

z/VM



Installation Guide

version 6 release 2

Migrate 51D from the old system

Appendix C. Contents of the z/VM system

Products loaded from the z/VM system installation media

Products installed on the z/VM system are:

- z/VM
 - Control Program (CP)
 - Dump Viewing Facility (DV)
 - Conversational Monitor System (CMS)
 - REstructured eXtended eXecutor/VM (REXX)
 - Virtual Machine Serviceability Enhancements Staged/Extended (VMSES)
 - Group Control System (GCS)
 - Transparent Services Access Facility (TSAF)
 - APPC/VM VTAM[®] Support (AVS)
 - Language Environment (LE)
 - 3800 Model-3 Printer Image Library
 - UCENG Help - Uppercase English Help minidisk
 - Kanji Help - Japanese Help minidisk
- Environmental Record Editing and Printing Program (EREP)
- Device Support Facilities (ICKDSF)
- Remote Spooling Communications Subsystem (RSCS) Networking for z/VM
- Transmission Control Protocol/Internet Protocol (TCPIP)
- Open Systems Adapter Support Facility (OSA)
- Directory Maintenance Facility (DIRM)
- RACF Security Server for z/VM (RACF)
- Performance Toolkit for VM (PERFTK)
- Hardware Configuration Definition and Hardware Configuration Manager for z/VM (VMHCD)

CMS defaults

The CMS nucleus was built with a local mod to DMSNGP. This local mod updates the CYLADDR, which defines where to write the CMS nucleus on the System disk (the recomp value).

CP defaults

1. The LOGO CONFIG and SYSTEM CONFIG files are located on the common parm disk (PMAINT CF0). These files contain the system configuration data used by CP.
The CP system control file (SYSTEM CONFIG) describes the system residence device (M0xRES) and various system parameters, defining the configuration of your system.
2. For detailed information about the CP system configuration function, CP nucleus options, and CP planning, see *z/VM: CP Planning and Administration*.
3. The CP nucleus on the z/VM system is a module. The module resides on the parm disks (MAINT's CF1 and CF3).
4. The CP nucleus is IPLed with the system default language, mixed case American English (AMENG), uppercase English (UCENG), or Kanji (KANJI), which was selected during installation.
5. The default USER DIRECT file on the PMAINT 2CC minidisk contains entries defining each virtual machine (user) permitted to log on to your system.

CP defaults

If there is no machine mode defined for a user ID, the default machine mode definition is ESA. However, issuing the SET MACHINE command overrides the default setting. The USER DIRECT file which was built during installation contains a SET MACHINE XA, SET MACHINE ESA, or SET MACHINE XC command for all user IDs.

6. The USER DIRECT file contains a common profile section, PROFILE IBMDFLT. An INCLUDE statement for this profile has been added to each user ID that previously linked to the AMENG HELP disk (19D). The PROFILE IBMDFLT section contains a link to each HELP disk. Each user you add to the directory that needs access to a HELP disk must have an INCLUDE statement to the PROFILE IBMDFLT section or a LINK statement for each of the three help disks.
7. The USER DIRECT file contains default passwords for all user IDs defined by the installation process. Before moving your system into production, you should ensure all passwords conform to your corporate security policies.
8. The z/VM system contains system definition files with sample information and default parameters. You can modify the following files to define your system configuration.

The logo configuration file (LOGO CONFIG) defines both the logo that appears on your terminal screen when you log on your system and the logo that appears on separator pages for printers. This file also provides information to the system about status areas on the terminal screens.

Note: Status areas are normally in the lower right side of the terminal and contain such informational messages as RUNNING, VM READ, CP READ, MORE..., and HOLDING.

9. CP ships several CP Sample Utility Programs to help you configure your system once installation is complete. They are located on the MAINT 2C2 minidisk. For additional information on these programs, see appendix A in *z/VM: CP Planning and Administration*.

GCS defaults

1. The GCS nucleus was built with mixed case American English (AMENG) as the system default language.
2. The GCS nucleus was built with a system name of GCS and is loaded at storage locations X'400'-X'5FF' and X'1000'-X'11FF'.
3. The GCS nucleus was also built with the following defaults:

Default Item	Description
Saved System Name	GCS
Authorized VM User IDs	VTAM GCS MAINT NETVIEW OPERATNS RSCS AVSVM PDMREM1 PDMGRP4 SNALNKA PVMG NVAS IHVOPER CMEOSI NPM VSCS
Saved System Information	Recovery machine user ID: GCS User ID to receive storage dumps: OPERATNS GCS Trace Table Size: 16KB Common storage above 16MB line (YES or NO): YES Single user environment: no Maximum number of VM machines: 14 System ID: GCS Name of the VSAM segment: CMSVSAM Name of the BAM segment: CMSBAM GCS saved system is restricted: yes Trace table in private storage: yes
Saved System links	VTAM NETVSG00

User IDs needing VSAM storage

NETVIEW NVAS CMEOSI

Saved segments on the z/VM system

1. CMS improves system performance and storage usage by placing heavily used execs in the CMS installation segment, CMSINST. CMSINST is a logical segment within the INSTSEG physical segment. If you want to add or delete an exec from CMSINST, you should identify the changes to VMSES/E using the procedure within the local modification example for CMSINST, see *z/VM: Service Guide*. A local modification allows VMSES/E to track the changes and to ensure the CMSINST segment is rebuilt when any of the execs in it are serviced.
2. The QUERY NSS ALL MAP command displays the saved segments and saved systems defined on your system. The segments might be displayed in a different order.

```

query nss all map
:
:
FILE FILENAME FILETYPE MINSIZE BEGPAG ENDPAG TYPE CL #USERS PARMREGS VMGROUP
nnnn ZCMS      NSS      0000256K 00000 0000D EW  A  nnnnn  00-15  NO
                00020 00023 EW
                00F00 013FF SR
nnnn CMS       NSS      0000256K 00000 0000D EW  A  nnnnn  00-15  NO
                00020 00023 EW
                00F00 013FF SR
nnnn GCS       NSS      0000256K 00000 0000C EW  R  nnnnn  OMITTED YES
                00400 0044E SR
                0044F 0044F SW
                00450 005FF SN
                01000 0101A SR
                0101B 011FF SN
nnnn CMSDOS   DCSS-M   N/A      00B00 00B0C SR  A  nnnnn  N/A     N/A
nnnn CMSBAM   DCSS-M   N/A      00B0D 00B37 SR  A  nnnnn  N/A     N/A
nnnn DOSBAM   DCSS-S   N/A      00B00 00B37 --  A  nnnnn  N/A     N/A
nnnn MONDCSS  CPDCSS  N/A      09000 0CFFF SC  R  nnnnn  N/A     N/A
nnnn GUICSLIB DCSS     N/A      01F00 01FFF SR  A  nnnnn  N/A     N/A
nnnn CMSFILES DCSS     N/A      01900 01BFF SR  A  nnnnn  N/A     N/A
nnnn SVM      DCSS     N/A      01900 019FF SR  A  nnnnn  N/A     N/A
nnnn CMSPIPES DCSS     N/A      01800 018FF SR  A  nnnnn  N/A     N/A
nnnn CMSVMLIB DCSS     N/A      01700 017FF SR  A  nnnnn  N/A     N/A
nnnn INSTSEG  DCSS     N/A      01400 016FF SR  A  nnnnn  N/A     N/A
nnnn HELPSEG  DCSS     N/A      00C00 00CFF SR  A  nnnnn  N/A     N/A
nnnn PERFOUT  DCSS     N/A      08A00 08FFF SN  A  nnnnn  N/A     N/A
nnnn DOSINST  DCSS     N/A      00900 0090F SR  A  nnnnn  N/A     N/A
nnnn SCEE     DCSS     N/A      00900 009FF SR  A  nnnnn  N/A     N/A
nnnn SCEEX    DCSS     N/A      02100 029FF SR  A  nnnnn  N/A     N/A
nnnn NLSKANJI DCSS     N/A      02000 020FF SR  A  nnnnn  N/A     N/A
nnnn NLSUCENG DCSS     N/A      02000 020FF SR  A  nnnnn  N/A     N/A
nnnn NLSAMENG DCSS     N/A      02000 020FF SR  A  nnnnn  N/A     N/A
Ready; T=n.nn/n.nn hh:mm:ss

```

VMSYS, VMSYSU, VMSYSR, and VMPSFS file pool defaults

The z/VM system incorporates four prebuilt file pools:

VMSYS

- System/member specific file pool
 - BFS directories defined for Shell and Utilities, and for SSL
 - System specific work disks in SFS
- Managed by the VMSESRV server machine
- Administrators – MAINT, MAINT620, MIGMAINT, VSMGUARD, and 6VMTCP20

VMSYS, VMSYSU, VMSYSR, and VMPSFS file pool defaults

Note: User IDs always enrolled in the VMSYS file pool are: DTCSMAPI, GSKADMIN, GSKSSLDB, LDAPSRV, MAINT, MAINT620, OPERATNS, PERSMAPI, ROOT, SSLSERV, SSL00001, SSL00002, SSL00003, SSL00004, SSL00005, TCPMAINT, VMRMSVM, VSMEVSRV, VSMGUARD, VSMPROXY, VSMREQIM, VSMREQIN, VSMREQI6, VSMREQIU, VSMWORK1, VSMWORK2, and VSMWORK3.

VMSYSU

- User data repository file pool
 - SFS storage space for general use by the system user population
 - SFS directories defined for use by SSL pool servers
- Managed by the VMSERVU server machine
- Administrators – MAINT, MAINT620, and MIGMAINT

Note: User IDs always enrolled in the VMSYSU file pool are: ETC, MAINT, MAINT620, TMP, and VAR.

VMSYSR

- Coordinated resource recovery (CRR) file pool
- Managed by the VMSERVR server machine
- Administrators – MAINT, MAINT620, and MIGMAINT

VMPSFS

- Product service file pool
- Managed by the VMSERVP server machine
- Administrators – MAINT, MAINT620, AUTOLOG1, AUTOLOG2, and MIGMAINT
- MAINT620's default file pool is set to VMPSFS

Note: User IDs always enrolled in the VMPSFS file pool are: DATAMOVE, DATAMOV2, DATAMOV3, DATAMOV4, DIRMAINT, DIRMSAT, DIRMSAT2, DIRMSAT3, DIRMSAT4, MAINT, MAINT620, and VSMGUARD.

Each of these file pools has two definition files associated with it:

- *filename* POOLDEF, which defines the configuration of the file pool. *filename* is the name of the file pool.
- *filename* DMSPARMS, which contains startup parameters for the file pool server machine. *filename* is the user ID of the server machine.

For more information and examples on tailoring these files and on BFS root directory definitions, see *z/VM: CMS File Pool Planning, Administration, and Operation*.

VMSYS/VMPSFS file pool

If you chose to load these products into the file pool, the following user IDs are also enrolled in the following file pools:

Table 18. VMSYS/VMPSFS File Pool User IDs

Product	File Pool	User IDs
VM	VMPSFS	BLDSEG
	VMPSFS	6VMLEN20

VMSYS, VMSYSU, VMSYSR, and VMPSFS file pool defaults

Table 18. VMSYS/VMPSFS File Pool User IDs (continued)

Product	File Pool	User IDs
RSCS	VMPSFS	6VMRSC20
	VMPSFS	RSCSAUTH
	VMPSFS	RSCSDNS
	VMPSFS	XCHANGE
	VMSYS	6VMRSC20
	VMSYS	XCHANGE
OSA/SF	VMPSFS	4OSASF40
	VMPSFS	OSADMIN1
	VMPSFS	OSADMIN2
	VMPSFS	OSADMIN3
	VMPSFS	OSAMAIN1
	VMPSFS	OSASF
TCP/IP	VMPSFS	6VMTCP20
ICKDSF	VMPSFS	5684042J
DIRM	VMPSFS	6VMDIR20
RACF	VMPSFS	6VMRAC20
PERFTK	VMPSFS	6VMPTK20
	VMPSFS	PERFSVM
	VMPSFS	PERSMAPI
	VMSYS	PERFSVM
VMHCD	VMPSFS	6VMHCD20
	VMPSFS	CBDIODSP

VMSYS, VMSYSU, VMSYSR, and VMPSFS file pool defaults

Appendix D. Back up the named saved systems and segments to tape

In this procedure, you will:

- On your system or each member of your SSI cluster, back up all the named saved systems and segments, including CMS, to tape.

1. Log on the system or member you are backing up as MAINT620.

```
logon maint620
:
Ready; T=n.nn/n.nn hh:mm:ss
```

2. Attach a tape drive (*tapeaddr*) to MAINT620 at virtual device address 181.

```
attach tapeaddr * 181
TAPE 0181 ATTACHED
Ready; T=n.nn/n.nn hh:mm:ss
```

3. Mount a tape, to be used for back up, on the tape drive attached at virtual device address 181.

4. Spool the console.

```
spool console * start
```

5. Enter the SPXTAPE command to dump the named saved systems and segments to tape.

```
spxtape dump tapeaddr sdf all run
SPXTAPE DUMP INITIATED ON VDEV tapeaddr
Ready; T=n.nn/n.nn hh:mm:ss
```

The operand RUN specifies that the SPXTAPE rewinds and unloads the tape after the operation.

```
DUMPING tapeaddr :      nnn FILES, PAGES      nnnn nn% COMPLETE
:
DUMPING tapeaddr :      nnn FILES, PAGES      nnnn nn% COMPLETE
RDR FILE fileno1 SENT FROM MAINT620 CON WAS fileno1 RECS nnnn CPY 001 T NOHOLD NOKEEP
SPXTAPE DUMP COMMAND COMPLETED ON VDEV tapeaddr
TIME STARTED:      hh:mm:ss
TIME ENDED:        hh:mm:ss
TAPE COUNT:        nnn
FILES PROCESSED:   nnn
SPOOL PAGES:       nnnn
RDR FILE fileno2 SENT FROM MAINT620 CON WAS fileno2 RECS nnnn CPY 001 T NOHOLD NOKEEP
```

tapeaddr

Address of the tape drive attached to MAINT620.

The messages from SPXTAPE tell you that the files are being dumped to tape.

fileno1

File number of the volume log file. The volume log file records information about the files processed by the SPXTAPE DUMP command that are associated with a particular tape volume.

fileno2

File number of the command summary log file. The command summary log file records the progress and status of the SPXTAPE DUMP operation.

Back up the named saved systems and segments to tape

6. Store the tape for emergency use. If it is ever necessary, you can use this tape and the SPXTAPE command to restore the CMS system data file. For more information about the SPXTAPE command, see *z/VM: CP Commands and Utilities Reference*. For information on how to restore this tape to your system, see Appendix G, “Restore the named saved systems and segments from tape,” on page 217.
7. If you have a multi-member SSI cluster, repeat substeps 1-6 for each remaining member to back up the NSSs and segments for that member.

Appendix E. Back up the z/VM system to tape

In this procedure, you will:

- Load the DDRXA utility to tape.
- Use DDRXA to back up the z/VM system to tape.

Notes:

1. A complete z/VM system backup includes all of your installation volumes.
2. You should check your installation worksheets to make sure you have backed up each volume.
3. This procedure requires a full-pack minidisk be defined in the CP directory, USER DIRECT, for each volume you are backing up.
4. If you do not have a tape drive or if you wish to back up to DASD, see Appendix F, “Back up the z/VM system to DASD,” on page 215.

1. Log on the system or member you are going to back up to tape as MAINT620.

```
logon maint620
⋮
Ready; T=n.nn/n.nn hh:mm:ss
```

2. Ensure you have a link to all of the full-pack minidisks for all of the volumes you are backing up, as per the following table.

Default Label	Full-pack Minidisk	Owner	Member Specific or Common
M01RES	123	MAINT	Member Specific
M01W01	124	MAINT	Member Specific
620RL1	131	MAINT620	Common
620RL2	132	MAINT620	Common
VMCOM1	141	PMAINT	Common
VMCOM2	142	PMAINT	Common

```
q v 122-142
DASD 0122 3390 M01S01 R/O      3339 CYL ON DASD  nnnn SUBCHANNEL = nnnn
DASD 0123 3390 M01RES R/O      3339 CYL ON DASD  nnnn SUBCHANNEL = nnnn
DASD 0124 3390 M01W01 R/O      3339 CYL ON DASD  nnnn SUBCHANNEL = nnnn
⋮
DASD 0131 3390 620RL1 R/W      3339 CYL ON DASD  nnnn SUBCHANNEL = nnnn
DASD 0132 3390 620RL2 R/W      3339 CYL ON DASD  nnnn SUBCHANNEL = nnnn
DASD 0141 3390 VMCOM1 R/O      3339 CYL ON DASD  nnnn SUBCHANNEL = nnnn
DASD 0142 3390 VMCOM2 R/O      3339 CYL ON DASD  nnnn SUBCHANNEL = nnnn
Ready; T=n.nn/n.nn hh:mm:ss
```

3. Attach a tape drive (*tapeaddr*) to MAINT620 at virtual device address 181.

```
attach tapeaddr * 181
TAPE 0181 ATTACHED
Ready; T=n.nn/n.nn hh:mm:ss
```

4. Mount a tape, to be used for back up, on the tape drive attached at virtual device address 181.
5. Access the 193 minidisk as file mode Z.

Back up the z/VM system to tape

```
access 193 z
Ready; T=n.nn/n.nn hh:mm:ss
```

6. Load the DDRXA utility to tape.

```
utility utiltape ddrxa
Rewind complete
HCPWUT8317I MOVING IPL DDRXA TO TAPE
HCPWUT8318I THE IPL DDRXA PROGRAM IS
                ON TAPE FILE NUMBER 1
Ready; T=n.nn/n.nn hh:mm:ss
```

7. Rewind the backup tape attached at virtual device address 181.

```
rewind 181
Rewind complete
```

8. IPL the tape and answer the prompts from DDRXA. For information about DDRXA, see the *z/VM: CP Commands and Utilities Reference* and *z/VM: System Operation*.

```
ipl 181 clear
z/VM DASD DUMP/RESTORE PROGRAM
ENTER CARD READER ADDRESS OR CONTROL STATEMENTS
ENTER:
```

CLEAR is necessary. Do not omit it.

Wait a few moments for DDRXA to prompt you. If a prompt does not appear, press Enter.

```
sysprint cons
ENTER:
```

This first control statement tells DDRXA that you want program messages sent to your console.

```
input devno dasd valid
ENTER:
```

The second control statement is the input control statement.

You must back up all your installation volumes, except the paging volume.

devno

Full-pack minidisk address of the volume you are backing up.

valid

Volume label – for example M01RES.

```
output 181 tape (compact
ENTER:
```

This control statement specifies the device to which you are dumping the system. You can specify one alternate tape drive for additional tape volumes.

Example: If you had a tape attached at virtual device address 181 and an alternate tape attached at virtual device address 182, the OUTPUT control statement would be:

```
output 181 tape 182 (compact
```

If you are using a 3590 tape, you can use the leave option to dump multiple DASD on one tape volume. The output control statement would be:

```
output 181 tape (compact leave
```

```
dump all
DUMPING valid
DUMPING DATA mm/dd/yy
  AT hh.mm.ss GMT FROM valid
```

This control statement dumps the specified volume to the tape.

The informational messages that follow will vary according to your use of device types.

The exact cylinder extents vary according to the device type.

```
INPUT CYLINDER EXTENTS      OUTPUT CYLINDER EXTENTS
      START      STOP      START      STOP
      nnnnnnnn   nnnnnnnn   nnnnnnnn   nnnnnnnn
      :
      :
      :
END OF DUMP
BYTES IN nnnnnnnnnn BYTES OUT nnnnnnnnnn
TRACKS NOT COMPACTED ON TAPE - nnnnnnnnnn
ENTER:
```

DDRXA prompts when finishes dumping the volume.

Note: When DDRXA encounters the end of a tape, and there is more data to dump, the program prompts you to mount the next tape.

- If you are using the same tape drive, mount the next tape and DDRXA continues.
- If you are using an alternate tape drive, DDRXA uses the alternate tape drive, then alternates between the tape drives for additional tapes. That is, if there are more than two tapes, you are prompted for the third tape on the first tape drive, the fourth tape on the second tape drive, and so forth.

9. If you have additional DASD volumes to back up, mount a new tape, if necessary, and repeat the INPUT, OUTPUT, and DUMP ALL statements for each volume.
10. Press Enter to end the program.

```
ENTER
END OF JOB
```

11. IPL CMS.

```
#cp ip1 cms
z/VM V6.2.0   yyyy-mm-dd hh:mm
```

```
ENTER
Ready; T=n.nn/n.nn hh:mm:ss
```

For information on how to restore your system from tape, see Appendix H, “Restore the z/VM system backup from tape,” on page 219.

12. If you have a multi-member SSI cluster, repeat substeps 1-11 for each remaining member to back up the member-specific volumes.

Back up the z/VM system to tape

Appendix F. Back up the z/VM system to DASD

In this procedure, you will:

- Use DDR to store a backup of the z/VM system to DASD.

Notes:

1. A complete z/VM system backup includes all of your installation volumes.
2. You should check your installation worksheets to make sure you have backed up each installation volume.
3. This procedure requires a full-pack minidisk be defined in the CP directory, USER DIRECT, for each volume you are backing up.
4. If you wish to store a back up to tape, see Appendix E, “Back up the z/VM system to tape,” on page 211.

1. Log on the system or member you are going to back up to DASD as MAINT620.

```
logon maint620
:
Ready; T=n.nn/n.nn hh:mm:ss
```

2. Ensure you have a link to all of the full-pack minidisks for all of the volumes you are backing up, as per the following table.

Default Label	Full-pack Minidisk	Owner	Member Specific or Common
M01RES	123	MAINT	Member Specific
M01W01	124	MAINT	Member Specific
620RL1	131	MAINT620	Common
620RL2	132	MAINT620	Common
VMCOM1	141	PMAINT	Common
VMCOM2	142	PMAINT	Common

```
q v 122-142
DASD 0122 3390 M01S01 R/O      3339 CYL ON DASD  nnnn SUBCHANNEL = nnnn
DASD 0123 3390 M01RES R/O      3339 CYL ON DASD  nnnn SUBCHANNEL = nnnn
DASD 0124 3390 M01W01 R/O      3339 CYL ON DASD  nnnn SUBCHANNEL = nnnn
:
DASD 0131 3390 620RL1 R/W      3339 CYL ON DASD  nnnn SUBCHANNEL = nnnn
DASD 0132 3390 620RL2 R/W      3339 CYL ON DASD  nnnn SUBCHANNEL = nnnn
DASD 0141 3390 VMCOM1 R/O      3339 CYL ON DASD  nnnn SUBCHANNEL = nnnn
DASD 0142 3390 VMCOM2 R/O      3339 CYL ON DASD  nnnn SUBCHANNEL = nnnn
Ready; T=n.nn/n.nn hh:mm:ss
```

3. Access the 193 minidisk as file mode Z.

```
access 193 z
Ready; T=n.nn/n.nn hh:mm:ss
```

4. Run DDR and answer the prompts. For information about DDR, see the *z/VM: CP Commands and Utilities Reference* and *z/VM: System Operation*.

Back up the z/VM system to DASD

DDR

z/VM DASD DUMP/RESTORE PROGRAM
ENTER CARD READER ADDRESS OR CONTROL STATEMENTS
ENTER:

sysprint cons

ENTER:

This first control statement tells DDR that you want program messages sent to your console.

input *devno dasd valid*

ENTER:

The second control statement is the input control statement.

You must back up all your installation volumes, except the paging volume.

devno

Full-pack minidisk address of the volume you are backing up.

valid

Volume label – for example M01RES.

output *devno dasd scratch*

ENTER:

You need a separate volume for each volume you are backing up.

devno

Full-pack minidisk address of the volume you are using to backup.

copy all

This control statement dumps the specified volume to the new DASD.

DUMPING *valid*
DUMPING DATA *mm/dd/yy*
AT *hh.mm.ss* GMT FROM *valid*

These are informational messages that will vary according to your use of device types.

The exact cylinder extents vary according to the device type.

INPUT CYLINDER EXTENTS		OUTPUT CYLINDER EXTENTS	
START	STOP	START	STOP
<i>nnnnnnnn</i>	<i>nnnnnnnn</i>	<i>nnnnnnnn</i>	<i>nnnnnnnn</i>

⋮
END OF DUMP
BYTES IN *nnnnnnnnnn* BYTES OUT *nnnnnnnnnn*
TRACKS NOT COMPACTED ON TAPE - *nnnnnnnnnn*
ENTER:

When DDR finishes dumping the volume, it prompts.

5. If you have any more DASD volumes to back up, repeat the INPUT, OUTPUT, and COPY ALL statements for each volume.
6. Press Enter to end the program.

ENTER

END OF JOB

7. If you have a multi-member SSI cluster, repeat substeps 1-6 for each remaining member to back up the member-specific volumes.

Appendix G. Restore the named saved systems and segments from tape

In this procedure, you will:

- Restore the CMS named saved systems and segments.

If you created a loadable tape of the named saved systems and segments during your system installation, perform the following steps to restore the named saved system and segments.

1. Log on as MAINT620.

```
ENTER
logon maint620
:
Ready; T=n.nn/n.nn hh:mm:ss
```

The default password for MAINT620 is MAINT620.

2. Attach a tape drive (*tapeaddr*) to MAINT620.

```
attach tapeaddr *
Ready; T=n.nn/n.nn hh:mm:ss
```

3. Mount the backup tape on the attached tape drive (*tapeaddr*).

4. Spool the console.

```
spool console *
```

5. Enter the SPXTAPE command to load the system data files.

```
spxtape load tapeaddr sdf all run
```

tapeaddr
Address of the tape drive attached to
MAINT620.

```
SPXTAPE LOAD INITIATED ON VDEV tapeaddr
Ready; T=n.nn/n.nn hh:mm:ss

LOADING tapeaddr : nnn FILES, PAGES nnnn
:
LOADING tapeaddr : nnn FILES, PAGES nnnn
SPXTAPE LOAD END-OF-TAPE ON VDEV tapeaddr;
MOUNT NEXT TAPE
TAPE NUMBER: tapeaddr-001
FILES PROCESSED: nnn
SPOOL PAGES: nnnn
LOADING tapeaddr : nnn FILES, PAGES nnnn
:
LOADING tapeaddr : nnn FILES, PAGES nnnn
RDR FILE fileno1 SENT FROM MAINT620 CON WAS fileno RECS nnnn CPY 001 T NOHOLD NOKEEP
```

fileno1
File number of the volume log file.

The volume log file records information about the files processed by the SPXTAPE LOAD command that are associated with a particular tape volume.

6. When all volumes have been loaded, use the SPXTAPE END command to end the SPXTAPE load.

Restore the named saved systems and segments from tape

```
spxtape end tapeaddr
SPXTAPE END      INITIATED ON VDEV tapeaddr
SPXTAPE LOAD COMMAND ENDED      ON VDEV tapeaddr
TIME STARTED:      hh:mm:ss
TIME ENDED:        hh:mm:ss
TAPE COUNT:        nnn
FILES PROCESSED:   nnn
SPOOL PAGES:       nnnn
```

The SPXTAPE END command ends the SPXTAPE LOAD operation at the completion of the current file.

```
Ready; T=n.nn/n.nn hh:mm:ss
```

The CMS ready message may occur between the messages.

```
RDR FILE fileno2 SENT FROM MAINT620 CON WAS fileno RECS nnnn CPY 001 T NOHOLD NOKEEP
```

fileno2
File number of the command summary log file.

The command summary log file records the progress and status of the SPXTAPE LOAD operation.

For more information on the SPXTAPE command, see *z/VM: CP Commands and Utilities Reference*.

7. IPL the CMS named saved system.

```
ipl cmsname
:
z/VM V6.2.0   yyyy-mm-dd hh:mm
ENTER
Ready; T=n.nn/n.nn hh:mm:ss
```

cmsname
Either the IBM supplied system name (CMS) or the name you defined in DMSNGP on the SYSNAME statement.

If you have changed the version heading, your own heading will appear.

Appendix H. Restore the z/VM system backup from tape

In this procedure, you will:

- Restore the backup of your new z/VM system from tape.

Note: This procedure requires a full-pack minidisk be defined in the CP directory, USER DIRECT, for each volume you are restoring.

If you created a backup of your new z/VM system on tape during your system installation, perform the following steps to restore the system.

1. Mount the backup tape on a tape drive.
2. IPL the tape drive.

```
ipl tapeaddr clear
```

tapeaddr

Address of the tape drive.

3. Use DDRXA to restore the system to disk. Repeat this substep for each DASD volume you are restoring.

```
z/VM DASD DUMP/RESTORE PROGRAM  
ENTER CARD READER ADDRESS OR CONTROL STATEMENTS  
ENTER:
```

```
sysprint cons  
ENTER:
```

This first control statement tells DDRXA that you want program messages sent to your console.

```
input tapeaddr tape  
ENTER:
```

The second control statement is the input control statement.

tapeaddr

Device number where the backup tape is mounted.

You can specify one alternate tape drive for additional tape volumes.

Example: If you had a tape attached at virtual device address 181 and an alternate tape attached at virtual device address 182, the INPUT control statement would be:

```
input 181 tape 182
```

If you are using a 3590 tape, and multiple DASD volumes were dumped on one tape volume, use the leave option to position the tape for the next restore. The input control statement would be:

```
input 181 tape (leave
```

Restore the z/VM system backup from tape

```
output devaddr dasd volid
ENTER:
```

This output statement specifies the DASD device to which you are restoring the system.

```
devaddr
    Full-pack minidisk address of the volume to
    which you are restoring this tape.
```

The full-pack minidisk addresses for the default DASD are 122 (620SPL), 123 (620RES) 124 (620W01), 125 (620W02), ...

By typing **dasd**, the device type (3390) is automatically identified by the DDRXA program.

restore all

The RESTORE ALL statement tells DDRXA to restore the whole tape to the output device.

```
RESTORING volid
DATA DUMPED mm/dd/yy
    AT hh.mm.ss GMT FROM volid
    RESTORED TO volid
INPUT CYLINDER EXTENTS      OUTPUT CYLINDER EXTENTS
    START      STOP          START      STOP
    nnnnnnnn   nnnnnnnn     nnnnnnnn   nnnnnnnn
:
END OF RESTORE
BYTES RESTORED nnnnnnnnnn
```

The exact cylinder extents vary according to the device type.

Repeat INPUT, OUTPUT, and RESTORE statements for each DASD you are restoring.

```
ENTER:
:
```

When DDRXA finishes, it prompts you with ENTER. Press Enter to end the program.

```
ENTER:
```

```
ENTER
```

```
END OF JOB
```

Note: When DDRXA encounters the end of a tape, and there is more data to restore, the program prompts you to mount the next tape.

- If you are using the same tape drive, mount the next tape and DDRXA continues.
- If you are using an alternate tape drive, DDRXA uses the alternate tape drive, then alternates between the tape drives for additional tapes. That is, if there are more than two tapes, you are prompted for the third tape on the first tape drive, the fourth tape on the second tape drive, and so forth.

Appendix I. Recover a file or minidisk

In this procedure, you will:

- Recover an entire minidisk. To recover a minidisk, you may either overlay the existing disk or restore the minidisk to a temporary disk and copy the files to the target disk.
- Recover an individual file from the installation media. To recover an individual file, you must first determine on which minidisk the file is located, restore the entire minidisk to a temporary disk, and copy the file from the temporary disk.

1. Log on as MAINT620.

```
ENTER  
logon maint620
```

The default password for MAINT620 is MAINT620.

```
:  
Ready; T=n.nn/n.nn hh:mm:ss
```

2. If you want to recover an entire minidisk, skip this substep and go to substep 3.

To recover an individual file, you must first determine on which minidisk the file is located. If you already know on which minidisk the file is located, go to substep 3. Otherwise, check the minidisk map file. If you loaded z/VM to the file pool, the minidisk map file is on the directory VMPSFS:MAINT620.CPDV.OBJECT. Access this directory in place of the 194 disk.

```
access 194 z  
Ready; T=n.nn/n.nn hh:mm:ss  
  
xedit minidisk map z  
:  
quit  
Ready; T=n.nn/n.nn hh:mm:ss
```

The MINIDISK MAP file lists the minidisks shipped on the z/VM system and the files contained on each minidisk. Look at MINIDISK MAP to determine which minidisk contains the file you want to recover.

3. If you want to recover an individual file or recover the entire minidisk to a temporary disk, you need to define a temporary disk. The temporary disk must be the same DASD type that is provided by your installation media and the same size as the minidisk you want to recover. (See the \$ITEMMD\$ \$TABLE\$ on the 4CC disk for the size of the minidisk you want to recover.)

```
define [t3390 or vfb-512] loadaddr mdisksize  
DASD loadaddr DEFINED  
Ready; T=n.nn/n.nn hh:mm:ss
```

loadaddr
Address of the temporary disk.

mdisksize
Size of the minidisk you want to restore.

If you receive the following message:

```
HCPLNM091E DASD loadaddr not defined; temp space not available
```

you must add additional temporary disk space to your system or define a minidisk with the address *loadaddr*. If you define a minidisk, it must be the same DASD type that is provided by your installation media and the same size as the minidisk you want to recover.

4. Continue to the appropriate substep depending on the type of installation media.

- DDR tape, continue to substep 5.
- DVD, continue to substep 8 on page 222.

5. Attach a tape drive (*tapeaddr*) to the MAINT620 user ID at virtual device address 181.

Recover a file or minidisk

```
attach tapeaddr * 181
tapeaddr attached to MAINT620
Ready; T=n.nn/n.nn hh:mm:ss
```

6. Mount the z/VM system installation tape on tape drive 181.
7. Restore the chosen minidisk by using the INSTTAPE command and RECOVER option.

```
access 4CC C
Ready; T=n.nn/n.nn hh:mm:ss
```

```
insttape tape (recover mdiskaddr loadaddr
```

mdiskaddr
Address of the minidisk to be loaded from the
z/VM system installation tape.

loadaddr
Address to which you restore the minidisk.

Notes:

- a. If the minidisk belongs to MAINT620, *mdiskaddr* is the actual minidisk address. If the minidisk does not belong to MAINT620, *mdiskaddr* is the alias address. See the \$ITEMMD\$ \$TABLE\$ on the 4CC disk to determine the alias address.
- b. To recover a minidisk and overlay the existing disk, you must link the minidisk in write mode. For example, enter the LINK CMSBATCH 195 801 WR command. Because this disk does not belong to MAINT620, the INSTTAPE command would be: INSTAPE TAPE (RECOVER 801 801
- c. If you want to restore an entire minidisk and overlay the existing minidisk, *loadaddr* is the address at which you have the disk linked.
If the load address (*loadaddr*) is not specified, a temporary disk (T-disk) is created.
- d. You cannot recover the 4CC minidisk directly to the 4CC minidisk. You can recover the 4CC to an address other than 4CC and copy the files you wish to recover to the 4CC minidisk.
- e. The INSTALL command requires a full screen terminal with at least 24 lines.

8. Recover the minidisk.

If your installation media was DVD, you could have installed from the DVD or uploaded the contents of the DVD to either an FTP server or VM minidisk. You can use the FTP server or VM minidisk if they are still available, otherwise use the DVD.

- a. Run INSTPIPE

```
instpipe
```

- b. Recover from the DVD or FTP server:

```
pipe ftpget -h IPaddress -u userid -p password -d ftpdrct -v BEF -DVDEOF -f dddcuu* |UNPACK|
restcmd loadaddr
```


<i>IPaddress</i>	IP address or FTP HOSTNAME.	<i>cuu*</i>	Address of the minidisk to be recovered from the DVD, with an asterisk (*) appended to the end.
<i>userid</i>		<i>restcmd</i>	ECKDREST for 3390 or MDREST for FBA.
<i>password</i>	User ID and password used to log on to the FTP server.	<i>loadaddr</i>	Address to which you are restoring the minidisk.
<i>ftpdrcrct</i>	Path to the DVD drive or server directory. If using a DVD drive, append /CPDVD to the end of the path.		
<i>ddd</i>	CKD for 3390 or FBA for FBA.		

Notes:

- 1) To recover a minidisk and overlay the existing disk, you must link the minidisk in write mode. For example, enter the LINK CMSBATCH 195 801 WR command.
- 2) If the minidisk belongs to MAINT620, *cuu* is the actual minidisk address. If the minidisk does not belong to MAINT620, *cuu* is the alias address. See the \$ITEMMD\$ \$TABLE\$ on the 4CC disk to determine the alias address.
- 3) If you want to recover an entire minidisk and overlay the existing minidisk, *loadaddr* is the address at which you have the disk linked. If *loadaddr* is not specified, a temporary disk (T-disk) is created.

C. Recover from a VM minidisk. Access the VM minidisk address as file mode C.

access <i>diskaddr c</i>	
Ready; T= <i>n.nn/n.nn hh:mm:ss</i>	
pipe <i>dvddecod dddcuu image c UNPACK restcmd loadaddr</i>	
<i>ddd</i>	<i>restcmd</i>
CKD for 3390 or FBA for FBA.	ECKDREST for 3390 or MDREST for FBA.
<i>cuu</i>	<i>loadaddr</i>
Address of the minidisk to be recovered from the DVD.	Address to which you are recovering the minidisk.

Notes:

- 1) To recover a minidisk and overlay the existing disk, you must link the minidisk in write mode. For example, enter the LINK CMSBATCH 195 801 WR command.
- 2) If the minidisk belongs to MAINT620, *cuu* is the actual minidisk address. If the minidisk does not belong to MAINT620, *cuu* is the alias address. See the \$ITEMMD\$ \$TABLE\$ on the 4CC disk to determine the alias address.
- 3) If you want to recover an entire minidisk and overlay the existing minidisk, *loadaddr* is the address at which you have the disk linked. If *loadaddr* is not specified, a temporary disk (T-disk) is created.

9. If you restored the minidisk to a temporary disk, copy the file or files that you want to recover from the temporary disk to the target disk.

access <i>loadaddr fm-1</i>	<i>loadaddr</i>
Ready; T= <i>n.nn/n.nn hh:mm:ss</i>	Address of the temporary disk.
	<i>fm-1</i>
	Any available file mode.

Recover a file or minidisk

access *mdiskaddr fm-2*
Ready; T=*n.nn/n.nn hh:mm:ss*

copyfile *fn ft fm-1 = = fm-2 (olddate*
Ready; T=*n.nn/n.nn hh:mm:ss*

mdiskaddr
Address of the target minidisk. If you loaded z/VM to the file pool, *mdiskaddr* is the directory to which the minidisks were copied. See MOVE2SFS \$TABLE\$ for a list of minidisks and directories.

fm-2
Any available file mode.

fn File name of the file you want to recover.

ft File type of the file you want to recover. Repeat the COPYFILE command for each file you want to recover.

Appendix J. Using an integrated 3270 console for installation

Perform the following steps to install the z/VM system in a new system environment using an integrated 3270 console on the HMC.

1. Open the CPC Image Work Area pane.
 - a. In the Hardware Management Console Workplace window, double-click the **Task List** icon in the Views pane.
 - b. In the Task List Work Area pane, double-click the **Recovery** icon.
 - c. In the Views pane, double-click the **Groups** icon.
 - d. In the Groups Work Area pane, double-click the **CPC Images** icon.
2. IPL the tape drive to load ICKDSF.
 - a. In the CPC Images Work Area pane, select the LPAR you are going to use for installation.
 - b. In the Recovery pane, double-click the **Load** icon. The Load window opens.
 - c. In the Load window, ensure that a Load Type of "Normal" is selected, enter the device address of your tape drive in the **Load address** field, and enter CNSLSCLP in the **Load parameter** field.
 - d. Click **OK**. The Load Task Confirmation prompt is displayed.
 - e. Click **Yes** to continue.
 - f. Messages indicating the status of the load are displayed in the Load Progress window. When a message is displayed indicating the load is successful, click **OK** to close the window.
 - g. In the Hardware Management Console Workplace window, double-click the **Operating System Messages** icon in the Recovery pane. The Operating System Messages window opens. ICKDSF will load in the Operating System Messages window. It might take a few minutes for the messages to appear.
 - h. Go back to "Step 1. Restore the SVS" on page 18 and follow substeps 6 through 8 to use ICKDSF to initialize, format, and label the volumes needed for installation. Return here when instructed.
3. Close the Operating System Messages window.
4. Open an integrated 3270 console and IPL the tape drive to load the DDR program. The Integrated 3270 Console window must remain open, even if it is in the background.
 - a. In the Hardware Management Console Workplace window, if not already highlighted, select the LPAR you are using for installation in the CPC Images Work Area pane.
 - b. In the Recovery pane, double-click the **Integrated 3270 Console** icon. The Integrated 3270 Console window for that LPAR opens.
 - c. In the Hardware Management Console Workplace window, select the LPAR you are using for installation in the CPC Images Work Area pane again.
 - d. In the Recovery pane, double-click the **Load** icon. The Load window opens.
 - e. In the Load window, enter the device address of your tape drive in the **Load address** field and enter SYSG in the **Load parameter** field. Ensure the **Load parameter** field is empty before entering SYSG.
 - f. Click **OK**. The Load Task Confirmation prompt is displayed.
 - g. Click **Yes** to continue.

Appendix K. Using a terminal emulator to upload files from a DVD

Note: Using a terminal emulator to upload files from a DVD can take several hours to complete.

The following procedure will guide you through using IBM Personal Communications to upload files from the z/VM system DVD and the RSU DVD to a VM minidisk. If Personal Communications is not your preferred terminal emulator, this procedure can be used as a model for using the upload function provided with your preferred terminal emulator.

Requirement: Files must be uploaded with a **fixed** record format, a logical record length of **1028**, and a **binary** transfer type. These options must be used to ensure file attributes are maintained.

1. Start a new Personal Communications session and log on to a user ID with access to the minidisk where you will transfer the DVD files.
2. If you have already set up a “dvdbinary” transfer type, skip to substep 3. Otherwise, create a new transfer type called “dvdbinary ”.
 - a. From the **Edit** menu, click **Preferences** then **Transfer**.
 - b. In the File Transfer Settings window, click the **General** tab and verify that the **Host Type** is **VM/CMS**. If not, select **VM/CMS** from the **Host Type** list.
 - c. Click the **VM** tab.
 - 1) In the **Transfer Type** field, enter “dvdbinary”.
 - 2) Select **Fixed** in the **Record Format** list.
 - 3) In the **Logical Record Length** field, enter “1028”.
 - 4) Click **Save**.
 - 5) Click **OK**.
3. Load the z/VM system DVD in the DVD drive.

Note: If your DVD drive is not labeled drive letter D, copy the 620prod.srl file from the DVD to your workstation. Open the file, and change “D:” to match your DVD drive letter for each entry. Save the modified file and use it instead of the copy on the DVD for the following steps.

4. Upload the contents of the DVD to the VM minidisk (previously accessed as file mode W).

- a. Set messages off in your VM session:

```
set msg off
set emsg off
set imsg off
set wng off
```

- b. From the **Actions** menu, click **Send File To Host**.

- c. In the Send Files to Host window, click **Open List**.

- 1) In the Open File-Transfer List File window, navigate to the CPDVD directory on the DVD and select the 620prod.srl file.

Note: If you created a modified 620prod.srl file in the previous substep, navigate to the location on your workstation where the modified file is saved and select it instead.

- 2) Click **Open**. Each file to be copied is added to the transfer list.

Using a terminal emulator to upload files from a DVD

- d. Click **Send**.
5. Repeat this procedure using the RSU DVD. Substitute one of the following *.srl files in place of the 620prod.srl file used for the z/VM system DVD.

If installing to . . .	Then substitute . . .
3390	62ckdrsu.srl
FBA	62fbarsu.srl

6. When all files have been transferred, restore your message settings in your VM session:

```
set msg on
set emsg on
set imsg on
set wng on
```

7. Verify that all of the files transferred have a **fixed** (F) file format and a logical record length (LRECL) of **1028**.

If the file format or logical record length of any file is incorrect, then the files were uploaded incorrectly. Erase all of the files from the minidisk and upload the contents of the z/VM system DVD and installation RSU DVD again, using the correct parameters:

```
filelist * image w
```

```
Cmd Filename Filetype Fm Format Lrecl Records Blocks Date Time
xxx 22200 IMAGE W1 F 1028 nnnn nnn dddd tttt
:
```

8. Return to Chapter 7, From a VM Minidisk, Step 1, Substep 12 on page 102.

Appendix L. Basic TCP/IP Connectivity Worksheets

Gather the TCP/IP configuration information from your network system administrator and record the information in the following tables.

If you are installing a multi-member SSI, the TCP/IP configuration must be done separately on each SSI member. Therefore, you will need a separate set of configuration worksheets for each member (1-4) on which you will create a minimal TCP/IP configuration.

In these worksheets, a number in parentheses following a field description – for example, Host name (20) – is the maximum length for that field.

Note: The IP configuration wizard supports real network devices only. If you plan on using virtual network devices for TCP/IP, they must be configured manually. See *z/VM: TCP/IP Planning and Customization*.

Member 1

Table 19. Installation TCP/IP Configuration Worksheet – Member 1

z/VM user ID of the z/VM TCP/IP stack virtual machine: (The default user ID is TCPIP. If you change this user ID, you must define the user ID in your user directory before issuing IPWIZARD.)	
Host name (20):	
Domain name (40):	
DNS IP address (up to three addresses):	1) _____ 2) _____ 3) _____
Gateway IP address :	
Interface name (16):	
Device number:	
IP address:	
IPv4 subnet mask (15) or IPv6 prefix length (3):	
(IPv4 only) Path MTU discovery:	<input type="checkbox"/> Enabled <input type="checkbox"/> Disabled
Choose the interface you will be using (select one):	<input type="checkbox"/> QDIO (layer 2) <input type="checkbox"/> QDIO (layer 3) <input type="checkbox"/> LCS <input type="checkbox"/> HiperSockets <input type="checkbox"/> CLAW <input type="checkbox"/> CTC See the appropriate interface worksheet to record additional information. IPv6 is available only for QDIO and HiperSockets devices.

Basic TCP/IP Connectivity Worksheets

Table 20. QDIO Interface Worksheet – Member 1

Router type (select one):	<input type="checkbox"/> Primary <input type="checkbox"/> Secondary <input type="checkbox"/> None Router type is not available for layer 2 transport.
(IPv6 only) Router advertisements:	<input type="checkbox"/> On <input type="checkbox"/> Off
Maximum transmission unit (MTU) size:	
(Optional) Port number:	
(Optional) VLAN ID:	
Note: As of V6.2, only Ethernet network types are allowed.	

Table 21. LCS Interface Worksheet – Member 1

Port/adaptor number:	
Maximum transmission unit (MTU) size:	
Note: As of V6.2, only Ethernet network types are allowed.	

Table 22. HiperSockets Interface Worksheet – Member 1

(IPv6 only) Router advertisements:	<input type="checkbox"/> On <input type="checkbox"/> Off
Maximum frame size (MFS) in kilobytes:	
(Optional) VLAN ID:	

Table 23. CLAW Interface Worksheet – Member 1

CLAW host name (8): (This name must match the host name configured on the CLAW device.)	
CLAW adapter name (8): (This name must match the device name configured on the CLAW device.)	
Maximum transmission unit (MTU) size:	

Table 24. CTC Interface Worksheet – Member 1

Write channel device number (select one):	<input type="checkbox"/> This choice contains the device number specified on the main z/VM TCP/IP Configuration Wizard panel. <input type="checkbox"/> This choice contains the device number specified on the main z/VM TCP/IP Configuration Wizard panel plus one.
Maximum transmission unit (MTU) size:	
Peer IP address:	

Member 2

Table 25. Installation TCP/IP Configuration Worksheet – Member 2

z/VM user ID of the z/VM TCP/IP stack virtual machine: (The default user ID is TCPIP. If you change this user ID, you must define the user ID in your user directory before issuing IPWIZARD.)	
Host name (20):	
Domain name (40):	
DNS IP address (up to three addresses):	1) _____ 2) _____ 3) _____
Gateway IP address :	
Interface name (16):	
Device number:	
IP address:	
IPv4 subnet mask (15) or IPv6 prefix length (3):	
(IPv4 only) Path MTU discovery:	<input type="checkbox"/> Enabled <input type="checkbox"/> Disabled
Choose the interface you will be using (select one):	<input type="checkbox"/> QDIO (layer 2) <input type="checkbox"/> QDIO (layer 3) <input type="checkbox"/> LCS <input type="checkbox"/> HiperSockets <input type="checkbox"/> CLAW <input type="checkbox"/> CTC See the appropriate interface worksheet to record additional information. IPv6 is available only for QDIO and HiperSockets devices.

Basic TCP/IP Connectivity Worksheets

Table 26. QDIO Interface Worksheet – Member 2

Router type (select one):	<input type="checkbox"/> Primary <input type="checkbox"/> Secondary <input type="checkbox"/> None Router type is not available for layer 2 transport.
(IPv6 only) Router advertisements:	<input type="checkbox"/> On <input type="checkbox"/> Off
Maximum transmission unit (MTU) size:	
(Optional) Port number:	
(Optional) VLAN ID:	
Note: As of V6.2, only Ethernet network types are allowed.	

Table 27. LCS Interface Worksheet – Member 2

Port/adaptor number:	
Maximum transmission unit (MTU) size:	
Note: As of V6.2, only Ethernet network types are allowed.	

Table 28. HiperSockets Interface Worksheet – Member 2

(IPv6 only) Router advertisements:	<input type="checkbox"/> On <input type="checkbox"/> Off
Maximum frame size (MFS) in kilobytes:	
(Optional) VLAN ID:	

Table 29. CLAW Interface Worksheet – Member 2

CLAW host name (8): (This name must match the host name configured on the CLAW device.)	
CLAW adapter name (8): (This name must match the device name configured on the CLAW device.)	
Maximum transmission unit (MTU) size:	

Table 30. CTC Interface Worksheet – Member 2

Write channel device number (select one):	<input type="checkbox"/> This choice contains the device number specified on the main z/VM TCP/IP Configuration Wizard panel. <input type="checkbox"/> This choice contains the device number specified on the main z/VM TCP/IP Configuration Wizard panel plus one.
Maximum transmission unit (MTU) size:	
Peer IP address:	

Member 3

Table 31. Installation TCP/IP Configuration Worksheet – Member 3

z/VM user ID of the z/VM TCP/IP stack virtual machine: (The default user ID is TCPIP. If you change this user ID, you must define the user ID in your user directory before issuing IPWIZARD.)	
Host name (20):	
Domain name (40):	
DNS IP address (up to three addresses):	1) _____ 2) _____ 3) _____
Gateway IP address :	
Interface name (16):	
Device number:	
IP address:	
IPv4 subnet mask (15) or IPv6 prefix length (3):	
(IPv4 only) Path MTU discovery:	<input type="checkbox"/> Enabled <input type="checkbox"/> Disabled
Choose the interface you will be using (select one):	<input type="checkbox"/> QDIO (layer 2) <input type="checkbox"/> QDIO (layer 3) <input type="checkbox"/> LCS <input type="checkbox"/> HiperSockets <input type="checkbox"/> CLAW <input type="checkbox"/> CTC See the appropriate interface worksheet to record additional information. IPv6 is available only for QDIO and HiperSockets devices.

Basic TCP/IP Connectivity Worksheets

Table 32. QDIO Interface Worksheet – Member 3

Router type (select one):	<input type="checkbox"/> Primary <input type="checkbox"/> Secondary <input type="checkbox"/> None Router type is not available for layer 2 transport.
(IPv6 only) Router advertisements:	<input type="checkbox"/> On <input type="checkbox"/> Off
Maximum transmission unit (MTU) size:	
(Optional) Port number:	
(Optional) VLAN ID:	
Note: As of V6.2, only Ethernet network types are allowed.	

Table 33. LCS Interface Worksheet – Member 3

Port/adaptor number:	
Maximum transmission unit (MTU) size:	
Note: As of V6.2, only Ethernet network types are allowed.	

Table 34. HiperSockets Interface Worksheet – Member 3

(IPv6 only) Router advertisements:	<input type="checkbox"/> On <input type="checkbox"/> Off
Maximum frame size (MFS) in kilobytes:	
(Optional) VLAN ID:	

Table 35. CLAW Interface Worksheet – Member 3

CLAW host name (8): (This name must match the host name configured on the CLAW device.)	
CLAW adapter name (8): (This name must match the device name configured on the CLAW device.)	
Maximum transmission unit (MTU) size:	

Table 36. CTC Interface Worksheet – Member 3

Write channel device number (select one):	<input type="checkbox"/> This choice contains the device number specified on the main z/VM TCP/IP Configuration Wizard panel. <input type="checkbox"/> This choice contains the device number specified on the main z/VM TCP/IP Configuration Wizard panel plus one.
Maximum transmission unit (MTU) size:	
Peer IP address:	

Member 4

Table 37. Installation TCP/IP Configuration Worksheet – Member 4

z/VM user ID of the z/VM TCP/IP stack virtual machine: (The default user ID is TCPIP. If you change this user ID, you must define the user ID in your user directory before issuing IPWIZARD.)	
Host name (20):	
Domain name (40):	
DNS IP address (up to three addresses):	1) _____ 2) _____ 3) _____
Gateway IP address :	
Interface name (16):	
Device number:	
IP address:	
IPv4 subnet mask (15) or IPv6 prefix length (3):	
(IPv4 only) Path MTU discovery:	<input type="checkbox"/> Enabled <input type="checkbox"/> Disabled
Choose the interface you will be using (select one):	<input type="checkbox"/> QDIO (layer 2) <input type="checkbox"/> QDIO (layer 3) <input type="checkbox"/> LCS <input type="checkbox"/> HiperSockets <input type="checkbox"/> CLAW <input type="checkbox"/> CTC See the appropriate interface worksheet to record additional information. IPv6 is available only for QDIO and HiperSockets devices.

Basic TCP/IP Connectivity Worksheets

Table 38. QDIO Interface Worksheet – Member 4

Router type (select one):	<input type="checkbox"/> Primary <input type="checkbox"/> Secondary <input type="checkbox"/> None Router type is not available for layer 2 transport.
(IPv6 only) Router advertisements:	<input type="checkbox"/> On <input type="checkbox"/> Off
Maximum transmission unit (MTU) size:	
(Optional) Port number:	
(Optional) VLAN ID:	
Note: As of V6.2, only Ethernet network types are allowed.	

Table 39. LCS Interface Worksheet – Member 4

Port/adaptor number:	
Maximum transmission unit (MTU) size:	
Note: As of V6.2, only Ethernet network types are allowed.	

Table 40. HiperSockets Interface Worksheet – Member 4

(IPv6 only) Router advertisements:	<input type="checkbox"/> On <input type="checkbox"/> Off
Maximum frame size (MFS) in kilobytes:	
(Optional) VLAN ID:	

Table 41. CLAW Interface Worksheet – Member 4

CLAW host name (8): (This name must match the host name configured on the CLAW device.)	
CLAW adapter name (8): (This name must match the device name configured on the CLAW device.)	
Maximum transmission unit (MTU) size:	

Table 42. CTC Interface Worksheet – Member 4

Write channel device number (select one):	<input type="checkbox"/> This choice contains the device number specified on the main z/VM TCP/IP Configuration Wizard panel. <input type="checkbox"/> This choice contains the device number specified on the main z/VM TCP/IP Configuration Wizard panel plus one.
Maximum transmission unit (MTU) size:	
Peer IP address:	

Appendix M. IPLing z/VM from a SCSI device

When IPLing z/VM from a SCSI device, the following parameters need to be entered in the HMC Load window

1. Select the **radio button for SCSI**.
2. In the **Load address** field, enter the address of the FCP device (that is, the FCP address, not the EDEV address) used to define the residence volume for the system you are IPLing.
3. In the **Load parameter** field, enter the address of your system console – either SYSG for the Integrated 3270 Console on the HMC, or some other address (for example, 20) that represents your system console.
4. In the **Worldwide port name** field, enter the world wide port name (WWPN) used to define the residence volume for the system you are IPLing.
5. In the **Logical unit number** field, enter the 16-character logical unit number (LUN) of the residence volume for the system you are IPLing.
6. In the **Boot program selector** field, enter 0 (zero).
7. In the **Boot record logical block address** field, enter the 16-character value 00000000000000C8.
8. Click **OK**. Confirmation prompts will be displayed.

Once you have confirmed your IPL, the z/VM Stand Alone Program Loader (SAPL) panel will be displayed on the console that you specified. Verify that your FCP device address is displayed in the **DEVICE NUMBER** field. In the **IPL PARAMETERS** area, enter “cons=” followed by your console address, and “pdvo1=” followed by the EDEVICE number used to define the residence volume for the system you are IPLing. When you have entered all your data, press F10 to complete your IPL.

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Glossary

For a list of z/VM terms and their definitions, see *z/VM: Glossary*.

The z/VM glossary is also available through the online z/VM HELP Facility. For example, to display the definition of the term “dedicated device”, issue the following HELP command:

```
help glossary dedicated device
```

While you are in the glossary help file, you can do additional searches:

- To display the definition of a new term, type a new HELP command on the command line:

```
help glossary newterm
```

This command opens a new help file inside the previous help file. You can repeat this process many times. The status area in the lower right corner of the screen shows how many help files you have open. To close the current file, press the Quit key (PF3/F3). To exit from the HELP Facility, press the Return key (PF4/F4).

- To search for a word, phrase, or character string, type it on the command line and press the Clocate key (PF5/F5). To find other occurrences, press the key multiple times.

The Clocate function searches from the current location to the end of the file. It does not wrap. To search the whole file, press the Top key (PF2/F2) to go to the top of the file before using Clocate.

Bibliography

See the following publications for additional information about z/VM. For abstracts of the z/VM publications, see *z/VM: General Information*.

Where to Get z/VM Information

z/VM product information is available from the following sources:

- z/VM V6R2 Information Center (publib.boulder.ibm.com/infocenter/zvm/v6r2/)
- IBM: z/VM Internet Library (www.ibm.com/vm/library/)
- IBM Publications Center (www.ibm.com/e-business/linkweb/publications/servlet/pbi.wss)
- *IBM Online Library: z/VM Collection*, SK5T-7054

z/VM Base Library

Overview

- *z/VM: General Information*, GC24-6193
- *z/VM: Glossary*, GC24-6195
- *z/VM: License Information*, GC24-6200

Installation, Migration, and Service

- *z/VM: Installation Guide*, GC24-6246
- *z/VM: Migration Guide*, GC24-6201
- *z/VM: Service Guide*, GC24-6247
- *z/VM: VMSES/E Introduction and Reference*, GC24-6243

Planning and Administration

- *z/VM: CMS File Pool Planning, Administration, and Operation*, SC24-6167
- *z/VM: CMS Planning and Administration*, SC24-6171
- *z/VM: Connectivity*, SC24-6174
- *z/VM: CP Planning and Administration*, SC24-6178
- *z/VM: Getting Started with Linux on System z*, SC24-6194
- *z/VM: Group Control System*, SC24-6196
- *z/VM: I/O Configuration*, SC24-6198
- *z/VM: Running Guest Operating Systems*, SC24-6228

- *z/VM: Saved Segments Planning and Administration*, SC24-6229
- *z/VM: Secure Configuration Guide*, SC24-6230
- *z/VM: TCP/IP LDAP Administration Guide*, SC24-6236
- *z/VM: TCP/IP Planning and Customization*, SC24-6238
- *z/OS and z/VM: Hardware Configuration Manager User's Guide*, SC33-7989

Customization and Tuning

- *z/VM: CP Exit Customization*, SC24-6176
- *z/VM: Performance*, SC24-6208

Operation and Use

- *z/VM: CMS Commands and Utilities Reference*, SC24-6166
- *z/VM: CMS Pipelines Reference*, SC24-6169
- *z/VM: CMS Pipelines User's Guide*, SC24-6170
- *z/VM: CMS Primer*, SC24-6172
- *z/VM: CMS User's Guide*, SC24-6173
- *z/VM: CP Commands and Utilities Reference*, SC24-6175
- *z/VM: System Operation*, SC24-6233
- *z/VM: TCP/IP User's Guide*, SC24-6240
- *z/VM: Virtual Machine Operation*, SC24-6241
- *z/VM: XEDIT Commands and Macros Reference*, SC24-6244
- *z/VM: XEDIT User's Guide*, SC24-6245
- *CMS/TSO Pipelines: Author's Edition*, SL26-0018

Application Programming

- *z/VM: CMS Application Development Guide*, SC24-6162
- *z/VM: CMS Application Development Guide for Assembler*, SC24-6163
- *z/VM: CMS Application Multitasking*, SC24-6164
- *z/VM: CMS Callable Services Reference*, SC24-6165
- *z/VM: CMS Macros and Functions Reference*, SC24-6168
- *z/VM: CP Programming Services*, SC24-6179
- *z/VM: CPI Communications User's Guide*, SC24-6180

- *z/VM: Enterprise Systems Architecture/Extended Configuration Principles of Operation*, SC24-6192
- *z/VM: Language Environment User's Guide*, SC24-6199
- *z/VM: OpenExtensions Advanced Application Programming Tools*, SC24-6202
- *z/VM: OpenExtensions Callable Services Reference*, SC24-6203
- *z/VM: OpenExtensions Commands Reference*, SC24-6204
- *z/VM: OpenExtensions POSIX Conformance Document*, GC24-6205
- *z/VM: OpenExtensions User's Guide*, SC24-6206
- *z/VM: Program Management Binder for CMS*, SC24-6211
- *z/VM: Reusable Server Kernel Programmer's Guide and Reference*, SC24-6220
- *z/VM: REXX/VM Reference*, SC24-6221
- *z/VM: REXX/VM User's Guide*, SC24-6222
- *z/VM: Systems Management Application Programming*, SC24-6234
- *z/VM: TCP/IP Programmer's Reference*, SC24-6239
- *Common Programming Interface Communications Reference*, SC26-4399
- *Common Programming Interface Resource Recovery Reference*, SC31-6821
- *z/OS: IBM Tivoli Directory Server Plug-in Reference for z/OS*, SA76-0148
- *z/OS: Language Environment Concepts Guide*, SA22-7567
- *z/OS: Language Environment Debugging Guide*, GA22-7560
- *z/OS: Language Environment Programming Guide*, SA22-7561
- *z/OS: Language Environment Programming Reference*, SA22-7562
- *z/OS: Language Environment Run-Time Messages*, SA22-7566
- *z/OS: Language Environment Writing Interlanguage Communication Applications*, SA22-7563
- *z/OS MVS Program Management: Advanced Facilities*, SA22-7644
- *z/OS MVS Program Management: User's Guide and Reference*, SA22-7643

Diagnosis

- *z/VM: CMS and REXX/VM Messages and Codes*, GC24-6161
- *z/VM: CP Messages and Codes*, GC24-6177
- *z/VM: Diagnosis Guide*, GC24-6187
- *z/VM: Dump Viewing Facility*, GC24-6191
- *z/VM: Other Components Messages and Codes*, GC24-6207
- *z/VM: TCP/IP Diagnosis Guide*, GC24-6235
- *z/VM: TCP/IP Messages and Codes*, GC24-6237
- *z/VM: VM Dump Tool*, GC24-6242
- *z/OS and z/VM: Hardware Configuration Definition Messages*, SC33-7986

z/VM Facilities and Features

Data Facility Storage Management Subsystem for VM

- *z/VM: DFSMS/VM Customization*, SC24-6181
- *z/VM: DFSMS/VM Diagnosis Guide*, GC24-6182
- *z/VM: DFSMS/VM Messages and Codes*, GC24-6183
- *z/VM: DFSMS/VM Planning Guide*, SC24-6184
- *z/VM: DFSMS/VM Removable Media Services*, SC24-6185
- *z/VM: DFSMS/VM Storage Administration*, SC24-6186

Directory Maintenance Facility for z/VM

- *z/VM: Directory Maintenance Facility Commands Reference*, SC24-6188
- *z/VM: Directory Maintenance Facility Messages*, GC24-6189
- *z/VM: Directory Maintenance Facility Tailoring and Administration Guide*, SC24-6190

Open Systems Adapter/Support Facility

- *zEnterprise System, System z10, System z9 and eServer zSeries: Open Systems Adapter-Express Customer's Guide and Reference*, SA22-7935
- *System z9 and eServer zSeries 890 and 990: Open Systems Adapter-Express Integrated Console Controller User's Guide*, SA22-7990

- *System z: Open Systems Adapter-Express Integrated Console Controller 3215 Support*, SA23-2247
- *System z10: Open Systems Adapter-Express3 Integrated Console Controller Dual-Port User's Guide*, SA23-2266

Performance Toolkit for VM

- *z/VM: Performance Toolkit Guide*, SC24-6209
- *z/VM: Performance Toolkit Reference*, SC24-6210

RACF Security Server for z/VM

- *z/VM: RACF Security Server Auditor's Guide*, SC24-6212
- *z/VM: RACF Security Server Command Language Reference*, SC24-6213
- *z/VM: RACF Security Server Diagnosis Guide*, GC24-6214
- *z/VM: RACF Security Server General User's Guide*, SC24-6215
- *z/VM: RACF Security Server Macros and Interfaces*, SC24-6216
- *z/VM: RACF Security Server Messages and Codes*, GC24-6217
- *z/VM: RACF Security Server Security Administrator's Guide*, SC24-6218
- *z/VM: RACF Security Server System Programmer's Guide*, SC24-6219
- *z/VM: Security Server RACROUTE Macro Reference*, SC24-6231

Remote Spooling Communications Subsystem Networking for z/VM

- *z/VM: RSCS Networking Diagnosis*, GC24-6223
- *z/VM: RSCS Networking Exit Customization*, SC24-6224
- *z/VM: RSCS Networking Messages and Codes*, GC24-6225
- *z/VM: RSCS Networking Operation and Use*, SC24-6226
- *z/VM: RSCS Networking Planning and Configuration*, SC24-6227
- *Network Job Entry: Formats and Protocols*, SA22-7539

Prerequisite Products

Device Support Facilities

- *Device Support Facilities: User's Guide and Reference*, GC35-0033

Environmental Record Editing and Printing Program

- *Environmental Record Editing and Printing Program (EREP): Reference*, GC35-0152
- *Environmental Record Editing and Printing Program (EREP): User's Guide*, GC35-0151

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