed to | Sample Description                                                                     |
|-------------------------------|-------------------|----------------------------------------------------------------------------------------|
| ASCXD <sup>SOE</sup> ASSEMBLE | 2B3               | Support of the Datasouth DS180 matrix printer for ASCII package.                       |
| ASCXD <sup>SOE</sup> TEXT     | 2B2               | Assembled version, built into RSCSEXIT LOADLIB <b>with entry name D<sup>SOE</sup>.</b> |
| ASCXD <sup>WRE</sup> ASSEMBLE | 2B3               | Support of the the LA120 Decwriter printer for ASCII package.                          |
| ASCXD <sup>WRE</sup> TEXT     | 2B2               | Assembled version, built into RSCSEXIT LOADLIB <b>with entry name D<sup>WRE</sup>.</b> |
| ASCX <sup>PROP</sup> ASSEMBLE | 2B3               | Support of the IBM PROprinter for ASCII package.                                       |
| ASCX <sup>PROP</sup> TEXT     | 2B2               | Assembled version, built into RSCSEXIT LOADLIB <b>with entry name P<sup>ROP</sup>.</b> |
| ASCX <sup>SPWE</sup> ASSEMBLE | 2B3               | Support of the NEC 3515 Spinwriter printer for ASCII package.                          |
| ASCX <sup>SPWE</sup> TEXT     | 2B2               | Assembled version, built into RSCSEXIT LOADLIB <b>with entry name S<sup>PWE</sup>.</b> |
| ASCX <sup>ZZET</sup> ASSEMBLE | 2B3               | Support of the Nicolet ZETA 3653SX drum plotter for ASCII package.                     |
| ASCX <sup>ZZET</sup> TEXT     | 2B2               | Assembled version, built into RSCSEXIT LOADLIB <b>with entry name Z<sup>ZET</sup>.</b> |
| ASCX749E ASSEMBLE             | 2B3               | Support of the IBM instruments XY/749 multipen digital plotter for ASCII package.      |

Figure 51 (Page 2 of 2). ASCII Package

| Sample File Name   | Disk Installed to | Sample Description                                                                         |
|--------------------|-------------------|--------------------------------------------------------------------------------------------|
| ASCX749E TEXT      | 2B2               | Assembled version, built into RSCSEXIT LOADLIB <b>with entry name 749E.</b>                |
| 4 ASCXONE ASSEMBLE | 2B6               | Support of a reentrant exit module supporting non-postscript printers only.                |
| 2 ASCXONE TEXT     | 2B2               | Assembled version, built into RSCSEXIT LOADLIB <b>with entry name ASCXONE.</b>             |
| ASCXPSE ASSEMBLE   | 2B3               | Support of a reentrant exit module supporting a postscript only printer for ASCII package. |
| ASCXPSE TEXT       | 2B2               | Assembled version, built into RSCSEXIT LOADLIB <b>with entry name ASCXPSE.</b>             |

## E.32 LPR Exit Package

The following table shows the files included with the LPR Printer driver exit package.

Figure 52. LPR Package

| Sample File Name    | Disk Installed to | Sample Description                                                                                                                                                                                                                                        |
|---------------------|-------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2 LPRXONE ASSEMBLE  | 2B3               | Support of a reentrant LPR exit module supporting non-postscript printers only.                                                                                                                                                                           |
| LPRXONE TEXT        | 2B2               | Assembled version, built into RSCSEXIT LOADLIB with entry name LPRXONE.                                                                                                                                                                                   |
| 2 LPRXPSE ASSEMBLE  | 2B3               | Support of a reentrant LPR exit module supporting postscript only printers.                                                                                                                                                                               |
| LPRXPSE TEXT        | 2B2               | Assembled version, built into RSCSEXIT LOADLIB with entry name LPRXPSE.                                                                                                                                                                                   |
| 4 LPRXFORM ASSEMBLE | 2B6               | Support of a reentrant exit module which contains exit 0 and exit 1 entry points to build form block tables for use with LPR-type links. These tables supply overrides, selected with the form name the file was spooled with, to LPR-type defined links. |
| 2 LPRXFORM TEXT     | 2B2               | Assembled version, built into RSCSEXIT LOADLIB with entry names LPRXFM00 and LPRXFM01.                                                                                                                                                                    |

## E.33 LPD Exit Package

The following table shows the files included with the LPD link driver exit package.

Figure 53. LPD Package

| Sample File Name    | Disk Installed to | Sample Description                                                                                                |
|---------------------|-------------------|-------------------------------------------------------------------------------------------------------------------|
| 4 LPDXMANY ASSEMBLE | 2B6               | Supports a single LPD printer queue. Multiple LPD link drivers can be defined and started using this exit module. |
| 1 LPDXMANY TEXT     | 2B2               | Assembled version, built into RSCSEXIT LOADLIB with entry name LPDXMANY.                                          |

---

## 4 E.34 UFT Exit Package

4 The following table shows the files included with the UFT support exit package.

4 *Figure 54. UFT Support Exit Package*

| 4 | 4 <b>Sample File Name</b> | 4 <b>Disk<br/>Installed<br/>to</b> | 4 <b>Sample Description</b>                                                                                                                                  |
|---|---------------------------|------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 4 | 4 UFTXOUT ASSEMBLE        | 4 2B6                              | 4 Support of a reentrant UFT exit module to support transmitting one file to a remote UFT daemon at a time.                                                  |
| 4 | 4 UFTXOUT TEXT            | 4 2B2                              | 4 Assembled version, built into RSCSEXIT LOADLIB with entry name UFTXOUT.                                                                                    |
| 4 | 4 UFTXIN ASSEMBLE         | 4 2B6                              | 4 Support of a reentrant UFTD exit module to support a single RSCS UFT daemon. Multiple UFTD link drivers can be defined and started using this exit module. |
| 4 | 4 UFTXIN TEXT             | 4 2B2                              | 4 Assembled version, built into RSCSEXIT LOADLIB with entry name UFTXIN.                                                                                     |

---

## 2 Appendix F. TCP/IP Enhancements

2 The following enhancements have been made to the TCP/IP capabilities of RSCS 3.2.0:

- 2 • Addition of an Initial Time Out (ITO) PARM for LPR-type links.
- 2 • Ability to override the default orientation, font name, font size, and additional leading size used by the  
2 LPR- and TCPASCII-type sample postscript exits when printing plain text files.
- 2 • Ability to override the default filter used in the control file sent to a remote daemon by the LPR-type  
2 link sample exits.
- 2 • Ability for the LPR- LPD- and TCPASCII-type link sample exits to read an external translation table
- 2 • Ability for the LPR- and TCPASCII-type link sample postscript exits to read an external postscript  
2 program used when printing plain text files.
- 2 • Ability for the LPR- and TCPASCII-type link sample postscript exits to read additional font names used  
2 when printing plain text files.
- 2 • Ability for the LPD-type link sample exit to read an external configuration file to provide overrides to  
2 defaults used by the exit on a printer queue name basis when receiving a file from a remote host.  
2 Defaults which can be overridden include:
  - 2 – Logical record length up to 1280 characters
  - 2 – Number of lines per page
  - 2 – Spool file class
  - 2 – Spool file form name
  - 2 – Job name
  - 2 – PSF destination
  - 2 – Whether or not to paginate regardless of control file setting
  - 2 – Whether or not to translate the data received
  - 2 – User ID file should be spooled to
  - 3 – Node ID file should be spooled to
  - 3 – TCPXLBIN translate table to use
- 3 • Ability to customize the control file created by the LPR-type link sample exits via parameters which  
3 can be defined in the sample exits configuration file.
- 2 • Domain Name Server support for LPR-, TCPNJE-, TCPASCII-, and UFT-type links.
- 2 • A TN3270E-Type link intended for use with TELNET printer sessions.
- 2 • Ability to override the host name portion of the control and data file names a LPR-type link constructs  
2 when sending the 'Receive control file' and 'Receive data file' subcommands to a remote daemon.
- 5 • Ability for the LPR- and TCPASCII-type link sample non-postscript printer exits to handle simple PCL  
5 strings and SCS transparency orders imbedded anywhere within each record of the file being  
5 processed for printing.
- 2 • Ability for the LPR- and TCPASCII-type link sample exits to split the prefix string before and after the  
2 separator page.

- 2 • Ability for the LPR- and TCPASCII-type link sample exits to produce a two-page separator useful when  
2 duplexing.
- 2 • Ability for users to provide keywords at the beginning of a file to contain overrides for a LPR-type link.  
2 Defaults which can be overridden include:
  - 2 – The fully-qualified host name
  - 2 – The dotted decimal host address
  - 2 – The one-character filter
  - 2 – The printer queue name
  - 2 – A prefix string
  - 2 – A suffix string
  - 2 – A translate table
  - 2 – The separator page setting

The PPS EXEC and PPS XEDIT macro have been enhanced to support reading these keywords from  
2 an RSCS NAMES file. The command and macro syntax are provided later in this appendix.
- 2 • Ability for an RSCS administrator to build form block tables to provide keywords which contain  
2 overrides for a LPR-type link. Defaults which can be overridden include:
  - 2 – The fully-qualified host name
  - 2 – The dotted decimal host address
  - 2 – The one-character filter
  - 2 – The printer queue name
  - 2 – A prefix string
  - 2 – A suffix string
  - 2 – A translate table
  - 2 – The form name
  - 2 – The separator page setting

The spool file form name is used to select a form block table to provide the overrides used by the  
2 LPR-type link when printing. The form block table is built using a new exit routine, called LPRXFORM,  
2 which utilizes exit points 0 and 1.
- 2 • Ability to have a LPR-type link place a file on hold when it has been unable to connect to a remote  
2 daemon. This capability can be used in conjunction with the RSCS events file to periodically take the  
2 file off hold and try connecting again.
- 3 • Ability to limit the size of files, based on number of records, printed by a LPR-type link.
- 3 • Support for the European currency character.

- 3 • Ability to define the number of days a LPR-type link will place an undeliverable file on hold before  
3 requeueing it to a notify link.
- 3 • Ability to define a timeout value for a LPR-type link which will cause the link to abort transmission, and  
3 place the file on hold, if a response is not received from the remote host.
- 3 • Ability to select the local port range a LPR-type link will use.
- 4 • Ability to supply TAG information when using the PPS EXEC and PPS XEDIT macro.
- 4 • Unsolicited File Transfer (UFT) Support.
- 4 • Support for POSIX translate tables in the LPR-type link sample exits.
- 4 • Support for a separate translate table used for translating the control file in the LPR- and LPD-type link  
4 sample exits.
- 5 • Support in the PPS EXEC and XEDIT macro for specifying a job name.
- 5 • Support in the ASCXPSE and LPRXPSE exit configuration file for specifying an encoding vector to be  
5 included with the postscript program sent when printing plain text.
- 5 • Support in the LPDXMANY configuration file to create PUNCH files instead of print files, and to specify  
5 the origin node name assigned to spool files the LPD link creates.
- 5 • Ability for the LPRXPSE and ASCXPSE sample exits to split the suffix string before and after the  
5 trailer page.

---

## 2 F.1 RSCS 3.2.0 APARs Providing TCP/IP Enhancements

- 2 • APAR VM59999 provides:
  - 2 – A **ITO=** parameter for the LPR-type link. For further details, see F.5, “New Link Parameters” on  
2 page 142
- 2 • APAR VM60615 provides:
  - 2 – A **FOrm=** exit parameter for the LPRXPSE and ASCXPSE sample exit routines.
  - 2 – A **FILter=** exit parameter for the LPRXONE, and LPRXPSE, sample exit routines.
 For further details, see F.6, “New Exit Parameters” on page 144.
- 2 • APAR VM60695 provides:
  - 2 – A configuration file for the LPDXMANY sample exit routine allowing an RSCS administrator to  
2 provide logical record length, lines per page, spool file class and form, job name, PSF destination,  
2 pagination, translation, and destination user ID for files received based on printer queue names,  
2 overriding the defaults used by the exit. For further details, see F.8.1, “LPDXMANY Configuration  
2 file” on page 147.
- 2 • APAR VM60931 provides:
  - 2 – Domain Name Server support. For further details, see F.2, “Domain Name Server Support” on  
2 page 136.

- 2 • APAR VM61295 provides:
  - 2 – A **HOSTDafn=** parameter for the LPR-type link. For further details, see F.5, “New Link Parameters” on page 142
- 2 • APAR VM61374 provides:
  - 2 – A TN3270E-Type link which supports 3270 printer sessions created by TCP/IP. For further details, see F.13, “Configuring an RSCS TN3270E Printer Link” on page 168,
  - 2 – Ability for the LPD-, LPR-, and TCPASCII-type link sample exits to read and use external translation tables. For further details, see F.8.1, “LPDXMANY Configuration file” on page 147, F.8.2, “LPRXONE and ASCXONE Configuration file” on page 150, and F.8.3, “LPRXPSE and ASCXPSE Configuration file” on page 152.
  - 2 – Ability for the LPR-, and TCPASCII-type link sample postscript exits to read and use an external postscript program for printing plain text files. For further details, see F.8.3, “LPRXPSE and ASCXPSE Configuration file” on page 152.
  - 2 – Ability for the LPR-, and TCPASCII-type link sample postscript exits to read and use additional font names for printing plain text files. For further details, see F.8.3, “LPRXPSE and ASCXPSE Configuration file” on page 152.
  - 2 – Ability for the LPR-, and TCPASCII-type link LPRXONE and ASCXONE sample exits to handle simple protocol conversion which used to be handled by hardware. For further details, see F.8.2, “LPRXONE and ASCXONE Configuration file” on page 150.
  - 2 – Ability for a LPR-type link to place a file on hold when it has been unable to connect to the remote daemon. The RSCS events file along with a **FILEhold=** link parameter allows the link to periodically retry sending the file to a remote daemon. For further details, see F.5, “New Link Parameters” on page 142.
  - 2 – A new sample exit, LPRXFORM, used in conjunction with a LPR-type link to provide overrides for link parameters based on the spool file form. Exit points 0 and 1 are used by LPRXFORM along with a **SYSTEM=** link parameter to allow the exits to be used by the link. For further details, see F.4, “System Supplied Keywords” on page 140 and, F.5, “New Link Parameters” on page 142.
  - 2 – Ability for a user to provide keywords at the beginning of a print file to provide overrides for LPR-type link parameters. The PPS EXEC and PPS XEDIT macro have been enhanced to read an RSCS NAMES file along with a **USER=** link parameter to allow users to provide keywords. For further details, see F.3, “User Supplied Keywords” on page 138, F.5, “New Link Parameters” on page 142, F.11, “The PPS Command” on page 158 and, F.12, “The PPS XEDIT Macro” on page 164.
  - 2 The PPS EXEC provided on the install ID's 406 disk is documented in F.11, “The PPS Command” on page 158. The PPS XEDIT macro provided on the install ID's 406 disk is documented in F.12, “The PPS XEDIT Macro” on page 164.
  - 2 – The LPDXMANY sample exit and configuration file have been enhanced with the following:
    - 2 - Support logical record lengths up to 1280 characters

- 2 - Specify whether or not to do ASCII to EBCDIC translation through a parameter on the
- 2 **queuename** record
- 2 - Support setting the destination user ID through a parameter on the **queuename** record,
- 2 instead of basing the destination user ID from the printer queue name
- 2 - Pick a printer device type based on the maximum record length
- 2 - Set the destination user ID to **SYSTEM** when a PSF destination is used

2 For further details, see F.8.1, "LPDXMANY Configuration file" on page 147.

3 • APAR VM61635

- 3 - Ability for the LPR-, and TCPASCII-type link sample exits to generate a two-page separator. For
- 3 further details, see F.8.2, "LPRXONE and ASCXONE Configuration file" on page 150, and F.8.3,
- 3 "LPRXPSE and ASCXPSE Configuration file" on page 152.
- 3 - Ability for the LPR-, and TCPASCII-type link sample exits to split the prefix string before and after
- 3 a separator page. For further details, see F.8.2, "LPRXONE and ASCXONE Configuration file" on
- 3 page 150, and F.8.3, "LPRXPSE and ASCXPSE Configuration file" on page 152.
- 3 - Ability for the LPR-, and TCPASCII-type link LPRXONE and ASCXONE sample exits to handle
- 3 SCS (SNA Character String) transparency strings. For further details, see F.8.2, "LPRXONE and
- 3 ASCXONE Configuration file" on page 150.
- 3 - Ability for a LPR-type link to limit the size of a file, based on number of records, printed using the
- 3 **Size=** link parameter. For further details, see F.5, "New Link Parameters" on page 142.
- 3 - Addition of the ASISCC keyword on the *translation* parameter within the LPDXMANY configuration
- 3 file. For further details, see F.8.1, "LPDXMANY Configuration file" on page 147.
- 3 - Support for the European currency character, defined as X'9F' in EBCDIC and X'A4' in ASCII,
- 3 within the LPR-, LPD-, and TCPASCII-type link sample exits.

3 • APAR VM61791

- 3 - The LPDXMANY sample exit and configuration file have been enhanced with the following:
- 3 - Support setting the destination node ID through a parameter on the **queuename** record,
- 3 instead of basing the destination node ID from the printer queue name
- 3 - Pick a TCPXLBIN translate table, provided with VM/TCPIP, to use when translating the data
- 3 and control file, through a parameter on the **queuename** record.
- 3 For further details, see F.8.1, "LPDXMANY Configuration file" on page 147.
- 3 - A **DAYshold=** parameter for the LPR-type link. For further details, see F.5, "New Link
- 3 Parameters" on page 142
- 3 - A **Timeout=** parameter for the LPR-type link. For further details, see F.5, "New Link Parameters"
- 3 on page 142
- 3 - A **SECure=** parameter for the LPR-type link. For further details, see F.5, "New Link Parameters"
- 3 on page 142



- 3     – Addition of a **TCPXibin** parameter on the PPS EXEC and XEDIT macro. For further details, see
- 3     F.11, “The PPS Command” on page 158, and F.12, “The PPS XEDIT Macro” on page 164.
- 3     – Ability to customize the control file created by the LPR-type link sample exits via the addition of
- 3     **DOMAINNAME=**, **HOSTNAME=**, and **USERNAME=** parameters within the exit configuration file.
- 3     For further details, see F.8.2, “LPRXONE and ASCXONE Configuration file” on page 150, and
- 3     F.8.3, “LPRXPSE and ASCXPSE Configuration file” on page 152.
- 4     • APAR VM61891
  - 5     – Ability to supply TAG information when using the PPS EXEC and PPS XEDIT macro. For further
  - 5     details, see F.11, “The PPS Command” on page 158, and F.12, “The PPS XEDIT Macro” on
  - 5     page 164.
- 4     • APAR VM62148
  - 4     – Provides UFT support for RSCS. For further details, see F.14, “UFT Support” on page 170.
  - 4     – Support for POSIX translate tables in the LPR-type link sample exits.
  - 4     – Support for a separate translate table used for translating the control file in the LPR- and LPD-type
  - 4     link sample exits.
- 5     • APAR VM62240
  - 5     Provides support in the PPS EXEC and XEDIT macro for specifying a job name. For further details,
  - 5     see F.11, “The PPS Command” on page 158, and F.12, “The PPS XEDIT Macro” on page 164.
- 5     • APARs VM62369 and VM62504
  - 5     Provides additional PCL string support within the LPRXONE and ASCXONE sample exits, including:
    - 5     – The ability to override the default PCL header string (x'6A79').
    - 5     – The ability to specify multiple PCL strings in each record.
  - 5     For further details, see F.8.2, “LPRXONE and ASCXONE Configuration file” on page 150.
- 5     • APAR VM62514
  - 5     Provides support in the LPRXPSE and ASCXPSE exit configuration file for specifying an encoding
  - 5     vector to be included with the postscript program sent when printing plain text. For further details, see
  - 5     F.8.3, “LPRXPSE and ASCXPSE Configuration file” on page 152.
- 5     • APAR VM62633
  - 5     Provides the ability for the LPRXPSE and ASCXPSE sample exits to split the suffix string before and
  - 5     after a trailer page. For further details, see F.8.3, “LPRXPSE and ASCXPSE Configuration file” on
  - 5     page 152.
- 5     • APAR VM62690
  - 5     Provides support in the LPDXMANY exit configuration file for creating PUNCH files instead of PRINT
  - 5     files, and for specifying the origin node assigned to spool files the LPD link creates. For further
  - 5     details, see F.8.1, “LPDXMANY Configuration file” on page 147.

---

## 2 F.2 Domain Name Server Support

4 Domain Name Server support in RSCS is provided through enhancements made to the RSCS LPR-,  
4 TCPNJE-, TCPASCII, and UFT-type links and a new GETHOSTC MODULE.

### 4 **Note!**

5 On VM/ESA 2.3.0, 2.4.0, or z/VM, the RSCSDNS user ID is defined as the virtual machine supporting  
4 the RSCS domain name server function.

5 Domain Name Server support in RSCS allows for the ability to supply a fully qualified host name, such as  
5 **gd1vm7.endicott.ibm.com**, when configuring LPR-, TCPNJE-, TCPASCII-, and UFT-type links. This  
5 support is an interface between the RSCS machine, and the DNS support defined in your VM TCP/IP  
5 configuration allowing RSCS to resolve a host name into a dotted decimal address.

### 2 F.2.1 GETHOSTC MODULE

4 GETHOSTC MODULE and GETHOSTC TEXT files are installed to the P684096K's 402 minidisk, or the  
4 VMSYS:P684096K.RSCS.XCHTEST SFS directory. This is a C MODULE which runs in it's own CMS  
2 virtual machine and does the Domain Name Server searches on behalf of RSCS. It will **listen** on a  
2 TCP/IP port for a connect request from an RSCS virtual machine. When a connect request is received, it  
2 will read a host name (up to 255-characters) sent by RSCS, issue the DNS search, and return the 4-byte  
2 IP address back to RSCS.

2 The CMS virtual machine must be set up as follows before invoking the GETHOSTC module:

2 • The runtime library for this compiler release must be linked and accessed. If on VM/ESA Version 1  
5 you will need the runtime library from LE 1.5 or higher. If on VM/ESA Version 2 or z/VM Version 3 or  
5 higher you can use the runtime library supplied with VM.

2 • Issue

2 GLOBAL LOADLIB SCEERUN

2 SCEERUN is part of the C runtime library supplied with LE 1.5 or greater.

2 • Link and access the TCPMAINT 592, or equivalent, minidisk.

2 • Link and access the P684096K 402 (test Build disk) or P684096K 403 (production Build disk), or  
4 equivalent, minidisk, or the VMSYS:P684096K.RSCS.XCHTEST SFS directory.

2 To start the module issue:

2 GETHOSTC port

2 where port is the TCP/IP port the module will listen on for connect requests; the default is 900.

2 Multiple virtual machines can run the GETHOSTC MODULE all listening on the same port. Each of the  
2 user IDs running GETHOSTC will need to be added to the PORT statement in the PROFILE TCPIP  
2 configuration file (for the TCPIP virtual machine).

4 The module will periodically check for command input. Two commands are supported:

2 **Query** will return a message indicating the current RSU level

2 **SHUTDOWN**

2 terminates processing

2 GETHOSTC TEXT file is provided to allow for the GETHOSTC MODULE to be rebuilt. To rebuild the  
2 module proceed with the following steps:

2 • Global the following TXTLIB's:

2 COMMTXT VMMLIB SCEELKED SCEESPC SCEESPCO DMSCMT DMSCENV

2 COMMTXT is part of TCP/IP.

5 VMMLIB, DMSCMT, and DMSCENV are part of VM/ESA and z/VM.

2 SCEELKED, SCEESPC, and SCEESPCO are part of the C runtime library supplied with LE 1.5 or  
2 greater.

2 • Global the following LOADLIB:

2 SCEERUN

2 SCEERUN is part of the C runtime library supplied with LE 1.5 or greater.

2 • Build the GETHOSTC module by issuing:

2 CMOD GETHOSTC

2 The CMOD EXEC is part of the C runtime library supplied with LE 1.5 or greater.

2 • Follow the procedures in Appendix B, "Local Modification Example: Assemble File" on page 97 to  
2 register the GETHOSTC MODULE as a full part replacement local modification.

## 2 F.2.2 RSCS LOADLIB Enhancements

4 Contains enhancements to the LPR-, TCPNJE-, TCPASCII-, and UFT-type links with support for 2 new  
2 link parameters:

2 • **HOSTName=** to supply up to a 200-character host name. For further details, see F.5, "New Link  
2 Parameters" on page 142.

2 • **DNSport=** to supply the TCP/IP port which the GETHOSTC module is listening on, default is 900. For  
2 further details, see F.5, "New Link Parameters" on page 142.

2 Each link will issue a Domain Name search only if a **HOST=** link parameter (to supply an IP address) has  
2 not been specified **and** a **HOSTName=** link parameter has been supplied.

---

## 2 F.3 User Supplied Keywords

4 LPR-type links have the ability to search for keywords at the beginning of the spool file to determine how  
4 to handle and process the file, overriding parameters that may have been defined for the LPR link. An  
4 RSCS administrator can authorize users to provide keywords for use by LPR-type links using the  
4 **USer=Yes** link parameter (see F.5, “New Link Parameters” on page 142). These keywords are  
4 automatically inserted at the beginning of a file by the PPS EXEC and the PPS XEDIT MACRO. For more  
4 information, see F.11, “The PPS Command” on page 158 and see F.12, “The PPS XEDIT Macro” on  
4 page 164. In addition, the TCP/IP LPR EXEC provided with TCP/IP Function Level 310 or higher can be  
4 used to add these keywords. The use of the PPS EXEC and the PPS XEDIT MACRO or the TCP/IP LPR  
4 EXEC is the suggested way to add LPR keywords to a spool file for printing.

2 The rest of this section describes how to manually add keywords to the beginning of a file prior to printing  
2 on a LPR-type link which has been defined with the **USer=Yes** link parameter.

### 2 **Warning!**

2 Use caution when printing a file which has had keywords added manually to the beginning of a file. If  
2 you intend to use the CMS PRINT command, you will need to use the **(CC** option. Otherwise the  
2 RSCS LPR-type link will not find the keywords as the first data records of the spool file.

2 Rules for adding keywords to the beginning of files are:

- 2 • All parsing and validations are done by the LPR-type link.
- 2 • Keywords can be anywhere in a record but a valid keyword must be the first non-blank character  
2 found on a record.
- 2 • Multiple keywords are allowed per record
- 2 • Valid keywords must precede any data records. Once a data record is found, the LPR-type link will  
2 cease looking for keywords.
- 2 • The same keyword can be defined on multiple records. This allows long strings to be split across  
2 records.

2 For example:

```
2 HOSTNAME=GDLVM7.ENDICOTT.  
2 HOSTNAME=IBM.COM
```

- 2 • Once the defined string length has been reached for each keyword, any additional keyword data will  
2 cause an error message to be issued to the RSCS console and user, and the file to be purged.
- 2 • Not all keywords need be used
- 2 • Only **HOSTNAME=**, **SUFFIX=**, **PREFIX=**, and **TRANS=** will be checked for valid hexadecimal (0-9,  
2 A-F) characters as each record is read. Any errors will cause an error message to be issued to the  
2 RSCS console and user, and the file to be purged.

- 2 • **HOSTID=** will be checked for a valid IP address. Any errors will cause an error message to be issued to the RSCS console and user, and the file to be purged. This keyword cannot span multiple records.
- 2 • See F.10, "New and Changed Messages" on page 154 for a description of message DMTLPR256E which will be issued for any errors found.

2 Valid keywords are as follows:

2 **FILTER=f**

2 Provide a one-character filter to be used in the control file sent to a remote daemon

2 **HOSTID=ipaddress**

2 Provide the host IP address of a remote daemon in dotted decimal

2 **HOSTNAME=address**

2 Provide up to 255 characters of a fully-qualified remote daemon host name

2 **PREFIX=string**

2 Provide up to 500 characters (250 when packed by RSCS) of a prefix string for the LPRXONE or LPRXPSE sample exits to send to the printer prior to sending data. This string can be used to initialize the printer, such as selecting a paper tray.

2 The prefix string can be split with part sent before the separator page and part sent after. The string will be split if the **FF04** divider characters are detected within the prefix string. The part before the divider characters will be sent prior to the separator page with the remaining sent after.

2 **PRINTER=name**

2 Provide up to 256 characters of a printer queue name

2 **SEP=string**

2 Provide a separator page setting for a LPR-type link exit to use.

2 The LPRXONE and LPRXPSE sample exits will accept the following settings:

2 **YES** Indicates to send an RSCS style separator page in front of the file

2 **NO** Indicates not to request or produce a separator

2 **HOST** Indicates to include the 'L' control file record requesting a banner page be produced by the remote daemon.

2 **2P** Indicates to print a two-page separator page. This is useful in conjunction with duplexing so that the print data starts on a fresh page.

2 Any other string settings will be ignored.

2 **SUFFIX=string**

2 Provide up to 500 characters (250 when packed by RSCS) of a suffix string for the LPRXONE or LPRXPSE sample exits to send to the printer after sending data. This string can be used to reset the printer state.

5 The suffix string can be split with part sent before the trailer page generated by the LPRXPSE and ASCXPSE sample exits and part sent after. The string will be split if the **FF04** divider characters are detected within the suffix string. The part before the divider characters will be sent prior to the trailer page with the remaining sent after.

- 2 **TRANS=string**
- 2     Provide 512 characters for a replacement translate table for LPRXONE or LPRXPSE sample exits to
- 2     use while printing this file

---

## 2 F.4 System Supplied Keywords

2 A new sample exit has been provided in the RSCSEXIT LOADLIB, called LPRXFORM, utilizing exit points  
2 0 and 1. This exit will read an external configuration file defined with a DDNAME of LPRXFORM on a  
2 FILEDEF statement in the PROFILE GCS file for the RSCS virtual machine. The exit will build FORM  
2 blocks based on keywords provided in the configuration file. These FORM blocks are then authorized for  
2 use by LPR-type links using the **SYStem=Yes** link parameter (see

4     **Warning!**

4     The LPRXFORM exit is not intended for use on the **EXIT=** parameter of a LPR-type link. If used, the  
4     link will abend.

2 F.5, “New Link Parameters” on page 142). When files arrive for printing by a LPR-type link with  
2 **SYStem=Yes**, the spool file form name will be used to search for a FORM block built by LPRXFORM. If  
2 found, keywords defined will be used as overrides to the link parameter definitions. If not found, the link  
2 name will be used to search for a FORM block. This allows the long link parameters, such as host name,  
2 prefix, and suffix to be moved from the RSCS configuration file to the LPRXFORM configuration file.

2 Rules of the LPRXFORM configuration file are:

- 2 • Each record must start in column one
- 2 • Only one keyword allowed per record
- 2 • The same keyword can be defined on multiple records. This allows long strings to be split across  
2 records.
- 2     For example:  
2     HOSTNAME=GDLVM7.ENDICOTT.  
2     HOSTNAME=IBM.COM
- 2 • Once the defined string length has been reached for each keyword, any additional keyword data will  
2 cause an error message to be issued
- 2 • Not all keywords need be used for each FORM block.
- 2 • The **FORM=** keyword starts a new FORM block and must precede any other keyword. This FORM  
2 block name will be checked for uniqueness. If a duplicate is found, or the name exceeds 8  
2 characters, the entire FORMBLOK will be ignored. This keyword cannot span multiple records of a  
2 FORM block.
- 2 • An \* in column one denotes a comment record.
- 5 • Blank records are not allowed. Each record must contain a valid keyword or be a comment record.

- 2 • The entire file will be read, any errors will generate messages but processing will continue on valid statements, keywords, and forms
- 2 • Only **HOSTNAME=**, **SUFFIX=**, **PREFIX=**, and **TRANS=** will be checked for valid hexadecimal (0-9, A-F) characters as each record is read. Any errors will cause the record to be ignored and processing to continue.
- 2 • **HOSTID=** will be checked for a valid IP address. Any errors will cause the record to be ignored and processing to continue. This keyword cannot span multiple records of a FORM block.
- 2 • The LPRXFORM exit routine will always return to RSCS with RC=0.

2 Valid keywords are as follows:

2 **FILTER=f**

2 Provide a one-character filter to be used in the control file sent to a remote daemon

2 **FORM=name**

2 Provide a one- to eight-character name for the FORM block.

2 **FORMSUB=name**

2 Provide a one- to eight-character form name to replace the spool file form name. This would provide a form name for use with the LPRXPSE sample exits.

2 **HOSTID=ipaddress**

2 Provide the host IP address of a remote daemon in dotted decimal

2 **HOSTNAME=address**

2 Provide up to 255 characters of a fully-qualified remote daemon host name

2 **PREFIX=string**

2 Provide up to 500 characters (250 when packed by RSCS) of a prefix string for the LPRXONE or LPRXPSE sample exits to send to the printer prior to sending data. This string can be used to initialize the printer, such as selecting a paper tray.

2 The prefix string can be split with part sent before the separator page and part sent after. The string will be split if the **FF04** divider characters are detected within the prefix string. The part before the divider characters will be sent prior to the separator page with the remaining sent after.

2 **PRINTER=name**

2 Provide up to 256 characters of a printer queue name

2 **SEP=string**

2 Provide a separator page setting for a LPR-type link exit to use.

2 The LPRXONE and LPRXPSE sample exits will accept the following settings:

2 **YES** Indicates to send an RSCS style separator page in front of the file

2 **NO** Indicates not to request or produce a separator

2 **HOST** Indicates to include the 'L' control file record requesting a banner page be produced by the remote daemon.

2 **2P** Indicates to print a two-page separator page. This is useful in conjunction with duplexing so that the print data starts on a fresh page.

2 Any other string settings will be ignored.

2 **SUFFIX=string**

2 Provide up to 500 characters (250 when packed by RSCS) of a suffix string for the LPRXONE or  
2 LPRXPSE sample exits to send to the printer after sending data. This string can be used to reset  
2 the printer state.

5 The suffix string can be split with part sent before the trailer page generated by the LPRXPSE and  
5 ASCXPSE sample exits and part sent after. The string will be split if the **FF04** divider characters are  
5 detected within the suffix string. The part before the divider characters will be sent prior to the trailer  
5 page with the remaining sent after.

2 **TRANS=string**

2 Provide 512 characters for a replacement translate table for LPRXONE or LPRXPSE sample exits to  
2 use when printing this file

2 To use the LPRXFORM exit points, add the following to the RSCS CONFIG file:

2 EXIT 0 ON LPRXFM00

2 EXIT 1 ON LPRXFM01

---

## 2 **F.5 New Link Parameters**

2 The following new link parameters have been added:

- 3 • **DAYshold=** for LPR-type links
- 2 • **DNSport=** for LPR-, TCPASCII-, and TCPNJE-type links
- 2 • **FILEhold=** for LPR-type links
- 2 • **HOSTDafn=** for LPR-type links
- 2 • **HOSTName=** for LPR-, TCPASCII-, and TCPNJE-type links
- 2 • **ITO=** for LPR-type links
- 3 • **SECure=** for LPR-type links
- 3 • **Size=** for LPR-type links
- 2 • **SYSTEM=** for LPR-type links
- 3 • **Timeout=** for LPR-type links
- 2 • **USer=** for LPR-type links

3 **DAYshold=nnn**

3 Specifies the number of days, 0 to 365, undeliverable files will be placed on hold before requeueing it  
3 to a notify link. In order to requeue files to a notify link, a route for **\*LPRH\*** must be defined, for  
3 example:

3 ROUTE \*LPRH\* TO \*LPRHOLD

3 This parameter must be used in conjunction with an events file entry which periodically changes any  
3 files on hold to nohold for the LPR link. If a **DAYshold** parameter is not specified, the LPR link will



3 continue indefinitely to try to deliver the file. If **0** is specified, the LPR link will requeue files to a notify  
3 link every time it places them on hold.

2 **DNSport=portid**

2 Specifies the port number on the local system which is running the RSCS Domain Name Server,  
3 defaults to 900 if not specified.

2 **FILEhold=No**

2 **FILEhold=Yes**

2 Specifies whether or not to place a file on hold when unable to connect to a remote daemon after  
2 approximately 1 minute; the default is No which indicates the LPR link will continue connect attempts  
2 until successful or the link is STOPped.

2 If defined as yes, the LPR link will attempt to connect to the remote daemon at 1, 2, 4, 8, 16, and 32  
2 second intervals. If still unable to connect, the file will be placed on hold. The RSCS events file can  
2 be used to periodically remove hold from all held files for a LPR link. A sample RSCS events file  
2 entry which will change all held files to NOHOLD for a LPR-type link with linkname of LPR every 10  
2 minutes would look like:

```
2      *      M:010      *      *      *      *      CHANGE LPR HOLD NOHOLD
```

2 **HOSTDafn=name**

2 Specifies a one- to eight-character name which should be used as the host name portion of the control  
2 and data file names. A control or data file name is used within the 'Receive control file' and 'Receive  
2 data file' subcommands of the daemon 'Receive job' command. The name should start with "cfa"  
2 (control file) or "dfa" (data file) followed by a three digit job number followed by the host name that has  
2 constructed the control/data file, as described in RFC 1179.

2 RSCS defaults to using the link name for the host name portion of the file name if this parameter is  
2 not specified. Certain daemons do not tolerate a name which does not match an existing defined host  
2 name. This parameter allows for supplying a defined name instead of using the link name.

2 **HOSTName=address**

2 Specifies up to 200 characters of the fully-qualified address of the remote host name to connect to.  
2 This host name address will be resolved to an IP address using the RSCS Domain Name Server.  
2 This may be overridden on a file by file basis by the LPR- and TCPASCII-type exit routines or can be  
2 overridden by the LPRXFORM exit or passed by a user. When overridden, the host name can be up  
2 to 255 characters.

2 **ITO=nnn**

2 Is a number from 0 to 100 that specifies the Inactivity Time Out value. The ITO value defines the  
2 length of time that can occur with no activity (that is, no file transmission or reception) before the link  
2 is deactivated. If this parameter is not specified, there is no inactivity time out for this link. If a link is  
2 ended because its ITO value has been exceeded, its restart exec will *not* be processed.

2 You can specify the following *nnn* values:

2 **0** If specified, the link will be deactivated when there is no activity on the link. RSCS will first  
2 send files that are queued for transmission, or finish reception of the file currently being  
2 received, before deactivating the link.

- 2    **1-99** Approximates the number of minutes until the link will be deactivated if there has been no  
2           activity on it.
- 2    **100** If specified, no ITO will be in effect; the link will stay active until it is deactivated manually or  
2           until an unrecoverable error occurs.
- 3    **SECure=Yes**
- 3    **SECure=No**  
3       Specifies whether to use local ports 721-731 or 1024-2048; The default is Yes, indicating local ports  
3       721-731 are to be used.
- 3    **Size=nnn**  
3       Specifies the maximum number of records the spool file may contain in order to be processed; the  
3       default is 0 which indicates no limit. If the number of records exceeds the maximum allowed amount,  
3       an error message will be issued to the user and console, and the file will be placed on hold. *nnn* can  
3       be between 0 (no limit) and 1048576 records.
- 2    **SYStem=No**
- 2    **SYStem=Yes**  
2       Specifies whether or not to search for a FORM table provided by the LPRXFORM exit using the  
2       FORM the file was spooled with; the default is No. The FORM table provides keywords which define  
2       the printer queue name, remote host name or IP address, translation table to use, filter, substitute  
2       form to use on the spool file, prefix string, separator page setting, and suffix string to be used when  
2       sending the file to a remote daemon, overriding the values defined for the link. For further details on  
2       the LPRXFORM exit, see F.4, "System Supplied Keywords" on page 140.
- 3    **Timeout=0**
- 3    **Timeout=nnn**  
3       Specifies the maximum amount of time, in seconds, to wait for a response from the remote host  
3       before aborting delivery of the file and placing it on hold. The default is zero indicating to wait  
3       indefinitely for a response from the remote host.
- 2    **USer=No**
- 2    **USer=Yes**  
2       Specifies whether or not to allow keywords to be defined and looked for at the beginning of a print file;  
2       the default is No. These keywords can define the printer queue name, remote host name or IP  
2       address, translation table to use, filter, prefix string, separator page setting, and suffix string to be  
2       used when sending the file to a remote daemon, overriding the values defined for the link. For further  
2       details on user defined keywords, see F.3, "User Supplied Keywords" on page 138.

---

## 2    **F.6 New Exit Parameters**

2    The following new link exit parameters have been added:

- 2    • **Config=** for LPDXMANY, LPRXONE, LPRXPSE, ASCXONE, and ASCXPSE exits
- 2    • **CONvert=** for LPRXONE, and ASCXONE exits
- 5    • **EOT=** for LPRXPSE, and ASCXPSE exits

2 • **FILter**= for LPRXONE, and LPRXPSE exits

2 • **Form**= for LPRXPSE, and ASCXPSE exits

5 • **PCL**= for LPRXONE, and ASCXONE exits

2 **Config**=*ddname*

2 Specifies the ddname which has been defined as an exit configuration file. If the ddname does not exist, the sample exits will pass back a return code to cause the LPD-, LPR-, or TCPASCII-type link to issue an error message and drain. If this exit parameter is not used, a configuration file is not read by the sample exits causing existing defaults to be used for values which can be defined by the configuration file. For further details see:

2 • F.8.1, "LPDXMANY Configuration file" on page 147,

2 • F.8.2, "LPRXONE and ASCXONE Configuration file" on page 150, and

2 • F.8.3, "LPRXPSE and ASCXPSE Configuration file" on page 152

2 **CONVert**=No

2 **CONVert**=Yes

2 Specifies whether or not to allow protocol conversion; the default is No. This function has been added for printers moved from coax connected protocol converters to LAN attached, connected to multiprotocol cards for TCP/IP. Some applications use the functions built in to protocol converters.

5 The LPRXONE and ASCXONE sample exits will look for strings starting with a header defined by the **PCL** exit parameter and ending with the trailing x'4A' character, which surround pairs of bytes that spell out PCL commands. These pairs of bytes will be packed into single bytes that are the equivalent PCL bytes, which are already in ASCII. Multiple PCL strings can be contained in each record of the print file as long as each string contains the X'4A' trailing character.

2 In addition, the LPRXONE and ASCXONE sample exits will look for the SCS (SNA Character String) transparency strings contained anywhere within each record. The SCS transparency string is defined with a x'35' followed by a one byte length, followed by data for the defined length that is sent unaltered (not translated). Multiple SCS transparency strings can be contained within a single record.

5 **EOT**=Yes

5 **EOT**=No

5 Specifies whether End Of Transmission (EOT) characters should be inserted after the separator page, data file, and trailer page. The default is Yes causing the EOT characters to be inserted.

2 **FILter**=*f*

2 Specifies the printer filter used in the control file sent to the daemon; the default is **f**. One EBCDIC character is passed. If it is uppercase alphabetic, it will be translated to lowercase. No other validation is performed. This maintains consistency with RFC1179.

2 **Form**=*OrFnFsLs*

2 Specifies the default orientation, font name, font size, and additional leading size to use when printing plain text files, overriding the defaults used by the exit. The spool file form name can be used to further override the values specified here.

2 **Note:** The actual fonts selected must be installed and used by the printer.

- 2 The following can be used for *OrFnFsLs* and shows the default when not specified:
- 2 *Or* File orientation:
- 2 **PO** Portrait (default)
- 2 **LA** Landscape
- 2 *Fn* Font name code
- 2 **CB** Courier-Bold
- 2 **CI** Courier-Oblique
- 2 **CP** Courier (default)
- 2 **CX** Courier-BoldOblique
- 2 **HB** Helvetica-Bold
- 2 **HI** Helvetica-Oblique
- 2 **HP** Helvetica
- 2 **HX** Helvetica-BoldOblique
- 2 **SP** Symbol
- 2 **TB** Times-Bold
- 2 **TI** Times-Italic
- 2 **TP** Times-Roman
- 2 **TX** Times-BoldItalic
- 2 *Fs* Font size, 04 thru 99; the default is 11 for portrait and 10 for landscape orientation
- 2 *Ls* Additional leading size, 0.0 - 9.9, added to font size to give leading, specified as 00 thru 99;
- 2 the default is 09 for portrait and 12 for landscape
- 5 **PCL=string**
- 5 Specifies a two- to eight-character string defining the header for PCL strings which the LPRXONE and
- 5 ASCXONE sample exits will search for in each record of the file to be printed when the **CONV=Y** exit
- 5 parameter is specified. An even number of characters must be specified. The default is 6A79.

---

## 2 **F.7 Enhanced Exit Parameters**

5 The existing **Sep=**, **Prefix=**, and **Suffix=** exit parameters for the LPRXONE, LPRXPSE, ASCXONE, and

2 ASCXPSE exits have been enhanced.

2 **Sep=2p** will produce a two-page separator page. This is useful in conjunction with duplexing so that the

2 print data starts on a fresh page.

2 The prefix string can be split with part sent before the separator page and part sent after. The string will

2 be split if the **FF04** divider characters are detected within the prefix string. The part before the divider

2 characters will be sent prior to the separator page with the remaining sent after.

5 The suffix string can be split with part sent before the trailer page generated by the LPRXPSE and

5 ASCXPSE sample exits and part sent after. The string will be split if the **FF04** divider characters are

5 detected within the suffix string. The part before the divider characters will be sent prior to the trailer page

5 with the remaining sent after.

---

## 2 F.8 Exit Configuration Files

2 The following LPD-, LPR, and TCPASCII link type exits now support reading an external configuration file:

- 2 • ASCXONE
- 2 • ASCXPSE
- 2 • LPDXMANY
- 2 • LPRXONE
- 2 • LPRXPSE

### 2 F.8.1 LPDXMANY Configuration file

2 The LPDXMANY sample exit routine can now read a configuration file. This configuration file can supply  
5 overrides for processing when a file is received from a remote LPR command based on the printer queue  
5 name. The configuration file can also be used to supply a translate table to override the one used by the  
5 exit, and to supply the origin node for spool files LPDXMANY creates.

2 The configuration file can have any desired filename and filetype and must be on a disk accessed by the  
2 RSCS user ID. This file must be defined with a FILEDEF statement in the PROFILE GCS. The DDNAME  
2 used must be supplied on the **Config=** link exit parameter statement when defining the LPD-type link in  
2 the RSCS CONFIG file. For further details on the **Config=** link exit parameter, see F.6, “New Exit  
2 Parameters” on page 144.

2 A sample PROFILE GCS DDNAME entry:

```
2 'FILEDEF LPDX DISK LPD CONFIG *'
```

2 Where LPDX is the DDNAME defined and LPD CONFIG is the name of the LPDXMANY configuration file.

2 A sample RSCS CONFIG parameter (PARM) for an LPD-type link with linkname LPD using the DDNAME  
2 defined on the FILEDEF statement in the PROFILE GCS:

```
5 PARM LPD EXIT=LPDXMANY PORT=515 EPARM='C=LPDX'
```

2 **F.8.1.1 Layout of the LPDXMANY Configuration File:** An \* in column one denotes a  
2 comment line. Any line that does not have an \* in column one will be interpreted as a configuration entry.  
5 All entries must be capitalized and start in column one.

2 The following configuration records are supported:

#### 5 **LOCAL\_NODE=string**

- 5 Provide a one- to eight-character origin node name LPDXMANY assigns to the created spool file.
- 5 If this option is not specified, LPDXMANY will use the link name assigned to the LPD-type link as
- 5 the origin node name.

2 **TOASCII=string**

2 Provide a table for EBCDIC to ASCII translation, overriding the default used by the exit. Up to 512  
2 hexadecimal (0-9, A-F) characters may be specified on multiple **TOASCII=** records to replace the  
2 256-byte translation table.

4 **TOEBCCMD=string**

4 Provide a table for ASCII to EBCDIC translation of the LPR control file and commands, overriding  
4 the default used by the exit. Up to 512 hexadecimal (0-9, A-F) characters may be specified on  
4 multiple **TOEBCCMD=** records to replace the 256-byte translation table.

2 **TOEBCDIC=string**

2 Provide a table for ASCII to EBCDIC translation, overriding the default used by the exit. Up to 512  
2 hexadecimal (0-9, A-F) characters may be specified on multiple **TOEBCDIC=** records to replace  
2 the 256-byte translation table.

2 *queuename*

2 Provide the ability to override defaults used by LPDXMANY on a printer queue name basis when  
2 receiving a file from a remote host. Multiple, unique, printer queue name records can be specified.  
2 The layout of the printer queue name records are as follows:

- 2 • Each queue name option is separated by one or more blanks.
- 2 • The parameters are not column dependent.
- 2 • One record per line, continuation is not supported.
- 2 • Each parameter IS position dependent.
- 2 • An \* can be used in a position (other than for the printer queue name) to tell LPDXMANY to  
2 use the existing default.
- 3 • The printer queue name will be parsed into user ID and node ID as follows:

3 **<userid@>nodeid**

3 **<userid%>nodeid**

3 **nodeid** user ID will be set to SYSTEM.

3 **@nodeid** user ID will be set to SYSTEM.

3 **%nodeid** user ID will be set to SYSTEM.

3 **userid@** node ID will be set to local node name.

3 **userid%** node ID will be set to local node name.

3 **NONEOFTHEABOVE** node ID and user ID MUST be set within record.

3 The userid and nodeid parsed from the printer queue name can be overridden within the  
3 record. If both are overridden, the printer queue name is not parsed. If neither are  
3 overridden, the printer queue name is parsed into user ID and node ID which must be valid  
3 (either of which can still be overridden within).

2 The format of the printer queue name records is:

3 queuename ppos lpage class forms jobn dest pagination translation userid nodeid tcpplbin

3 DEFAULT ppos lpage class forms jobn dest pagination translation userid nodeid tcpplbin

2 *queuename*  
 2 is a printer queue name up to 32 characters. A *queuename* of **DEFAULT** can be used to  
 2 define parameters for any printer queue not defined by a configuration file record. When a  
 2 printer queue name arrives, LPDXMANY first looks for a configuration record of that name; if  
 2 not found it will look for a configuration record using **DEFAULT**; if not found it will use  
 2 existing LPDXMANY defaults.

2 *ppos*  
 5 is the logical record length 1-1280; default is 255 The device type LPDXMANY assigns  
 5 based on the PPOS is as follows:

| 5 <b>PPOS</b>     | <b>Device Type</b> |
|-------------------|--------------------|
| 5 <b>205-1280</b> | VAFP               |
| 5 <b>151-204</b>  | 3800               |
| 5 <b>133-150</b>  | 3211               |
| 5 <b>81-132</b>   | 1403               |
| 5 <b>1-80</b>     | PUNCH              |

2 *lpage*  
 2 is the number of lines per page 1-99; default is 66

2 *class*  
 2 is the one character spool file class; default is blank

2 *forms*  
 2 is the one- to eight-character spool file form; default is blank

2 *jobn* is the one- to eight-character job name; default is SYSTEM

2 *dest* is the one- to eight-character PSF destination; default is blank. When using a PSF  
 2 destination, LPDXMANY will set the user ID field of the tag to **SYSTEM**.  
 3 When using a PSF destination, the printer queue name can be in the form  
 3 SYSTEM@nodeid. Alternatively, the printer queue name can be anything unique as long as  
 3 the user ID field is **SYSTEM** or \* **and** the node ID field is specified.

2 *pagination*  
 2 is either PAGE or NOPAGE; default is NOPAGE. This parameter determines how pagination  
 2 will be performed as follows:

2 PAGE will cause LPDXMANY to always paginate regardless of the control file print filter.

2 NOPAGE will cause LPDXMANY to paginate only as defined by the 'f' or 'p' control file  
 2 print filters. To be effective, the control file **must be** received prior to the data file.

2 *translation*  
 3 is either TRAN, NOTRAN, or ASISCC; default is TRAN. Translation specifies whether or not  
 3 to translate the data file prior to spooling as follows:

3 **TRAN** Translate data received into EBCDIC removing any CR/LF/FF (carriage return,  
 3 line feed, form feed) control characters.

3 **NOTRAN** Do not translate data received into EBCDIC, but remove any CR/LF/FF (carriage  
 3 return, line feed, form feed) control characters.

3 **ASISCC** Leave the data received as is, do not translate nor remove any control characters.  
 3 ASISCC would be desired when data received is destined to be printed by a  
 3 LPR-type link.

2 *userid*  
 2 is the one- to eight-character user ID to which the file should be spooled to; default is derived  
 2 from the printer queue name.

2 **Note:** If a PSF destination is provided by *dest*, then the *userid* field can only be set to  
 2 **SYSTEM**.

3 *nodeid*  
 3 is the one- to eight-character destination node ID to which the file should be spooled to;  
 3 default is derived from the printer queue name.

3 *tcpxlbm*  
 3 is the filename of a TCP/IP TCPXLBIN translate table to be used for this printer queue name.  
 3 The file must exist on any accessed disk. If not specified, the translation table used will  
 3 either be the default one within LPDXMANY or the override specified within the LPDXMANY  
 3 configuration file.

2 Some examples:

```
3 LPR@NODEONE 1280 50 * STDN * * * ASISCC ASCII
2 LOCALNODE * * * * * SYSTEM
2 DEFAULT 255 66 * * SYSTEM * NOPAGE TRAN *
```

2 The first example would allow a file to be received without translating, and spooled to a LPR link  
 2 using the LPRXONE exits causing the file to be sent unaltered to a remote daemon.

2 The second example defines a printer queue used to spool input to the system printer.

2 The third example shows the defaults defined within LPDXMANY.

## 2 F.8.2 LPRXONE and ASCXONE Configuration file

3 The LPRXONE and ASCXONE sample exit routines can now read a configuration file. This configuration  
 3 file is used to supply the following:

- 3 • Translation tables to override the ones used by the exit.
- 3 • Overrides for the control file created by LPRXONE.

2 The configuration file can have any desired filename and filetype and must be on a disk accessed by the  
 2 RSCS user ID. This file must be defined with a FILEDEF statement in the PROFILE GCS. The DDNAME  
 2 used must be supplied on the **Config=** link exit parameter statement when defining the LPR- or  
 2 TCPASCII-type link in the RSCS CONFIG file. For further details on the **Config=** link exit parameter, see  
 2 F.6, "New Exit Parameters" on page 144.

2 A sample PROFILE GCS DDNAME entry:

```
2 'FILEDEF LPRONE DISK LPR CONFIG *'
```

2 Where LPRONE is the DDNAME defined and LPR CONFIG is the name of the configuration file.

2 A sample RSCS CONFIG parameter (PARM) for a LPR-type link with linkname LPR using the DDNAME  
 2 defined on the FILEDEF statement in the PROFILE GCS:



2 PARM LPR EXIT=LPRXONE EPARM='C=LPRONE'

2 **F.8.2.1 Layout of the LPRXONE and ASCXONE Configuration File:** An \* in column  
2 one denotes a comment line. Any line that does not have an \* in column one will be interpreted as a  
2 configuration entry. All entries must be capitalized.

2 The following configuration records are supported:

2 **ASCII=string**

2 Provide a table for translating ASCII control characters, overriding the default used by the exit.  
2 LPRXONE uses this translation table when files are already in ASCII and the user ID field of the  
2 TAG is set to 'ASCIIC'. Up to 512 hexadecimal (0-9, A-F) characters may be specified on multiple  
2 **ASCII=** records to replace the 256-byte translation table.

3 **DOMAINNAME=string**

3 Used to specify a domain name, up to 255 characters, to be appended after the host name of the  
3 'H' control file record. A period (.) will be inserted between the host name and domain name. This  
3 record can be used to add a domain name after the host name, which by default is the node name  
3 where the file originated or as specified in the **HOSTNAME=** record. This record is not supported  
3 by the ASCXONE exits.

3 **HOSTNAME=string**

3 Used to specify a host name, up to 255 characters, for the 'H' control file record, overriding the  
3 default, which is the node name where the file originated. This record is not supported by the  
3 ASCXONE exits.

2 **TOASCII=string**

2 Provide a table for EBCDIC to ASCII translation, overriding the default used by the exit. Up to 512  
2 hexadecimal (0-9, A-F) characters may be specified on multiple **TOASCII=** records to replace the  
2 256-byte translation table.

4 **TOASCIIC=string**

4 Provide a table for EBCDIC to ASCII translation of the LPR control file, overriding the default used  
4 by the exit. Up to 512 hexadecimal (0-9, A-F) characters may be specified on multiple  
4 **TOASCIIC=** records to replace the 256-byte translation table. This record is not supported by the  
4 ASCXONE exits.

3 **USERNAME=string**

3 Used to specify a user name, up to 32 characters, for the 'P' control file record, overriding the  
3 default name used by the exit, which is the user name of the file originator. This record can be  
3 used to cause all error messages to be sent to a central location. This record is not supported by  
3 the ASCXONE exits.

## 2 F.8.3 LPRXPSE and ASCXPSE Configuration file

2 The LPRXPSE and ASCXPSE sample exit routines can now read a configuration file. This configuration  
2 file is used to supply the following:

- 2 • Translation table to override the one used by the exit
- 2 • Postscript program to override the one sent to the printer when printing plain text files
- 2 • Additional font names used when printing plain text files.
- 3 • Overrides for the control file created by LPRXPSE.

2 The configuration file can have any desired filename and filetype and must be on a disk accessed by the  
2 RSCS user ID. This file must be defined with a FILEDEF statement in the PROFILE GCS. The DDNAME  
2 used must be supplied on the **Config=** link exit parameter statement when defining the LPR- or  
2 TCPASCII-type link in the RSCS CONFIG file. For further details on the **Config=** link exit parameter, see  
2 F.6, "New Exit Parameters" on page 144.

2 A sample PROFILE GCS DDNAME entry:

```
2 'FILEDEF LPRPSE DISK LPR CONFIG *'
```

2 Where LPRPSE is the DDNAME defined and LPR CONFIG is the name of the configuration file.

2 A sample RSCS CONFIG parameter (PARM) for a LPR-type link with linkname LPR using the DDNAME  
2 defined on the FILEDEF statement in the PROFILE GCS:

```
2 PARM LPR EXIT=LPRXPSE EPARM='C=LPRPSE'
```

2 **F.8.3.1 Layout of the LPRXPSE and ASCXPSE Configuration File:** An \* in column one  
2 denotes a comment line. Any line that does not have an \* in column one will be interpreted as a  
2 configuration entry. All entries must be capitalized.

2 The following configuration records are supported:

### 3 **DOMAINNAME=string**

3 Used to specify a domain name, up to 255 characters, to be appended after the host name of the  
3 'H' control file record. A period (.) will be inserted between the host name and domain name. This  
3 record can be used to add a domain name after the host name, which by default is the node name  
3 where the file originated or as specified in the **HOSTNAME=** record. This record is not supported  
3 by the ASCXPSE exits.

### 5 **ENCODING=string**

5 Used to specify an encoding vector to be included with the postscript program sent when printing  
5 plain text files. Up to 32-characters can be specified. The default encoding vector used is  
5 StandardEncoding.

5 **Warning:** The encoding vector, in many case, is case sensitive. For example, if  
5 ISOLatin1Encoding is acceptable to a printer, ISOLATIN1ENCODING may not be.

2 **FONT=***xxname*

2 Provide a 2-character font name abbreviation (*xx*) followed by a 32-character font name. There  
2 should be no blanks between the abbreviation and full font name. Multiple records can be  
2 provided for supplying as many additional fonts as required. The abbreviation should be unique  
2 on each **FONT=** record. In addition, the fonts must be loaded and available at the printer.

2 The current available fonts are:

| 2 | <b>2-character abbreviation</b> | <b>32-character Font name</b> |
|---|---------------------------------|-------------------------------|
| 2 | <b>CB</b>                       | Courier-Bold                  |
| 2 | <b>CI</b>                       | Courier-Oblique               |
| 2 | <b>CP</b>                       | Courier (exit default)        |
| 2 | <b>CX</b>                       | Courier-BoldOblique           |
| 2 | <b>HB</b>                       | Helvetica-Bold                |
| 2 | <b>HI</b>                       | Helvetica-Oblique             |
| 2 | <b>HP</b>                       | Helvetica                     |
| 2 | <b>HX</b>                       | Helvetica-BoldOblique         |
| 2 | <b>SP</b>                       | Symbol                        |
| 2 | <b>TB</b>                       | Times-Bold                    |
| 2 | <b>TI</b>                       | Times-Italic                  |
| 2 | <b>TP</b>                       | Times-Roman                   |
| 2 | <b>TX</b>                       | Times-BoldItalic              |

3 **HOSTNAME=***string*

3 Used to specify a host name, up to 255 characters, for the 'H' control file record, overriding the  
3 default, which is the node name where the file originated. This record is not supported by the  
3 ASCXPSE exits.

2 **PSCRIPT=**'*string*'

2 Provide a replacement postscript program to be used when printing a plain text file. The postscript  
2 program must be enclosed within quotes. Anything after the ending quote will be ignored allowing  
2 for comments.

2 For example:

```
2 PSCRIPT='this is line one' comment for line one  
2 PSCRIPT='this is line two'
```

2 Multiple **PSCRIPT=** records can be provided in order to supply the entire program. LPRXPSE will  
2 add a carriage return (X'0A') after each record, and will translate the record from EBCDIC to  
2 ASCII.

2 **Note:** When replacing the postscript program, the ability to tailor the file orientation, font name,  
2 font size, and additional leading size through a FORM is lost. The supplied postscript program  
2 must define all of these.

2 **TOASCII=***string*

2 Provide a table for EBCDIC to ASCII translation, overriding the default used by the exit. Up to 512  
2 hexadecimal (0-9, A-F) characters may be specified on multiple **TOASCII=** records to replace the  
2 256-byte translation table.

4 **TOASCII**=*string*

4 Provide a table for EBCDIC to ASCII translation of the LPR control file, overriding the default used  
 4 by the exit. Up to 512 hexadecimal (0-9, A-F) characters may be specified on multiple  
 4 **TOASCII**= records to replace the 256-byte translation table. This record is not supported by the  
 4 ASCXPSE exits.

3 **USERNAME**=*string*

3 Used to specify a user name, up to 32 characters, for the 'P' control file record, overriding the  
 3 default name used by the exit, which is the user name of the file originator. This record can be  
 3 used to cause all error messages to be sent to a central location. This record is not supported by  
 3 the ASCXPSE exits.

---

2 **F.9 LPR-type Link Exit Parameter List**

2 The parameter list passed to each LPR-type link exit routine has been expanded as follows:

2 **Word 11 (+40)** Address of a 255-character host name

2 **Word 12 (+44)** Address of a full word containing the length of a user defined prefix string followed by the  
 2 250-byte prefix string

2 **Word 13 (+48)** Address of a full word containing the length of a user defined suffix string followed by the  
 2 250-byte suffix string

2 **Word 14 (+52)** Address of a one-character user defined filter

2 **Word 15 (+56)** Address of a 256-character user defined translate table

2 **Word 16 (+60)** Address of a 4-character user defined separator page setting

---

2 **F.10 New and Changed Messages**

4 **012I** Link *linkid* exit routine *name* loaded at *address*

4 **Explanation:** An exit module has been loaded for use by the indicated ASCII-, LPR-, TCPASCII-, UFT-, or  
 4 UFTD-type link. The *linkid* identifies the link. The routine is identified by its entry point name *name* and is loaded at  
 4 *address*, the hexadecimal storage address.

4 **System Action:** Normal system operation continues.

4 **Operator Response:** None.

4 **Destination:** R, SCO

---

4 **193I** Link *linkid* {connecting to | disconnecting from | unable to connect to} host *ip-address* port *port* {  
 4 printer *printer* | user *username* }

4 **Explanation:** This message is issued when a LPR- of UFT-type link attempts to connect to, disconnect from, or has  
 2 been unable to connect to, the indicated host. "Connecting to" indicates a file has arrived on the link to be  
 2 transmitted. "Disconnecting from" indicates the file is finished processing. "Unable to connect to" indicates the link  
 2 has been defined with the **FILEhold=Yes** parameter and has attempted for approximately 1 minute to connect with the  
 2 indicated host.

- 4 *linkid* Link identifier of the LPR- or UFT-type link sending the file.
- 2 *ip-address* IP address of the host to which the link is connecting, disconnecting, or unable to connect to.
- 2 *port* Port number to which the link is connecting, disconnecting, or unable to connect to.
- 4 *printer* Name of the printer queue on the host where the file will be sent for LPR-type links.
- 4 *username* Name of the user ID on the host where the file will be sent for UFT-type links.
- 2 **System Action:** Normal RSCS processing continues. If the link was unable to connect to the indicated host, the file being processed is put on hold.
- 2 **Operator Response:** If the link was defined with the **FILEhold=Yes** parameter, an entry should be included in the RSCS event file to periodically change all held files for the indicated link to NOHOLD.
- 2 **Destination:** R, SCO

---

2 **215I** Link *linkid* response message requested by {data | control | command} exit, message=*message*

2 **Explanation:** One of the following return codes was provided by the exit routines while a LPD- or UFTD-type link was processing a data stream from a TCP/IP line print router or unsolicited file transfer client:

- 2 • A return code of 8 was returned by the data processing exit routine for a LPD-type link.
- 2 • A return code of 8 was returned by the control file exit routine for a LPD-type link.
- 2 • A return code of 12 was returned by the data processing exit for a UFTD-type link.
- 2 • A return code of 8 or 12 was returned by the UFT command processing exit for a UFTD-type link.

2 This return code requests RSCS to send a negative response message provided by the exit routine to the TCP/IP LPR or UFT client.

2 *linkid* Specifies the link identifier of the link receiving the file.

2 *message* The negative response message returned by the exit routine.

2 **System Action:** The negative response message is sent to the TCP/IP LPR or UFT client, the spool file is purged if created, and the connection with the TCP/IP client is closed.

2 **Operator Response:** If the problem persists, start local diagnostic procedures to determine why the exit is sending a negative response message.

2 **Destination:** R

---

4 **256E** Link *linkid* keyword *keyword* {missing | data invalid | not allowed} for file *fileid* -- file purged

4 **Explanation:** This message is issued when a LPR- or UFT-type link has detected an error in a user supplied keyword. The keyword and possible errors are as follows:

4 **DESTADDR=** Either the destination address (username and hostname) provided exceeds 255 characters, one has not been provided by the user for a UFT-type link, or name resolution failed for the hostname portion.

2 **FILTER=** The filter provided exceeds 1 character in length.

2 **HOSTNAME=** Either the host name provided exceeds 255 characters, one has not been provided by the user or defined for the link, or name resolution failed.

2 **HOSTID=** The host ID in dotted decimal is not valid or exceeds 16 characters.

2 **PREFIX=** Either the prefix string provided exceeds 500 characters, does not contain valid hexadecimal characters (0-9, A-F), or is an odd number of characters.

## 257I • 257I

- 2 **PRINTER=** Either the printer queue name provided exceeds 256 characters or one has not been provided by the user  
2 or defined for the link.
- 2 **SEP=** The separator string provided exceeds 4 characters in length.
- 2 **SUFFIX=** Either the suffix string provided exceeds 500 characters, does not contain valid hexadecimal characters  
2 (0-9, A-F), or is an odd number of characters.
- 2 **TRANS=** Either the translate table provided does not contain 512 characters, or does not contain valid hexadecimal  
2 characters (0-9, A-F).
- 4 **TRANSLATE=** Either the translate table provided does not contain 512 characters, or does not contain valid  
4 hexadecimal characters (0-9, A-F).
- 4 **TRANSFORM=** The UFT transform type specified is not supported by the UFT-type link.
- 4 The LPR- or UFT-type link detected one of the following possible errors with the user supplied keyword:
- 4 **missing** The keyword is required for the LPR- or UFT-type link and has not been specified by the user or as a link  
4 parameter.
- 4 **data invalid** The LPR- or UFT-type link detected an error with the associated data supplied with the indicated  
4 keyword.
- 4 **not allowed** A keyword has been detected by an LPR- or UFT-type link which was defined **not** to allow user  
4 keywords (**USer=No**). In this instance, the file will be rejected for security reasons since it may not be  
4 printed where the user intended.
- 2 This message is also issued when a keyword has been detected by an LPR-type link which was defined **not** to allow  
2 user keywords (**USer=No**). In this instance, the file will be rejected for security reasons since it may not be printed  
2 where the user intended.
- 2 **System Action:** The file is purged.
- 2 **User Response:** Correct the problem with the indicated keyword and resubmit the file for printing, or contact your  
2 local RSCS administrator.
- 2 **Destination:** R, SCO

---

2 **257I**      **Enablement verification check returned {not enabled | not defined | an unknown error} -- {RSCS**  
2                    **initialization continuing | TCP Port redirector not started | RSCS/VTAM interface not started}**

2 **Explanation:** This message is issued if RSCS detects it is running in a disabled state during initialization, or when  
2 the TCP START OR NET START commands have been issued.

2 **System Action:** If issued during initialization, RSCS processing will continue. If issued as a result of the TCP  
2 START or NET START commands, those commands will fail and the resulting task will not be started.

2 **User Response:** If the TCP port redirector, RSCS/VTAM interface, or the indicated link are required, then RSCS  
4 must be licensed and enabled on your system. If RSCS is licensed, process the enabling instructions in section 6.1 of  
4 the RSCS program directory.

2 **Destination:** RO, SCO

---

2 **258I**      **Enablement verification check returned {not enabled | not defined | an unknown error} -- link *linkid***  
 2                    **not started**

2 **Explanation:** This message is issued if RSCS detects it is running in a disabled state while processing a START  
 5 command for a link which does not support new function for the TCP/IP feature of VM/ESA 2.3.0, 2.4.0, or z/VM.

2 **System Action:** The indicated link will not be started.

4 **User Response:** If the indicated link is required, then RSCS must be licensed and enabled on your system. If  
 4 RSCS is licensed, process the enabling instructions in section 6.1 of the RSCS program directory.

2 **Destination:** RO, SCO

---

2 **259E**      **Link *linkid* device address *nnnn* is not a TN3270E attached printer**

2 **Explanation:** This message is issued if RSCS detects that a TN3270E-type link is not a TELNET printer attached by  
 5 the TCP/IP feature of VM/ESA 2.3.0, 2.4.0, or z/VM.

2 **System Action:** The indicated link will not be started.

2 **User Response:** If the indicated link is required, then it must be defined and attached to RSCS by the TCP/IP  
 5 feature of VM/ESA 2.3.0, 2.4.0, or z/VM.

2 **Destination:** RC, SCO

---

4 **260E**      **Link *linkid* {CONNECT | TAG} processing exit has rejected file *origid***

4 **Explanation:** Either the CONNECT processing exit routine for a UFTD-type link has rejected a UFT clients request  
 4 to send a file, or the TAG processing exit routine for a UFT-type link has rejected the file identified by *origid*. Either  
 4 exit does this by returning to RSCS with a return code of 4.

4 Reasons the UFTXOUT exit routines may reject a file include:

- 4 • The logical record length was not provided for transformation type VARREC.
- 4 • The logical record length provided for transformation type VARREC is greater than 65535 bytes.
- 4 • The transformation type is not supported.

4 **System Action:** The file is purged.

4 **Operator Response:** If the file rejection is viewed as a problem, notify the local support personnel responsible for  
 4 the exit that rejected the file.

4 **Destination:** R, RS

---

4 **262E**      **Link *linkid* file *spoolid* not in the required NETDATA format -- file purged**

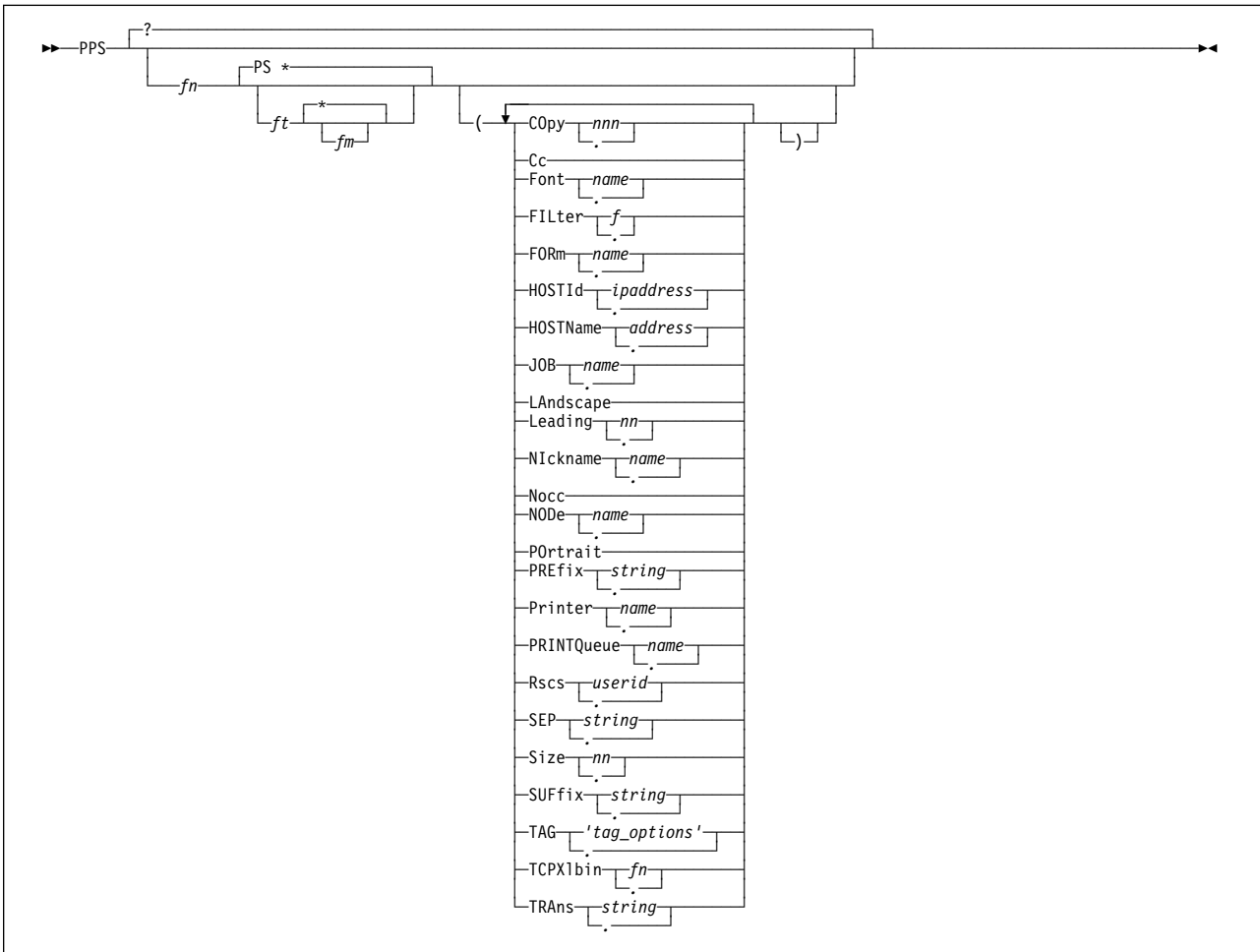
4 **Explanation:** This message is issued when an UFT-type link has not been able to find NETDATA control records in  
 4 the indicated spool file.

4 **System Action:** The file is purged.

4 **User Response:** The CMS SENDFILE COMMAND should be used to send a file on a RSCS UFT link. Review the  
 4 help file for the SENDFILE command then resubmit the file for processing, or contact your local RSCS administrator.

4 **Destination:** R, SCO

## 2 F.11 The PPS Command



### 2 F.11.1 Purpose

2 The PPS command can be used from the CMS ready prompt to send files,  
 2 including Postscript files, to an RSCS LPR-type link using the LPRXONE or  
 2 LPRXPSE sample exit routines, or to an RSCS TCPASCII-type link using the  
 2 ASCXONE or ASCXPSE sample exit routines.



## 2 F.11.2 Operands

2 ? Will cause a short help describing the exec input parameters to be displayed.  
2 This is the default if the exec is issued without any command parameters.

2 *fn* Is the filename of the file to print.

### 2 PS

2 *ft* Is the filetype of the file to print. If not specified, the filetype will default to **PS**.

2 \*

2 *fm* Is the filemode of the file to print. If not specified, the first occurrence of the  
2 filename and filetype on any accessed disk will be printed.

### 2 COpy *nnn*

2 Identifies the number of copies to be printed, specified as 1 to 255; the default  
2 is 1.

2 **Cc** Indicates the file to be printed already contains carriage control characters in  
2 column one of each record. This is the default for filetypes of LISTING.

### 2 FILter *f*

2 Provides a one-character print filter used in the control file sent to the remote  
2 daemon.

### 2 Font *name*

2 Is the two-character font name to be used when printing plain text files to a  
2 postscript printer when using the LPRXPSE sample exits for a LPR-type link or  
2 the ASCXPSE sample exits for a TCPASCII-type link. See usage note 5 on  
2 page 162 for a list of available font names.

### 2 FORm *name*

2 Provides a one- to eight-character name used as the form when the file is  
2 spooled to RSCS for printing.

3 **Note:** **FORm** is not applicable, nor used, when the **Font**, **LANdscape**,  
2 **Leading**, **POrtrait**, or **Size** operands are specified.

### 2 HOSTid *idaddress*

2 Provides the host IP address of a remote daemon in dotted decimal.

### 2 HOSTName *address*

2 Provides up to 255 characters of a remote daemon host name.

### 5 JOB *name*

5 Provides a one to eight-character job name or additional job information. The  
5 default is the file name. Depending on the LPR server, this allows job  
5 information to be printed on the burst page. The job name will also be used for  
5 the name of the source file by the LPRXONE and LPRXPSE sample exits.

2           **Landscape**  
2           Indicates the file should be printed in landscape mode. This option can be  
2           used when printing plain text files to a postscript printer when using the  
2           LPRXPSE sample exits for a LPR-type link or the ASCXPSE sample exits for a  
2           TCPASCII-type link.

2           **Leading** *nn*  
2           Is the two-digit additional leading size, 0.0 - 9.9, specified as 00 to 99, added to  
2           the font size to give leading. The default is 09 for portrait and 12 for landscape  
2           orientation. This option can be used when printing plain text files to a  
2           postscript printer when using the LPRXPSE sample exits for a LPR-type link or  
2           the ASCXPSE sample exits for a TCPASCII-type link.

2           **Nickname** *name*  
2           Is the nickname within an RSCS NAMES file containing additional keywords to  
2           be used when printing a file. This parameter is only valid for print files destined  
2           to an LPR-type link using the **USer=Yes** link parameter. See usage note 6 on  
2           page 163 for a list of available keyword tag/value pairs.

2           **Nocc**  
2           Indicates the file to be printed does not contain carriage control characters in  
2           column one of each record. This is the default for all filetypes except LISTING.

2           **NODe** *name*  
2           Is the name of the node where the printer is located. If not specified, it is  
2           assumed the printer is attached to the local RSCS node.

2           **POrtrait**  
2           Indicates the file should be printed in portrait mode. This option can be used  
2           when printing plain text files to a postscript printer when using the LPRXPSE  
2           sample exits for a LPR-type link or the ASCXPSE sample exits for a  
2           TCPASCII-type link.

2           **PREfix** *string*  
2           Provides up to 500 characters (250 when packed by RSCS) of a prefix string  
2           for the LPRXONE or LPRXPSE sample exits to send to the printer prior to  
2           sending the data. This string can be used to initialize the printer, such as  
2           selecting a paper tray.

2           The prefix string can be split with part sent before the separator page and part  
2           sent after. The string will be split if the **FF04** divider characters are detected  
2           within the prefix string. The part before the divider characters will be sent prior  
2           to the separator page with the remaining sent after.

2           **Printer** *name*  
2           Is the name of an RSCS LPR-type or TCPASCII-type link. This option must be  
2           specified on the command invocation, in lasting globalv, or within the selected  
2           nickname in the RSCS NAMES file.

2           **PRINTQueue** *name*  
2           Provides up to 256 characters of a printer queue name.

2           **Rscs** *userid*  
2           Is the user ID of the virtual machine running RSCS. If not specified, this field  
2           will default to the user ID returned from the CMS IDentify command.

2           **SEP** *string*  
2           Provide a separator page setting for a LPR-type link exit to use.  
2           The LPRXONE and LPRXPSE sample exits will accept the following settings:

2           **YES**   Indicates to send an RSCS style separator page in front of the file  
2           **NO**     Indicates not to request or produce a separator  
2           **HOST**  Indicates to include the 'L' control file record requesting a banner page  
2           be produced by the remote daemon.  
2           **2P**     Indicates to print a two-page separator page. This is useful in  
2           conjunction with duplexing so that the print data starts on a fresh page.

2           Any other string settings will be ignored.

2           **Size** *nn*  
2           Is the two-digit font size, from 04 to 99. The default is 11 for portrait and 10 for  
2           landscape orientation. This option can be used when printing plain text files to  
2           a postscript printer when using the LPRXPSE sample exits for a LPR-type link  
2           or the ASCXPSE sample exits for a TCPASCII-type link.

2           **SUFfix** *string*  
2           Provides up to 500 characters (250 when packed by RSCS) of a suffix string  
2           for the LPRXONE or LPRXPSE sample exits to send to the printer after  
2           sending the data. This string can be used to reset the printer state.  
5           The suffix string can be split with part sent before the trailer page generated by  
5           the LPRXPSE and ASCXPSE sample exits and part sent after. The string will  
5           be split if the **FF04** divider characters are detected within the suffix string. The  
5           part before the divider characters will be sent prior to the trailer page with the  
5           remaining sent after.

4           **TAG** '*tag\_options*'  
4           Can be any valid RSCS accepted TAG options. If this operand is supplied, the  
4           data **must start** with the TAG priority option.  
4           **Note:** All characters between the quote immediately following the TAG  
4           operand and the **last** quote on the command invocation will become the  
4           *tag\_options*  
4           An example use on the command line would be:  
4           TAG '50 (ACCMMSG=YES'

4 An example use within an RSCS NAMES file would be:

4 :TAG.50 (ACCMSG=YES

4 **Note:** Quotes should not be supplied on the :TAG. nickname entry.

3 **TCPXlbin** *fn*

3 Provides the filename of a TCP/IP TCPXLBIN file containing a translation table  
3 for LPRXONE or LPRXPSE sample exits to use when printing this file.

2 **TRAns** *string*

2 Provides 512 characters for a replacement translate table for LPRXONE or  
2 LPRXPSE sample exits to use when printing this file.

## 2 F.11.3 Usage Notes

- 2 1. Issuing the PPS EXEC without specifying any parameters will cause a short  
2 help describing the exec input parameters to be displayed, as if the ?  
2 parameter was used.
- 2 2. LASTING GLOBALV can be used to save optional parameters. If the PPS  
2 EXEC is issued with only optional parameters (that is no filename is provided to  
2 print), any specified optional parameters will be saved in LASTING GLOBALV.  
2  
2 When the PPS EXEC is issued, optional parameters will be obtained from  
2 LASTING GLOBALV. Values saved in LASTING GLOBALV can be overridden  
2 by specifying optional parameters when issuing the PPS EXEC.
- 2 3. For those options which have a keyword/value pair, the use of a period (.) can  
2 be used to remove the keyword/value pair from LASTING GLOBALV.
- 2 4. The first record of a file will be examined for the postscript identifier (%!PS) in  
2 both ASCII and EBCDIC. If found at the beginning of the record, it's assumed  
2 the file is postscript. The file will be packed into blocks of 80 bytes with line  
2 feeds separating the records, prior to issuing the CMS PUNCH command.
- 2 5. The following describes the available font names which can be used when  
2 printing text files to a postscript printer on a LPR-type link using the LPRXPSE  
2 sample exits or a TCPASCII-type link using the ASCXPSE sample exits:

| 2 | <i>Fn</i> | <b>Font name code</b>  |
|---|-----------|------------------------|
| 2 | <b>CB</b> | Courier-Bold           |
| 2 | <b>CI</b> | Courier-Oblique        |
| 2 | <b>CP</b> | Courier (exit default) |
| 2 | <b>CX</b> | Courier-BoldOblique    |
| 2 | <b>HB</b> | Helvetica-Bold         |
| 2 | <b>HI</b> | Helvetica-Oblique      |
| 2 | <b>HP</b> | Helvetica              |
| 2 | <b>HX</b> | Helvetica-BoldOblique  |
| 2 | <b>SP</b> | Symbol                 |
| 2 | <b>TB</b> | Times-Bold             |

2           **TI** Times-Italic  
2           **TP** Times-Roman  
2           **TX** Times-BoldItalic

6. The **Nickname** parameter can be used to specify a nickname tag within an RSCS NAMES file on any accessed disk containing additional keywords which can be used when printing a file to an LPR-type link. These keywords will be placed as No-Operational records at the beginning of the spool file. The LPR-type link which the file is printed on must have the link parameter **User=Yes** specified in order for these keywords to be used.

2           The keywords are standard **:tag.value** pairs after a **:nick.name**, where name is provided with the **Nickname** parameter. All PPS EXEC operands, except **Nickname** can be placed within the RSCS NAMES file.

2           The nickname file can be used to specify keywords, such as **:TRANS.**, which are too long to include on the PPS EXEC command invocation or within LASTING GLOBALV.

2           Rules for the RSCS NAMES file:

- 2           • File can be on any accessed disk.
- 2           • Any non-blank character preceding the colon (:) will cause the line to become a comment and not processed or used.
- 2           • Each record will be uppercased before processing, except for the **:FILTER.**, **:HOSTNAME.**, and **:PRINTQUEUE.** tag data which will be left as specified.
- 2           • The same keyword can be used multiple times within a nickname tag for a keyword/value pair longer than will fit on one record. For example:

2           :TRANS.100 characters of the translate table  
2           :TRANS.100 characters of the translate table  
2           :TRANS.100 characters of the translate table  
2           :TRANS.100 characters of the translate table  
2           :TRANS.112 characters of the translate table

- 2           • Keywords must be fully specified, no abbreviations.

- 2           • Available keywords are as follows:

2           **:COPY.nnn**  
2           **:CC.**  
2           **:FILTER.f**  
2           **:FONT.name**  
2           **:FORM.name**  
2           **:HOSTID.idaddress**  
2           **:HOSTNAME.address**  
5           **:JOB.name**  
2           **:LANDSCAPE.**  
2           **:LEADING.nn**  
2           **:NOCC.**



## 2 F.12.2 Operands

2 ? Will cause a short help describing the XEDIT macro input parameters to be  
2 displayed.

### 2 **COpy** *nnn*

2 Identifies the number of copies to be printed, specified as 1 to 255; the default  
2 is 1.

2 **Cc** Indicates the file to be printed already contains carriage control characters in  
2 column one of each record. This is the default for filetypes of LISTING.

### 2 **FILter** *f*

2 Provides a one-character print filter used in the control file sent to the remote  
2 daemon.

### 2 **Font** *name*

2 Is the two-character font name to be used when printing plain text files to a  
2 postscript printer when using the LPRXPSE sample exits for a LPR-type link or  
2 the ASCXPSE sample exits for a TCPASCII-type link. See usage note 5 on  
2 page 162 for a list of available font names.

### 2 **FORm** *name*

2 Provides a one- to eight-character name used as the form when the file is  
2 spooled to RSCS for

3 **Note:** **FORm** is not applicable, nor used, when the **Font**, **LAandscape**,  
2 **Leading**, **POrtrait**, or **Size** operands are specified.

### 2 **HOSTid** *idaddress*

2 Provides the host IP address of a remote daemon in dotted decimal.

### 2 **HOSTName** *address*

2 Provides up to 255 characters of a remote daemon host name.

### 5 **JOB** *name*

5 Provides a one to eight-character job name or additional job information. The  
5 default is the file name. Depending on the LPR server, this allows job  
5 information to be printed on the burst page. The job name will also be used for  
5 the name of the source file by the LPRXONE and LPRXPSE sample exits.

### 2 **LAandscape**

2 Indicates the file should be printed in landscape mode. This option can be  
2 used when printing plain text files to a postscript printer when using the  
2 LPRXPSE sample exits for a LPR-type link or the ASCXPSE sample exits for a  
2 TCPASCII-type link.

### 2 **Leading** *nn*

2 Is the two-digit additional leading size, 0.0 - 9.9, specified as 00 to 99, added to  
2 the font size to give leading. The default is 09 for portrait and 12 for landscape  
2 orientation. This option can be used when printing plain text files to a

2           postscript printer when using the LPRXPSE sample exits for a LPR-type link or  
2           the ASCXPSE sample exits for a TCPASCII-type link.

2           **Nickname** *name*

2           Is the nickname within an RSCS NAMES file containing additional keywords to  
2           be used when printing a file. This parameter is only valid for print files destined  
2           to an LPR-type link using the **USer=Yes** link parameter. See usage note 6 on  
2           page 163 for a list of available keyword tag/value pairs.

2           **Nocc**

2           Indicates the file to be printed does not contain carriage control characters in  
2           column one of each record. This is the default for all filetypes except LISTING.

2           **NODE** *name*

2           Is the name of the node where the printer is located. If not specified, it is  
2           assumed the printer is attached to the local RSCS node.

2           **POrtrait**

2           Indicates the file should be printed in portrait mode. This option can be used  
2           when printing plain text files to a postscript printer when using the LPRXPSE  
2           sample exits for a LPR-type link or the ASCXPSE sample exits for a  
2           TCPASCII-type link.

2           **PREfix** *string*

2           Provides up to 500 characters (250 when packed by RSCS) of a prefix string  
2           for the LPRXONE or LPRXPSE sample exits to send to the printer prior to  
2           sending the data. This string can be used to initialize the printer, such as  
2           selecting a paper tray.

2           The prefix string can be split with part sent before the separator page and part  
2           sent after. The string will be split if the **FF04** divider characters are detected  
2           within the prefix string. The part before the divider characters will be sent prior  
2           to the separator page with the remaining sent after.

2           **Printer** *name*

2           Is the name of an RSCS LPR-type or TCPASCII-type link. This option must be  
2           specified on the macro, in LASTING GLOBALV, or within the selected  
2           nickname in the RSCS NAMES file.

2           **PRINTQueue** *name*

2           Provides up to 256 characters of a printer queue name.

2           **Rscs** *userid*

2           Is the user ID of the virtual machine running RSCS. If not specified, this field  
2           will default to the user ID returned from the CMS IDentify command.

2           **SEP** *string*

2           Provide a separator page setting for a LPR-type link exit to use.

2           The LPRXONE and LPRXPSE sample exits will accept the following settings:





2                   **TRAns** *string*  
2                   Provides 512 characters for a replacement translate table for LPRXONE or  
2                   LPRXPSE sample exits to use when printing this file.

### 2 **F.12.3 Usage Notes**

- 2                   1. When the PPS XEDIT macro is issued, optional parameters will be obtained  
2                   from LASTING GLOBALV. These values must have been previously saved  
2                   using the CMS PPS EXEC command. Values saved in LASTING GLOBALV  
2                   can be overridden by specifying optional parameters when issuing the PPS  
2                   XEDIT macro.
- 2                   2. The same usage notes apply for the PPS XEDIT macro as for the PPS  
2                   command starting with usage note 4 on page 162.

---

## 2 **F.13 Configuring an RSCS TN3270E Printer Link**

5                   **Important!**

5                   A TCP/IP Function Level supplied with VM/ESA 2.3.0, 2.4.0, or z/VM is required in order to use  
5                   TN3270E-type links.

2                   The TN3270E protocol supported by TCP/IP provides for the creation of 3270 printer sessions in addition  
2                   to traditional display sessions. To make this capability available, the following steps must be performed:

- 2                   1. An arbitrary name, called the "LU name" must be defined in the TN3270E control statement in the  
2                   PROFILE TCPIP file. This statement assigns a virtual line address to the printer session.
- 2                   2. The TN3270E Printer Management exit must be enabled by the TN3270EEXIT parameter of the  
2                   INTERNALCLIENTPARMS statement in the PROFILE TCPIP file.
- 2                   3. An RSCS TN3270E link must be defined that has a line address that matches the line address defined  
2                   in step 1. While not required, you may find administration and problem determination easier if the LU  
2                   name is the same as the associated RSCS link name.

2                   To configure an RSCS TN3270E printer link, you will need to add LINKDEFINE and PARM  
2                   configuration file statements in an RSCS configuration file. You will need to define as many of these  
2                   links as you have defined printer LUNAMES within the PROFILE TCPIP configuration file.

2                   The RSCSTCP SCONFIG file located on the TCPMAINT 198 minidisk contains a sample LINKDEFINE  
2                   and PARM statement for a TN3270E-type link. You may wish to rename this sample configuration file  
2                   as RSCSTCP CONFIG on the TCPMAINT 198 minidisk, have the RSCS machine link the TCPMAINT  
4                   198, and imbed this file in the RSCS CONFIG file. Link the TCPMAINT 198, access the TCPMAINT  
4                   198 minidisk in the PROFILE GCS, and imbed this file in the RSCS CONFIG file. This way your  
2                   TCP/IP administrator can configure TN3270E printers in both the PROFILE TCPIP and RSCSTCP  
2                   CONFIG file by accessing one disk.

- 2                   4. The user must have the "LU name" configured in their TN3270E-capable emulator.

## 2 F.13.1 LINKDEFINE and DEFINE Statements for a TN3270E-Type Link

2 The LINKDEFINE and DEFINE statements for the TN3270E link driver are defined with the type TN3270E.  
2 All existing parameters descriptions can be found in the *VM/Remote Spooling Communications Subsystem Planning and Installation* and *VM/Remote Spooling Communications Subsystem Operation and Use* manuals.

2 You will need to provide the **LINE vaddr** parameter on either the LINKDEFINE configuration statement or DEFINE command, or when starting the link. *vaddr* specifies the 4-digit virtual device number of a TN3270E printer associated with the TN3270E-type link. Valid addresses are X'0002' to X'FFFF'.

## 2 F.13.2 PARM Statement for a TN3270E-Type Link

2 The PARM statement for a TN3270E-type link supports the same operands as the PARM statement for a 3270P-type link, with differences in the defaults when not specified, plus the addition of MSG, PRTWtm and PRTRet operands. The following describe the default differences and the new operands:

### 2 **COMP=No**

2 The default is No, indicating the link will not perform blank compression.

### 2 **EPC=No**

2 The default is No, indicating Early Print complete will not be used by the link.

### 2 **ITO=0**

2 The default is 0, indicating the link will drain immediately after the last queued file is processed.

### 2 **Msg=**

2 Specifies if RSCS will allow the TN3270E-type link to dequeue messages destined for transmission to the printer.

2 **Yes** RSCS will select all messages for transmission; this is the default.

2 **No** RSCS will select messages, but they will not be sent to the printer; the messages will be purged.

### 2 **PRTWtm=nnn**

2 The time, in seconds (1-600), between recovery attempts due to an unattached device. If not specified, the default is 10 seconds.

### 2 **PRTRet=nn**

2 The number of hours (1-100) the link will attempt error recovery due to an unattached device before terminating. If not specified, the default is 1 hour.

### 2 **SEP=No**

2 The default is No, indicating no separator pages will be sent to the printer prior to printing a file.

## 2 F.13.3 Tag Options for a TN3270E-Type Link

2 The TN3270E link will accept the same tag options as defined for a 3270P-type link described in the  
2 *VM/Remote Spooling Communications Subsystem Operation and Use* manual except only **SOSI2** will be  
2 supported for the **PRMODE=** option.

---

## 4 F.14 UFT Support

4 The Unsolicited File Transfer (UFT) support within RSCS 3.2.0 provides two new link drivers:

- 4 • The UFT-type (Unsolicited File Transfer Client) provides support for the UFTASYNC option of the  
4 CMS SENDFILE command, enabling files to be transmitted to a remote system when possible, without  
5 tying up the user's CMS session. The required TCP/IP UFT support in SENDFILE is provided with  
5 VM/ESA 2.3.0, 2.4.0, or z/VM. In addition, this link driver is accessible to any connected NJE node  
4 whether it be another RSCS, VSE/ESA™, OS/390®, or like peer.
- 4 • The UFTD-type (Unsolicited File Transfer Daemon) enables RSCS to receive files over the internet for  
4 delivery to a local VM user, a remote NJE node, locally or remotely attached printer (including  
4 LPR-type printer links), or to a UFT-type link.

4 The RSCS configuration file LINKDEFINE statement and the RSCS DEFINE and START commands have  
4 been updated to accept UFT and UFTD as link types. Line addresses are not required. See F.15, “Parm  
4 Statement for a UFT-Type Link” on page 174 and F.16, “Parm Statement for a UFTD-Type Link” on  
4 page 176 for further information on the UFT and UFTD configuration file PARM statements. See F.17, “  
4 Start Command Parameters for a UFT-Type Link” on page 178 and F.18, “Start Command Parameters  
4 for a UFTD-Type Link” on page 181 for further information on the UFT and UFTD START command  
4 PARM operands.

4 Exit routines are required for both the UFT- and UFTD-type links. See F.19, “UFTXOUT Routine” on  
4 page 183, and F.20, “UFTXIN Routine” on page 186 for further information on the IBM-supplied UFT and  
4 UFTD exit routines.

### 4 F.14.1 UFT-type Link Driver

4 A UFT client driver that enables RSCS to send files to a remote TCP/IP UFT server for distribution to a  
4 user, acting as a sendfile gateway between the RSCS NJE world to the TCP/IP UFT world. The UFT-type  
4 link is single threaded handling ONE file at a time although successive files may be delivered to different  
4 hosts and user IDs by starting multiple UFT-type links and having them be members of an RSCS GROUP.

4 The UFT-type link provides I/O, protocol, and error handling. All policy decisions (for example character  
4 set translation from EBCDIC to ASCII or binary) are handled by exits. Single threaded handling keeps the  
4 writing of exit routines from getting overly complicated.

## 4 F.14.2 UFTD-type Link Driver

4 A UFT server, or daemon, driver that enables RSCS to receive files from a TCP/IP UFT client for delivery  
4 to a network destination or printer, acting as a gateway for processing files from the TCP/IP world to the  
4 NJE world through RSCS.

4 The UFTD-type link driver only handles a single file at a time. Since the driver has been designed to  
4 allow multiple **listens** on the same TCP/IP port number, more than one UFTD-type link driver can be  
4 started to handle multiple concurrent incoming files.

4 The UFTD-type link driver **binds** to **well known** port 608 and **listens** for TCP/IP UFT clients to connect  
4 and send a file. The port number that the UFTD-type link driver **listens** on can be overridden by defining  
4 a different port number on the UFTD-type link PARM statement or when starting an UFTD-type link. This  
4 allows for site installation testing and more flexibility.

4 The maximum data length supported when receiving any individual file by the UFTD-type link driver is  
4 2,147,483,647 bytes (2 giga-bytes).

4 This link driver is an input only driver. No data or messages will be transferred out over this link. Only  
4 data is transferred in. Any files or messages queued to this link will remain so until explicitly transferred or  
4 purged. Use RSCS routing capabilities to avoid having files or messages queued to this link. For  
4 example, add the following route to the RSCS configuration file to cause files or messages bound to an  
4 UFTD link to instead be queued on a notify link:

```
4 ROUTE UFTD TO *UNKNOWN
```

4 **F.14.2.1 TCP/IP Machine Configuration file:** If you currently are using VM TCP/IP UFTD as  
4 your VM UFT daemon and wish to replace this with RSCS's UFTD link driver, then you will need to make  
4 the following changes in the TCP/IP machines configuration file:

- 4 • Remove UFTD from the autolog list
- 4 • Change UFTD to RSCS for the port 608 reserve list
- 4 • Define UFTD link in RSCS with the appropriate exit (customize if appropriate to match the UFTD  
4 Configuration).

4 **Note:** In order to test the RSCS UFTD-type link, you will first need to shutdown UFTD or define a port  
4 other than 608 for RSCS to listen on.

## 4 F.14.3 Managing UFT Links

4 The host name a file will be delivered to can be specified using either dotted decimal or fully-qualified  
4 notation. If fully-qualified notation is desired, then the RSCSDNS user ID is required. See F.2, "Domain  
4 Name Server Support" on page 136 for information on the RSCSDNS user ID.

4 The TCPIP DATA file **must** contain these **uncommented** UFTserverID statements. These two entries

4 enable you to send the files asynchronously using the RSCS UFT client and receive them using either the  
 4 RSCS or TCP/IP UFTD servers.

| 4 | Statement        | Description                                                                                                                                                                        |
|---|------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 4 | UFTserverID RSCS | Specifies the user ID the SENDFILE command will spool files to when using the UFTASYNC option. The default of * can be used as long as RSCS is specified in the SYSTEM NETID file. |
| 4 |                  | In addition, this statement is used by the PEEK and RECEIVE commands when receiving UFT files to indicate the local RSCS UFTD server user ID.                                      |
| 4 | UFTserverID UFTD | Used by the PEEK and RECEIVE commands when receiving UFT files to indicate the local TCP/IP UFTD server user ID.                                                                   |

4 **Important Notes!**

- 5 • The CMS SENDFILE command included with VM/ESA 2.3.0, 2.4.0, or z/VM has a UFTASYNC  
 4 option for preparing and sending files on an RSCS UFT-type link. See the full SENDFILE  
 4 command description for options available with UFTASYNC.
- 4 • Use caution when sending a file which has had keywords added manually to the beginning of a  
 4 file. If you intend to use the CMS PRINT command, you will need to use the **(CC** option.  
 4 Otherwise the RSCS UFT-type link will not find the keywords as the first data records of the spool  
 4 file.
- 4 • Any files already in NETDATA format should be sent using the CMS PUNCH command instead of  
 4 using the CMS PRINT command.
- 4 • The following information describes the file format required by the RSCS UFT support if the  
 4 SENDFILE command is not sufficient.

4 End users desiring to send files to remote users via UFT need to tag and spool (or other platform specific  
 4 commands) their file to the RSCS UFT-type link. RSCS accepts files from locally connected users as well  
 4 as remote users via any valid RSCS connection (NJE, RJE, LPD, etc.). The files must be in NETDATA  
 4 format. Preceding any data records must be NETDATA control records containing file characteristics  
 4 (format, record length, name, etc.). In addition, the following informational records must precede any  
 4 NETDATA records for the UFT-type link to obtain and process:

- 4 **DESTADDR**=*userid@hostname*  
 4 Indicates the remote host and user ID the file is to be delivered to. A host name in  
 4 either dotted decimal or fully-qualified notation is supported.
- 4 **TRANSLATE**=*string*  
 4 Provides 512-characters that RSCS will pack into a translate table to be used if  
 4 translation to ASCII is required.
- 4 **TRANSFORM**=*type*  
 4 Used when forming the TYPE UFT command. The following types are supported:  
 4 **ASCII** Data is to be translated to ASCII and a X'0D0A' is added to the end of  
 4 each record.

|   |                |                                                                              |
|---|----------------|------------------------------------------------------------------------------|
| 4 | <b>EBCDIC</b>  | Data is sent without translation and a X'15' is added to the end of each     |
| 4 |                | record.                                                                      |
| 4 | <b>BINARY</b>  | Data is sent as a stream of data without translating.                        |
| 4 | <b>MAIL</b>    | Data is sent as a stream of data after translating to ASCII.                 |
| 4 | <b>NETDATA</b> | Data is sent as contained when punched to RSCS without translating.          |
| 4 | <b>VARREC</b>  | Data is sent as variable record length with a two-byte length preceding      |
| 4 |                | each record of the data. The maximum supported logical record length         |
| 4 |                | when using this type is 65535.                                               |
| 4 | <b>SPOOL</b>   | For use when transferring a VM print or punch file between an RSCS           |
| 4 |                | UFT client and RSCS UFT server. The maximum supported logical                |
| 4 |                | record length for print files is 1280.                                       |
| 4 |                | <b>Notes:</b>                                                                |
| 4 |                | 1. The use of SPOOL is the only time the data is not required to be in       |
| 4 |                | NETDATA format.                                                              |
| 4 |                | 2. The <b>DESTADDR=</b> , and <b>TRANSFORM=</b> are required by the UFT-type |
| 4 |                | link. If they are not found, message DMT265E will be issued and the          |
| 4 |                | file will be rejected and purged.                                            |

4 **F.14.3.1 UFT-Type Link use of Forms and Class:** The UFT-type link driver will support the  
4 use of forms and class under these conditions:

- 4 • Class can be defined to restrict files processed by a UFT-type link
- 4 • The LPRXFORM exit can be utilized to define a host name or translation table, if not provided within a  
4 keyword.

4 If class processing is not desired, then class \* must be used when defining or starting a UFT-type link.

4 Otherwise, RSCS may not select files for processing by a UFT- type link.





4                   **EXIT=*name***  
4                   Specifies the one- to eight-character name of the exit module containing the  
4                   five to six exit routines supporting the specific UFT driver. The exit module  
4                   must exist in a LOADLIB that has been previously identified by use of the GCS  
4                   GLOBAL command. If this keyword is omitted or if the exit module cannot be  
4                   found, the line driver **will not** start.

4                   **FILEhold=No**  
4                   **FILEhold=Yes**  
4                   Specifies whether to place a file on hold when unable to connect to a remote  
4                   UFT daemon after approximately 1 minute. The default is No which indicates  
4                   the UFT link will continue connect attempts until successful or the link is  
4                   STOPped.

4                   If defined as Yes, the UFT link will attempt to connect to the remote daemon at  
4                   1, 2, 4, 8, 16, and 32 second intervals. If still unable to connect, the file will be  
4                   placed on hold. The RSCS events file can be used to periodically change any  
4                   files with a status of HOLD to NOHOLD allowing for another delivery attempt.  
4                   A sample RSCS events file entry which will change all held files to NOHOLD  
4                   for an UFT-type link with linkname of UFT every 10 minutes would look like:

4                                   \*       M:010       \*       \*       \*       CHANGE UFT HOLD NOHOLD

4                   **ITO=100**  
4                   **ITO=*nnn***  
4                   Is a number from 0 to 100 that specifies the Inactivity Time Out value. The ITO  
4                   value defines the length of time that can occur with no activity (that is, no file  
4                   transmission or reception) before the link is deactivated. If this parameter is not  
4                   specified, there is no inactivity time out for this link.

4                   If a link is ended because its ITO value has been exceeded, its restart exec will  
4                   *not* be processed.

4                   The following values are permitted:

4                   **0**       If specified, the link will be deactivated when there is no activity on the  
4                   link. RSCS will first send files that are queued for transmission, or finish  
4                   reception of the file currently being received, before deactivating the link.

4                   **1-99** Approximates the number of minutes until the link will be deactivated if  
4                   there has been no activity on it.

4                   **100** If specified, there will be *no* ITO in effect. That is, the link will stay active  
4                   until it is deactivated manually or until an unrecoverable error occurs.

4                   **POrt=608**  
4                   **POrt=*portid***  
4                   Specifies the port number on the remote host to connect to. The default is port  
4                   608 if not specified. May be overridden on a file by file basis by the exit  
4                   routines.

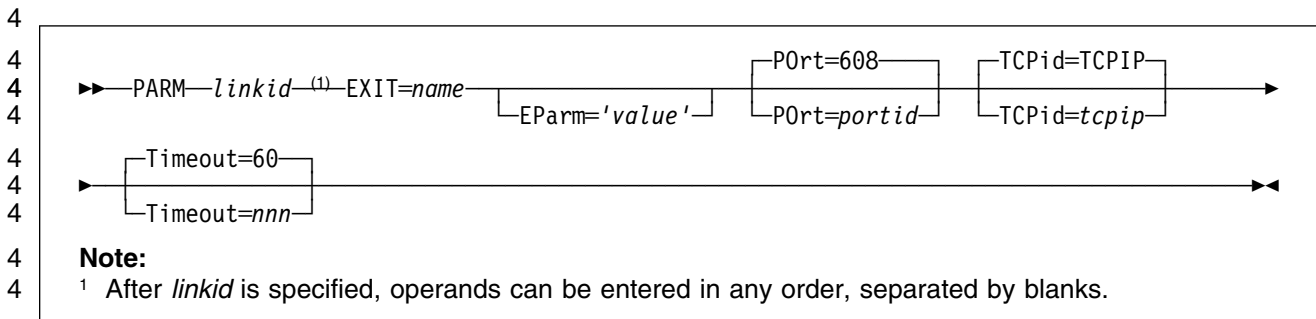
4                   **Size=nnn**  
 4                   Specifies the maximum number of records the spool file may contain in order to  
 4                   be processed. The default is 0 which indicates no limit. If the number of  
 4                   records exceeds the maximum allowed amount, an error message will be  
 4                   issued to the user and console, and the file will be placed on hold. *nnn* can be  
 4                   between 0 (no limit) and 1048576 records.

4                   **SYStem=No**  
 4                   **SYStem=Yes**  
 4                   Specifies whether to search for a FORM table provided by the LPRXFORM exit  
 4                   using the FORM the file was spooled with. The default is No. The FORM table  
 4                   provides keywords which define the remote host name or IP address, translate  
 4                   table to use, and substitute form to use on the spool file, when sending the file  
 4                   to a remote UFT daemon, overriding the values defined for the link.

4                   **TCPid=TCPIP**  
 4                   **TCPid=tcPIP**  
 4                   Specifies the name of the TCPIP virtual machine; defaults to TCPIP if not  
 4                   specified.

4                   **Timeout=0**  
 4                   **Timeout=nnn**  
 4                   Specifies the maximum amount of time, in seconds, to wait for a response from  
 4                   the remote daemon before aborting delivery of the file and placing it on hold.  
 4                   The default is zero indicating to wait indefinitely for a response from the remote  
 4                   daemon. *nnn* can be between 0 (wait indefinitely) and 2147483647 seconds.

## 4 F.16 Parm Statement for a UFTD-Type Link



## 4 F.16.1 Operands

4 *linkid*

4 Is the one- to eight-character name of an UFTD driver that will act as a  
4 gateway accepting files from a UFT client within the TCP/IP environment into  
4 your RSCS network. Before you can specify a PARM statement for a link, you  
4 must specify a LINKDEFINE (or LINK) statement with the same link ID.

4 **EXIT**=*name*

4 Specifies the one- to eight-character name of the exit module containing the  
4 five to six exit routines supporting this UFTD link driver. The exit module must  
4 exist in a LOADLIB that has been previously identified on the GCS GLOBAL  
4 command. If this keyword is omitted or if the exit module cannot be found, the  
4 link driver **will not** start.

4 **EParm**=*' value '*

4 Specifies the exit routine parameter value associated with the exit routine name  
4 defined by EXIT. This parameter is a character string up to 239 bytes in length  
4 and enclosed in single quotation marks ( ' '). Any character, except another  
4 single quotation mark ( ' ), is allowed between the single quotation marks. The  
4 specified exit routine defines the actual value of the character string. The data  
4 between the quotation marks cannot be continued to the next line in a RSCS  
4 configuration file.

4 **POrt**=608

4 **POrt**=*portid*

4 Specifies the port number on the local host to listen on. The default is port  
4 608.

4 **TCPid**=TCPIP

4 **TCPid**=*tcpip*

4 Specifies the name of the TCPIP virtual machine; the default name is TCPIP.

4 **Timeout**=*nnn*

4 Specifies the amount of time in seconds RSCS will wait for data when receiving  
4 from a TCP/IP UFT client prior to breaking the socket connection; the default is  
4 60. *nnn* can be between 0 (wait indefinitely) and 2147483647 seconds. After  
4 the UFTD link driver breaks this connection, it will remain operational waiting for  
4 another UFT client to connect.





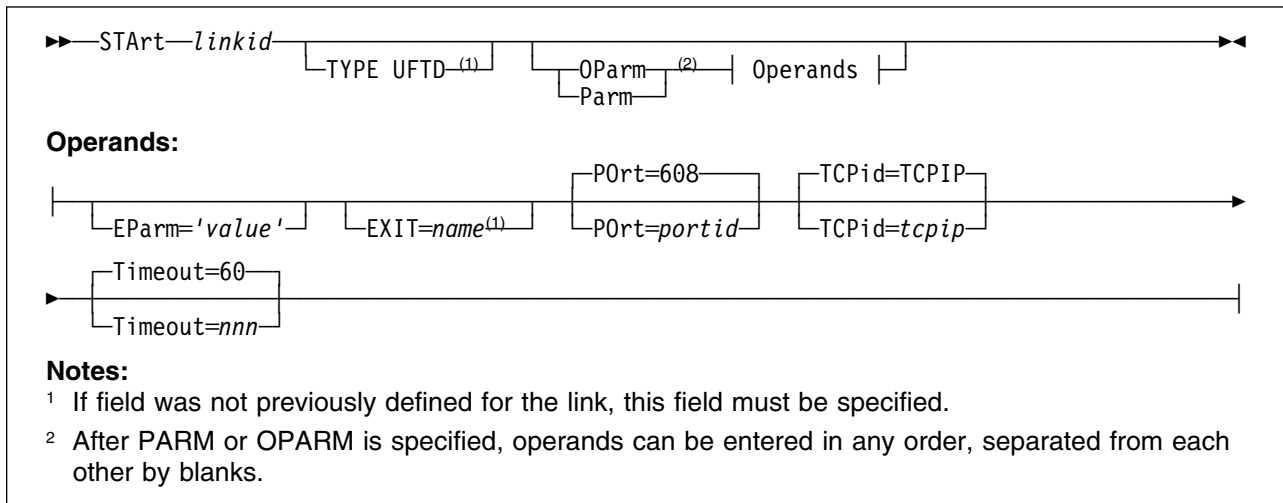
4 **ITO=100**  
4 **ITO=*nnn***  
4 Is a number from 0 to 100 that specifies the Inactivity Time Out value. The ITO  
4 value defines the length of time that can occur with no activity (that is, no file  
4 transmission or reception) before the link is deactivated. If this parameter is not  
4 specified, there is no inactivity time out for this link.  
4  
4 If a link is ended because its ITO value has been exceeded, its restart exec will  
4 *not* be processed.  
4  
4 The following values are permitted:  
4  
4 **0** If specified, the link will be deactivated when there is no activity on the  
4 link. RSCS will first send files that are queued for transmission, or finish  
4 reception of the file currently being received, before deactivating the link.  
4  
4 **1-99** Approximates the number of minutes until the link will be deactivated if  
4 there has been no activity on it.  
4  
4 **100** If specified, there will be *no* ITO in effect. That is, the link will stay active  
4 until it is deactivated manually or until an unrecoverable error occurs.  
4  
4 **POrt=608**  
4 **POrt=*portid***  
4 Specifies the port number on the remote host to connect to. The default is port  
4 608. May be overridden on a file by file basis by the exit routines.  
4  
4 **Size=*nnn***  
4 Specifies the maximum number of records the spool file may contain in order to  
4 be processed. The default is 0 which indicates no limit. If the number of  
4 records exceeds the maximum allowed amount, an error message will be  
4 issued to the user and console, and the file will be placed on hold. *nnn* can be  
4 between 0 (no limit) and 1048576 records.  
4  
4 **SYStem=No**  
4 **SYStem=Yes**  
4 Specifies whether to search for a FORM table provided by the LPRXFORM exit  
4 using the FORM the file was spooled with; the default is No. The FORM table  
4 provides keywords which define the remote host name or IP address, translate  
4 table to use, and substitute form to use on the spool file, when sending the file  
4 to a remote UFT daemon, overriding the values defined for the link.  
4  
4 **TCPid=TCPIP**  
4 **TCPid=*tcpip***  
4 Specifies the name of the TCPIP virtual machine; The default name is TCPIP.  
4  
4 **Tlmeout=0**  
4 **Tlmeout=*nnn***  
4 Specifies the maximum amount of time, in seconds, to wait for a response from  
4 the remote daemon before aborting delivery of the file and placing it on hold.

4 The default is zero indicating to wait indefinitely for a response from the remote  
 4 daemon. *nnn* can be between 0 (wait indefinitely) and 2147483647 seconds.

### 4 F.17.2 Usage Notes

- 4 1. RSCS will truncate any command received via the CP SMSG facility or the  
 4 RSCS console at 132 bytes. This may limit the amount of EPARM data which  
 4 can be passed on the START command.
- 4 2. CP converts all data that is entered from the RSCS console or sent using the  
 4 CP SMSG command to uppercase letters. To ensure the correct letters are  
 4 used in any EPARM data, you can create an exec using:  
 4 'EXECIO \* CP (STEM CPMSG. STRING SMSG *serverid options*'
- 4 Where:
- 4 *serverid* Specifies the CP name of the RSCS virtual machine.
- 4 *options* Specifies the uppercase RSCS command and any options which may  
 4 need to be in mixed case.

## 4 F.18 Start Command Parameters for a UFTD-Type Link



## 4 F.18.1 Operands

4 *linkid*

4 Is the one- to eight-character name of an UFTD driver that will act as a  
4 gateway accepting files from a UFT client within the TCP/IP environment into  
4 your RSCS network.

4 **TYPE UFTD**

4 Gives the name of the link-type. This specification overrides the link-type that  
4 may have been previously defined for the link. If no type was previously  
4 defined for the link, this field must be specified.

4 **OParm**

4 **Parm**

4 Is a keyword signifying that one or more operation parameters follow.

4 Operation parameters supplied after the OPARM operand override the  
4 corresponding parameters previously defined by a PARM configuration file  
4 control statement or a previous DEFINE command.

4 Operation parameters supplied after the PARM operand override *all* parameters  
4 previously defined by a PARM configuration file control statement or a previous  
4 DEFINE command. That is, if no information is supplied after the PARM  
4 operand, *all* previously defined parameters are effectively negated. Any  
4 parameters not specified will assume the default values shown below.

4 **EParm='value'**

4 Specifies the exit routine parameter value associated with the exit routine name  
4 defined by EXIT. This parameter is a character string up to 239 bytes in length  
4 and enclosed in single quotation marks ( ' '). Any character, except another  
4 single quotation mark ( ' ), is allowed between the single quotation marks. The  
4 specified exit routine defines the actual value of the character string.

4 **EXIT=name**

4 Specifies the one- to eight-character name of the exit module containing the  
4 five to six exit routines supporting the specific UFTD driver. The exit module  
4 must exist in a LOADLIB that has been previously identified by use of the GCS  
4 GLOBAL command. If this keyword is omitted or if the exit module cannot be  
4 found, the link driver **will not** start. This specification overrides the exit name  
4 that may have been previously defined for the link. If no exit name was  
4 previously defined for the link, this field must be specified.

4 **Port=608**

4 **Port=portid**

4 Specifies the port number on the local host to listen on. The default is port  
4 608.



4                   **TCPid=TCPIP**  
 4                   **TCPid=tcPIP**  
 4                   Specifies the name of the TCPIP virtual machine; the default name is TCPIP.

4                   **Timeout=nnn**  
 4                   Specifies the amount of time in seconds RSCS will wait for data when receiving  
 4                   from a TCP/IP UFT client prior to breaking the socket connection; the default is  
 4                   60. *nnn* can be between 0 (wait indefinitely) and 2147483647 seconds. After  
 4                   the UFTD link driver breaks this connection, it will remain operational waiting for  
 4                   another UFT client to connect.

## 4 **F.18.2 Usage Notes**

- 4                   1. RSCS will truncate any command received via the CP SMSG facility or the  
 4                   RSCS console at 132 bytes. This may limit the amount of EPARM data which  
 4                   can be passed on the START command.
- 4                   2. CP converts all data that is entered from the RSCS console or sent using the  
 4                   CP SMSG command to uppercase letters. To ensure the correct letters are  
 4                   used in any EPARM data, you can create an exec using:  
 4                   '**EXECIO \* CP (STEM CPMSG. STRING SMSG *serverid options* ')**  
 4                   Where:  
 4                   *serverid* Specifies the CP name of the RSCS virtual machine.  
 4                   *options* Specifies the uppercase RSCS command and any options which may  
 4                   need to be in mixed case.

---

## 4 **F.19 UFTXOUT Routine**

4 UFTXOUT sample exit routine performs functions to support transmitting one file to a remote UFT daemon  
 4 at a time. Multiple UFT link drivers can be defined using this sample exit. It also performs simple  
 4 translation of data to ASCII.

4 The UFT commands created by UFTXOUT are the minimum necessary for transmitting the data, these  
 4 include:

- 4 • **CLASS**  
 4 From the tag (TAGCLASS). In addition, if the transform is SPOOL, the spool file device type will be  
 4 appended to TAGCLASS as PUN, 1403, 3211, 3800, or VAFFP. Print files with a logical record length  
 4 equal to or less than 1280 are supported.
- 4 • **COPY**  
 4 From the tag (TAGCOPY).
- 4 • **DATE**  
 4 The date, time, and time zone of the file from the UFTBLOK (as specified by an INMR02 NETDATA  
 4 control record) or if not specified, from the tag (TAGINTOD).

- 4 • DEST  
4 From the tag (TAGDEST), if specified.
- 4 • DIST  
4 From the tag (TAGDIST), if specified.
- 4 • EOF
- 4 • FILE  
4 This only needs to be an estimated size. The value specified in the UFTBLOK (from an INMR02 NETDATA control record) will be used if specified; otherwise zero is used.  
4 In addition, the second required parameter will be the originator of the file (TAGINVM).
- 4 • FORM  
4 From the tag (TAGFORMN) , if specified.
- 4 • NAME  
4 This will be in the form 'file name.file type'. From the UFTBLOK (as specified by an INMR02 NETDATA control record).
- 4 • OWNER  
4 From the OWNER= record of the configuration file, if specified.
- 4 • RECFMT  
4 From the UFTBLOK (as specified by an INMR02 NETDATA control record).
- 4 • RECLLEN  
4 From the UFTBLOK (as specified by an INMR02 NETDATA control record).
- 4 • TYPE  
4 This will be determined from the transform field of the UFTBLOK. UFTXOUT will support these transform types:

| Type                                                                            | Code | Description                                                                                                                                        |
|---------------------------------------------------------------------------------|------|----------------------------------------------------------------------------------------------------------------------------------------------------|
| ASCII                                                                           | A    | Data will be translated, X'0D0A' added to end of each record.                                                                                      |
| BINARY                                                                          | I    | File data will be transmitted unaltered.                                                                                                           |
| EBCDIC                                                                          | E    | X'15' added to end of each record.                                                                                                                 |
| MAIL                                                                            | M    | Data will be translated to ASCII.                                                                                                                  |
| NETDATA                                                                         | N    | File transmitted in NETDATA format.                                                                                                                |
| SPOOL                                                                           | V M  | Two-byte length followed by CCW opcode will precede each data record. This allows VM spool files to be transferred to another VM system unaltered. |
| TEXT                                                                            | A    | Data will be translated, X'0D0A' added to end of each record.                                                                                      |
| VARREC                                                                          | V    | Two-byte length will precede each data record.                                                                                                     |
| <b>Note:</b> VARREC doesn't support a logical record length greater than 65535. |      |                                                                                                                                                    |
| <b>Note:</b> Any other type received will be rejected.                          |      |                                                                                                                                                    |

- 4 • USER
- 4 This will be as parsed from the data prior to the at sign (@) character in the DESTADDR= keyword.

4 When using the UFTXOUT routine, you can also specify the following EPARM values on the PARM  
4 statement for the UFT-type link.

4 **Note:** The EPARM parameter is limited to 239 bytes of data; these options may be useful for small  
4 amounts of data only.

#### 4 **Config=ddname**

4 Specifies the ddname which has been defined as an exit configuration file. If the ddname does not  
4 exist, the UFTXOUT initialization exit routine will pass back a return code to cause the UFT-type link  
4 to issue an error message and drain. If this exit parameter is not used, a configuration file is not read  
4 by the UFTXOUT exit causing existing defaults to be used for values which can be defined by the  
4 configuration file. This configuration file is used to supply the following:

- 4 • Translation tables to override the ones used by the exit.
- 4 • Overrides for the UFT commands created by UFTXOUT.

4 The configuration file can have any desired filename and filetype and must be on a disk accessed by  
4 the RSCS user ID. This file must be defined with a FILEDEF statement in the PROFILE GCS. The  
4 DDNAME used must be supplied on the **Config=** link exit parameter statement when defining the  
4 UFT-type link in the RSCS CONFIG file.

4 A sample PROFILE GCS DDNAME entry:

```
4 'FILEDEF UFTOUT DISK UFTO SCONFIG *'
```

4 Where UFTOUT is the DDNAME defined and UFTO SCONFIG is the name of the configuration file.

4 A sample RSCS CONFIG parameter (PARM) for an UFT-type link with linkname UFT using the  
4 DDNAME defined on the FILEDEF statement in the PROFILE GCS:

```
4 PARM UFT EXIT=UFTXOUT EPARM='C=UFTOUT'
```

4 The UFTXOUT configuration file has the following layout:

- 4 • An \* in column one denotes a comment line. Any line that does not have an \* in column one will  
4 be interpreted as a configuration entry. All entries must be capitalized.
- 4 • Entries can span multiple records.

4 The following configuration records are supported:

#### 4 **OWNERNAME=string**

4 Used to specify an owning user ID name, up to 32 characters, for the OWNER UFT command.

#### 4 **TOASCII=string**

4 Provide a table for EBCDIC to ASCII translation, overriding the default used by the exit. Up to  
4 512 hexadecimal (0-9, A-F) characters may be specified on multiple **TOASCII=** records to  
4 replace the 256-byte translation table.

4 **TOASCII**=*string*  
4 Provide a table for EBCDIC to ASCII translation of UFT commands, overriding the default used  
4 by the exit. Up to 512 hexadecimal (0-9, A-F) characters may be specified on multiple  
4 **TOASCII**= records to replace the 256-byte translation table.

---

## 4 F.20 UFTXIN Routine

4 The UFTXIN sample exit routine performs functions to support a single UFTD connect request. Multiple  
4 UFTD link drivers can be defined using this sample exit. It also performs simple translation of data to  
4 EBCDIC.

### 4 Note

4 The UFTXIN sample UFTD link driver exit **will operate** more consistently and seamlessly if UFT  
4 commands are sent **prior** to the data. UFTXIN will however accept UFT commands second.  
4 However, information required for file processing may not be setup as desired.

4 The UFTXIN routine parses the user name on the USER command received from the UFT client in the  
4 form *userid*<*@nodeid*> or *userid*<*%nodeid*> as follows:

|                        |                                                                                     |
|------------------------|-------------------------------------------------------------------------------------|
| 4 <b>KERRY</b>         | Will set the node ID to the local node name and the user ID to KERRY. The file will |
| 4                      | be spooled to user KERRY on the local system.                                       |
| 4 <b>KERRY@</b>        | Will set the node ID to the local node name and the user ID to KERRY. The file will |
| 4                      | be spooled to user KERRY on the local system.                                       |
| 4 <b>KERRY%</b>        | Will set the node ID to the local node name and the user ID to KERRY. The file will |
| 4                      | be spooled to user KERRY on the local system.                                       |
| 4 <b>KERRY@GDLVM7</b>  | Will set the node ID to GDLVM7 and the user ID to KERRY causing the file to be      |
| 4                      | sent to user KERRY at node GDLVM7.                                                  |
| 4 <b>KERRY%GDLVM7</b>  | Will set the node ID to GDLVM7 and the user ID to KERRY causing the file to be      |
| 4                      | sent to user KERRY at node GDLVM7.                                                  |
| 4 <b>@LASER3</b>       | Will set the node ID to LASER3 and the user ID to SYSTEM causing the file to be     |
| 4                      | sent to the network node LASER3.                                                    |
| 4 <b>%LASER2</b>       | Will set the node ID to LASER2 and the user ID to SYSTEM causing the file to be     |
| 4                      | sent to the network node LASER2.                                                    |
| 4 <b>anything_else</b> | Will search for a username entry specified within the UFTXIN configuration for      |
| 4                      | options on handling the file.                                                       |

4 **Note:** The UFTXIN routine will limit the length of the *userid* and *nodeid* fields to eight characters. Any  
4 extra data in those operand fields will be discarded. In addition, only 32 characters of the USER  
4 command data will be used.

4 UFT commands supported by this exit are:

- 4 • ABORT
- 4 Cause the spool file to be closed and purged.

- 4 • CLASS
  - 4 First character of the first operand of the data will be used for the class field of the tag (TAGCLASS).
  - 4 The second operand, if specified when TYPE is "V M" (operand is ignored for all other TYPE's), will indicate the file was from VM spool and whether it was a PRT or PUN device.
- 4 • COPY
  - 4 Will be used for the copy count field of the tag (TAGCOPY).
- 4 • DATE
  - 4 Will be used to create the file origin TOD value in the tag (TAGINTOD).
- 4 • DESTINATION
  - 4 First eight characters of the data will be used for the destination field of the tag (TAGDEST).
- 4 • DISTRIBUTION
  - 4 First eight characters of the data will be used for the distribution field of the tag (TAGDIST).
- 4 • EOF
  - 4 Cause the spool file to be closed and delivered.
- 4 • FILE
  - 4 First eight characters of the from data will be used for the origin user field of the tag (TAGINVM).
- 4 • FORM
  - 4 First eight characters of the data will be used for the form field of the tag (TAGFORMN).
- 4 • NAME
  - 4 The first eight characters of the file name and the first eight characters of the file extension will be used for the dataset name field of the tag (TAGDSN). Some parsing will be done to remove dots and slashes. For example:
  - 4 C:\WINDOWS\SYSTEM\AUTOEXEC1234.BAT
  - 4 will become AUTOEXEC BAT
- 4 • OWNER
  - 4 First eight characters of the data will be used for the origin user field of the tag (TAGINVM) overriding the information supplied on the FILE UFT command if provided.
- 4 • RECFMT
  - 4 Used when creating the INMR2 control record.
- 4 • RECLen
  - 4 Defines the maximum allowed line width. This will become TAG field TAGRECLN.
- 4 • TITLE
  - 4 Will be used for the title line on each page if pagination was requested in the matching username (or DEFAULT) record defined within the UFTXIN configuration file.
- 4 • TYPE
  - 4 Will be used to determine whether or not to translate data into EBCDIC and how to spool the data.
- 4 • USER
  - 4 First 17 characters of the data will be used for the destination user field of the tag (TAGTOVM) and the destination node field of the tag (TAGTOLOC).

4 In addition, the first 32 characters of the data will be used to search for a matching username within  
4 the UFTXIN configuration file.

4 In addition, the UFTXIN routine supports comment records \* and #.

4 When using the UFTXIN routine, you can also specify the following EPARM values on the PARM  
4 statement for the UFT-type link.

4 **Note:** The EPARM parameter is limited to 239 bytes of data; these options may be useful for small  
4 amounts of data only.

4 **Config=ddname**

4 Specifies the ddname which has been defined as an exit configuration file. If the ddname does not  
4 exist, the UFTXIN initialization exit routine will pass back a return code to cause the UFTD-type link to  
4 issue an error message and drain. If this exit parameter is not used, a configuration file is not read by  
4 the UFTXIN exit causing existing defaults to be used for values which can be defined by the  
4 configuration file.

4 The UFTXIN sample exit routine configuration file can be used to supply the following:

- 4 • Overrides for processing when a file is received from a remote UFT client based on the user  
4 name.
- 4 • A translate table to override the one used by the exit.
- 4 • Override the host name used in the herald response message.
- 4 • Provide a domain name used in the herald response message.

4 The configuration file can have any desired filename and filetype and must be on a disk accessed by  
4 the RSCS user ID. This file must be defined with a FILEDEF statement in the PROFILE GCS.

4 A sample PROFILE GCS DDNAME entry:

```
4 'FILEDEF UFTIN DISK UFTI SCONFIG *'
```

4 Where UFTIN is the DDNAME defined and UFTI SCONFIG is the name of the UFTXIN configuration  
4 file.

4 A sample RSCS CONFIG parameter (PARM) for an UFTD-type link with linkname UFTD using the  
4 DDNAME defined on the FILEDEF statement in the PROFILE GCS:

```
4 PARM UFTD EXIT=UFTXIN EPARM='C=UFTIN'
```

4 The UFTXIN configuration file has the following layout:

- 4 • An \* in column one denotes a comment line. Any line that does not have an \* in column one will  
4 be interpreted as a configuration entry. All entries must be capitalized.
- 4 • Entries can span multiple records.

4 The following configuration records are supported:

4 **DOMAINNAME=string**

4 Used to specify a domain name, up to 255 characters, to be appended after the host name of  
4 the positive herald response message (message sent in response to a connect request from a  
4 remote UFT client). A period (.) will be inserted between the host name and domain name.  
4 This record can be used to add a domain name after the host name, which by default is the  
4 local RSCS node name.

4 **HOSTNAME=string**

4 Used to specify a host name, up to 255 characters, used within the positive herald response  
4 message (message sent in response to a connect request from a remote UFT client)  
4 overriding the default, which is the the local RSCS node name.

4 **TOASCII=string**

4 Provide a table for EBCDIC to ASCII translation, overriding the default used by the exit. Up to  
4 512 hexadecimal (0-9, A-F) characters may be specified on multiple **TOASCII=** records to  
4 replace the 256-byte translation table.

4 **TOEBCCMD=string**

4 Provide a table for ASCII to EBCDIC translation of the UFT commands, overriding the default  
4 used by the exit. Up to 512 hexadecimal (0-9, A-F) characters may be specified on multiple  
4 **TOEBCCMD=** records to replace the 256-byte translation table.

4 **TOEBCDIC=string**

4 Provide a table for ASCII to EBCDIC translation, overriding the default used by the exit. Up to  
4 512 hexadecimal (0-9, A-F) characters may be specified on multiple **TOEBCDIC=** records to  
4 replace the 256-byte translation table.

4 *username*

4 Provide the ability to override defaults used by UFTXIN on a user name basis when receiving  
4 a file from a remote UFT client. Multiple, unique, *username* records can be specified. The  
4 layout of the *username* records are as follows:

- 4 • Each *username* option is separated by one or more blanks.
- 4 • The parameters are not column dependent.
- 4 • One record per line, continuation is not supported.
- 4 • Each parameter IS position dependent
- 4 • An \* can be used in a position (other than for the user name) to tell UFTXIN to use the  
4 existing default.
- 4 • The user name will be parsed into user ID and node ID as follows:

4 **userid<@nodeid>**

4 **userid<%nodeid>**

4 **userid**

node ID will be set to local node name.

4 **@nodeid**

user ID will be set to SYSTEM.

4 **%nodeid**

user ID will be set to SYSTEM.

4           **userid@**                           node ID will be set to local node name.  
4           **userid%**                           node ID will be set to local node name.  
4           **NONEOFTHEABOVE**           node ID and user ID MUST be set within record.

4           The *userid* and *nodeid* parsed from the user name can be overridden within the record. If  
4           both are overridden, the user name is not parsed. If neither one is overridden, the user  
4           name is parsed into user ID and node ID which must be valid (either of which can still be  
4           overridden within).

4           The format of the *username* records are:

4           username ppos lpage class forms jobn dest pagination userid nodeid tcpplbin netdata  
4           DEFAULT ppos lpage class forms jobn dest pagination userid nodeid tcpplbin netdata

4           *username*  
4           is a user name up to 32 characters. A *username* of **DEFAULT** can be used to define  
4           parameters for any user name not defined by a configuration file record. When a user  
4           name arrives, UFTXIN first looks for a configuration record of that name; if not found it  
4           will look for a configuration record using **DEFAULT**; if not found it will use existing  
4           UFTXIN defaults unless otherwise noted.

4           *ppos*  
4           is the logical record length 1-65535 when the file will be spooled in NETDATA format,  
4           otherwise 1-32760; default is 255 if the RECLen UFT command is not received.

4           *lpage*  
4           is the number of lines per page 1-99; default is 66. This parameter is only valid if the  
4           pagination parameter has been set to PAGE.

4           *class*  
4           is the one character spool file class; default is blank if the the CLASS UFT command is  
4           not received.

4           *forms*  
4           is the one- to eight-character spool file form; default is blank if the the FORM UFT  
4           command is not received.

4           *jobn* is the one- to eight-character job name; default is SYSTEM.

4           *dest* is the one- to eight-character PSF destination; default is blank if the the DESTINATION  
4           UFT command is not received. When using a PSF destination, UFTXIN will set the user  
4           ID field of the tag to **SYSTEM**.  
4           When using a PSF destination, the user name can be in the form SYSTEM@nodeid.  
4           Alternatively, the user name can be anything unique as long as the user ID field is  
4           **SYSTEM** or \* **and** node ID field is specified.

4           *pagination*  
4           is either PAGE or NOPAGE; default is NOPAGE. This parameter determines how  
4           pagination will be performed as follows:  
4           PAGE will cause UFTXIN to paginate.  
4           NOPAGE will cause UFTXIN not to paginate.



4           *userid*  
 4           is the one- to eight-character user ID the file should be spooled to; default is derived  
 4           from the user name.

4           **Note:** If a PSF destination is provided by *dest*, then the *userid* field can only be set to  
 4           **SYSTEM**.

4           *nodeid*  
 4           is the one- to eight-character destination node ID the file should be spooled to; default is  
 4           derived from the user name.

4           *tcpxlb*  
 4           is the filename of a TCP/IP tcpxlb translate table to be used for this user name. The  
 4           file must exist on any accessed disk. If not specified, the translation table used will  
 4           either be the default one within UFTXIN or the override specified within the UFTXIN  
 4           configuration file.

4           *netdata*  
 4           is either YES, or NO; the default is YES. Netdata specifies whether the data should be  
 4           spooled in NETDATA format as follows:

4           **YES**        Spool data in NETDATA format.

4           **NO**         Spool data as plain records, not in NETDATA format. This is the desired  
 4           format if the destination of the file is a printer.

4           **Note:** This does not apply if the UFT type is NETDATA.

## 4 F.20.1 Examples of Username

4 This example would allow a file to be received without translating, and spooled to an LPR link using the  
 4 LPRXONE exits causing the file to be sent unaltered to a remote LPR daemon:

```
4 LPR@NODEONE 1280 50 * STDN * * * ASCII * * NO
```

4 This example defines a *username* used to spool input to the system printer:

```
4 LOCALNODE * * * * * SYSTEM * * * NO
```

4 This example shows the defaults defined within UFTXIN.

```
4 DEFAULT 255 66 * * SYSTEM * NOPAGE * * * YES
```

---

## 2 Appendix G. Disabling RSCS

5 If you are running VM/ESA 2.3.0, 2.4.0, or z/VM and had previously licensed and enabled RSCS 3.2.0 for  
2 use, and no longer are licensed for RSCS, you need to explicitly disable RSCS. Perform the following  
2 steps to disable RSCS.

2 **1** Logon to a user ID that has privilege class E authority and has access to the  
2 VMSES/E code disk (default MAINT 5E5) and VMSES/E Software Inventory  
2 disk (default MAINT 51D).

2 **2** Establish read access to VMSES/E code.

2 **link MAINT 5e5 5e5 rr** The 5E5 minidisk is where VMSES/E resides.  
2 **access 5e5 b**

2 **3** If the Software Inventory disk (51D) was accessed R/O (read only) then  
2 establish write access to the Software Inventory disk.

2 **Note:** If the MAINT 51D minidisk was accessed R/O, you will need to have  
2 the user that has it accessed R/W link it R/O. You then can issue the  
2 following commands to obtain R/W access to it.

2 **link MAINT 51d 51d mr** The 51D minidisk is where the VMSES/E Software  
2 **access 51d d** Inventory files and other product dependent files  
2 reside.

2 **4** Set RSCS to the disabled state.

4 **vmfins disable ppf 5684096K {RSCSIRSCSSFS}** Use **RSCS** if installed using minidisk or **RSCSSFS**  
4 if installed using Shared File System directories.

2 This command will perform the following:

- 2 • Set RSCS as DISABLED in VMSES/E and  
2 within CP.
- 2 • Create a 5684096K PRODSYS file on the  
2 A-disk that contains the CP system  
2 configuration PRODUCT statement with a state  
2 of DISABLED.

4 **5** In order to **retain the DISABLED state** for RSCS, **update the CP system**  
4 **configuration file** with the information in the 5684096K PRODSYS file; which  
4 was created in the previous step.

4 You need to update the CP system config file so that the next time you IPL  
4 your system RSCS will be in the DISABLED state. If you are not authorized  
4 to update the CP system configuration file then contact your CP System  
4 Administrator. The CP system configuration file default name is SYSTEM  
6 CONFIG and it resides on the CP parm disk (MAINTs CF1, CF2 and CF3  
6 minidisks). The section, PRODUCT ENABLE/DISABLE INFORMATION, in  
4 the SYSTEM CONFIG file, needs to be updated. You will need to replace the  
4 current ENABLED entry for PRODID 5684096K with the entry from the  
6 5684096K PRODSYS file. Once the SYSTEM CONFIG is working, it should  
6 be backed up to the CF2 and CF3 disks. The CF3 disk is new with z/VM  
6 4.1.0. If necessary, refer to the *Planning and Administration* manual for more  
4 information.

5 **6** Shutdown the RSCS server. If you still require RSCS support for new  
5 functions provided in the TCP/IP feature of VM/ESA 2.3.0, 2.4.0, or z/VM,  
2 then restart the RSCS server running in a disabled state.

---

## 6 Appendix H. Service Instructions for z/VM Express Users 6 Only

6 The service instructions that follow are to be used by those customers who have  
6 chosen to install z/VM using the Express Installation and Service Procedure.  
6 Express Service instructions can also be found in the *Z/VM Express Installation and*  
6 *Service Procedures* pamphlet (provided with the *Z/VM Installation Guide*).

6 These instructions are to be used for installing either preventive service (the  
6 Recommended Service Upgrade, or **RSU**) or corrective (**COR**) service for RSCS.

6 **1** Before you proceed, make sure that you have a current backup of your  
6 system. If not, refer to the step titled "Store a Backup Copy of the z/VM  
6 System on Tape," in the "Post Load Installation Tasks" chapter of the *Z/VM*  
6 *Installation Guide*.

6 **2** Log on to the **MAINT** user ID.

6 **logon maint**  
6 **Enter**

6 **3** Mount the RSU or COR service tape and attach the tape drive as 181.

6 **attach tapeaddr \* 181**

If the RSU or COR tape encompasses multiple  
volumes, you will be requested to mount additional  
tapes as these are needed by the service exec.

6 **Note:** If you have received the RSU or COR electronically (or on CD-ROM),  
6 follow the appropriate instructions to retrieve and decompact the envelope file  
6 to the MAINT user ID A-disk. Decompaction is currently done by using the  
6 DETERSE MODULE, which produces a decompacted file that has one of the  
6 following file name formats:

- 6 • RPTF*num* — for an RSU envelope
- 6 • VPTF*num* — for a COR service envelope.

6 The file type for either of these files (once decompacted) must be **SERVLINK**.  
6 You will need to enter the file name of your decompacted file as part of the  
6 SERVICE command, used in the next step.



6 **ipl cms**  
6 **put2prod**  
6  
6  
6

This will copy all code — including service — from test build disks to the appropriate production build disks, for any component that has been serviced since the last time the PUT2PROD utility was executed.

6 **7** Shutdown and re-IPL your system.

6 **shutdown reipl**  
6 **Enter**

---

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# Reader's Comments

## Program Directory for VM/RSCS Version 3 Release 2

You may use this form to comment about this document, its organization, or subject matter with the understanding that IBM may use or distribute whatever information you supply in any way it believes appropriate without incurring any obligation to you.

For each of the topics below please indicate your satisfaction level by circling your choice from the rating scale. If a statement does not apply, please circle N.

| RATING SCALE      |        |       |   |                      |                   |
|-------------------|--------|-------|---|----------------------|-------------------|
| very<br>satisfied | <===== | ===== | > | very<br>dissatisfied | not<br>applicable |
| 1                 | 2      | 3     | 4 | 5                    | N                 |

|                                                               | Satisfaction |   |   |   |   |   |
|---------------------------------------------------------------|--------------|---|---|---|---|---|
| Ease of product installation                                  | 1            | 2 | 3 | 4 | 5 | N |
| Contents of program directory                                 | 1            | 2 | 3 | 4 | 5 | N |
| Installation Verification Programs                            | 1            | 2 | 3 | 4 | 5 | N |
| Time to install the product                                   | 1            | 2 | 3 | 4 | 5 | N |
| Readability and organization of program directory tasks       | 1            | 2 | 3 | 4 | 5 | N |
| Necessity of all installation tasks                           | 1            | 2 | 3 | 4 | 5 | N |
| Accuracy of the definition of the installation tasks          | 1            | 2 | 3 | 4 | 5 | N |
| Technical level of the installation tasks                     | 1            | 2 | 3 | 4 | 5 | N |
| Ease of getting the system into production after installation | 1            | 2 | 3 | 4 | 5 | N |

Did you order this product as an independent product or as part of a package?

- Independent
- Package

If this product was ordered as part of a package, what type of package was ordered?

- CustomPac
- FunctionPac®
- SystemPac
- System Delivery Offering (SDO)
- Other - Please specify type: . . . . .

Is this the first time your organization has installed this product?

- Yes
- No

Were the people who did the installation experienced with the installation of VM products?

- Yes
- No

If yes, how many years? \_\_\_

If you have any comments to make about your ratings above, or any other aspect of the product installation, please list them below:

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Please provide the following contact information:

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Thank you for your participation.

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