Prime Computer, Inc.

System Administrator Rev. 19.2

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<pre>//filer 2200 //rest teech/branch5/soutrret -at</pre>

FDR3622-192

SYSTEM ADMINISTRATOR'S COMPANION

REVISION 19.2 FDR3622-192

This document reflects the software as of Master Disk Revision 19.2.

by James Craig Burley Matthew Hoffman

Prime Computer, Inc. 500 Old Connecticut Path Framingham, Massachusetts 01701 The Programmer's Companion is a series of pocket size, quick-reference guides to Prime software products

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Note

For more information on most of the commands in this book, see the **System Administrator's Guide**.

Credits

Editor	Pamela I Pierson
Project Support	Stephen E Alley
	Alice Landy
Design	Susan Windheim
Typesetter	The Typc Shop
Printer	Winthrop Printing Company

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Note

In response to user requests, a new Programmer's Companion has been created. This book, the **System Operator's Companion**, contains information on system operations and PRI-MOS Commands for the operator formerly in the **System Administrator's Companion**.

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COMMAND FORMAT CONVENTIONS

Uppercase: Identifies commands of keywords Enter literally SMLC ON

Lowercase: Identifies arguments Substitute an appropriate numerical or text value -DAYS n

Abbreviations: Indicated via rust-colored letters. LENGTH n

Braces { }: Indicate a choice of arguments and/or keywords At least one choice must be selected

BLOCK {queuename}

Square Brackets []: Indicate an optional keyword or argument

FILE [pathname]

Hyphen -: Identifies a command line option Must be entered literally

USAGE -DISK

Ellipsis . . . : Indicates that the preceding argument may be repeated

ADDISK diskname-1 [diskname-2] ...

Angle brackets (): Used literally to separate the elements of a pathname (FOREST) BEECH) BRANCH537) TWIG43) LEAF4

Parentheses (): Must be entered literally. ADDRESS site + server [(password)]

Option: Indicates that one or more optional arguments can be given and that a list of options for the particular command follows

BATCH -START [options]

Spaces: Used literally to separate commands and arguments in command lines PROP_PRO_-MODIFY_NOW

TERMINOLOGY

Byte: 8 bits, 1 character

Halfword: 16 bits, 2 bytes

Fullword: 32 bits, 2 halfwords, 4 bytes

TERMINOLOGY

SYSTEM CONFIGURATION FILE

This section contains information that you need to set the system configuration. Normally called CON FIG, the system configuration file contains data detailing how the configuration is set up. The name of the system configuration file is determined by the C_PRMO file, also known as PRIMOS COMI C_PRMO is a command file that is invoked during system cold start. (Both the CONFIG and C_PRMO files are in the directory CMDNC0.)

The first line of C_PRMO is CONFIG -DATA configuration-file

This specifies **configuration-file** as the system configuration file. After the configuration file is used to set system parameters and configure the system, the system continues to use the C_PRMO file to initialize system software and subsystems

REQUIRED PARAMETERS

Parameters

Command disk Indicates end of config file Primary paging disk Terminal users, number of CONFIG Directive

COMDEV GO PAGDEV NTUSR

SYSTEM AND NETWORK PARAMETERS

Parameter	Default Value	Meaning of Value	CONFIG Dırective
ABBREV processor AMLC DMC	YES	Enabled	ABBREV
input buffer (tumble tables)	'60	48 chars	AMLIBL
AMLC/ICS programmable clock linespeed	'22600	9600 bps	AMLCLK
ASR terminal input buffer	'200	128 chars	ASRBUF
ASR terminal output buffer	'300	192 chars	ASRBUF
Assignable async line	0	None	NAMLC

Parameter	Default Value	Meaning of Value	CONFIG Directive
Asynchronous line input buffer	'200	128 chars	AMLBUF
Asynchronous line output buffer	'300	192 chars	AMLBUF
Buffers reserved for assigned lines	0	None	NAMLC
Carrier check operations interval	2	.2 secs	AMLTIM
Configure network	-	Disabled	NET ON
DMQ AMLC/ICS buffer	' 40	32 chars	AMLBUF
DTR dropped/not dropped on logout	-	Not	DTRDRP
Erase character (system)	'242	"	ERASE
Event logging (system) enabled at cold start	0	Enabled	LOGREC
File system read/write lock	1	EXCL	RWLOCK
Guaranteed per-user file units	'20	16	FILUNT

Parameter	Default Value	Mcaning of Value	CONFIG Directue
ICS input queue size Inactivity before	'77	63 chars	ICS INPQSZ
forced logout (minutes)	'1750	1000 mins	LOUTQM
Kıll character (system)	'277	7	KILL
Line speeds for ICS lines (speeda, speedb, speedc)	'113 '226 '3410	75 bps 150 bps 1800 bps	ICS JUMPER
Locate buffers	'100	64 pages	NLBUF
Login inactivity timeout (minutes)	3	3 mins	LOTLIM
Login while logged in allowed	YES	Allowed	LOGLOG
Logout inactivity timeout (minutes)	'1750	1000 mins	LOUTQM
Logout on asynchronous line disconnect	NO	No logout	DISLOG
Maximum main memory	'400	512 Kb	MAXPAG
Maxımum per-user file units	'200	128	FILUNT
Minimum grace time foi terminal lines	0	Disabled	AMLTIM
Modem disconnect operations rate	'3410	1800 secs	AMLTIM

Parameter	Default Value	Meaning of Value	CONFIG Directive
Network event logging enabled at cold start Networks Number of buffers	0	Enabled Disabled	NETREC NET ON
reserved for assigned lines	0	None	NAMLC
Number of locate buffers	'100	64 pages	NLBUF
Number of prepaged pages	3	3 pages	PREPAG
Phantom users, number of	0	None	NPUSR PREPAG
Prepaged pages Print	ر	3 pages	PREPAG
configuration directives	NO	Disabled	TYPOUT
Print LOGIN/LOGOU messages	T Yes	Enabled	LOGMSG
Ratio of ALTDEV to PAGDEV use	5	5 of 10	PRATIO
Remote users, input buffer	'200	128 chars	REMBUF
Remote users, number of	0	None	NRUSR
Remote users, output buffer	'300	192 chars	REMBUF
Restart after power failure	'177777	Disabled	UPS
Segments per user process	'40	32 segs	NUSEG

SYSTEM AND NETWORK PARAMETERS

7

Parameter	Default Value	Meaning of Value	CONFIG Directive
Slave users, number of	0	None	NSLUSR
Supervisor terminal line speed	'1010	300 bps	ASRATE
Synchronous lines	_	Disabled	SMLC
System erase character	'242	"	ERASE
System event logging enabled at cold start	0	Enabled	LOGREC
System kıll character	'277	?	KILL
Total virtual address space (segments)	'1776	1022 segs	NSEG
Wired memory size printout	_	Disabled	WIRMEM

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CONFIGURATION DIRECTIVES

All numbers in configuration directives must be in octal notation. Octal numbers are indicated with the single quote ('). These directives are included in the system configuration file by editing the configuration file and adding to or modifying the file

$\bullet ABBREV \left\{ \begin{array}{c} YES \\ NO \end{array} \right\}$

Controls use of ABBREV files. YES: users can use ABBREV files. NO: ABBREV files can't be used. Default YES.

► ALTDEV physical-device [records]

Specifies the alternate paging device and, optionally, the size of the paging areas in records.

physical-device is the physical device number of the paging disk or partition.

records is rarely used. It specifies the size of the alternate paging device Default use entire paging area of partition.

AMLBUF line [in [out [dmq]]]

Sets terminal I/O buffer sizes (in 16-bit halfwords) on async line. Includes ICS lines

line is the async line number for which buffer sizes are to be set

in is the terminal input buffer size (two characters per halfword). If 0 is specified, default size is selected. Minimum: 1. Maximum: '7777 (4095 decimal). Default: '200 (128 decimal)

out is the terminal output buffer size (two characters per halfword). If 0 is specified, the default size is selected. Minimum. '62 (50 decimal). Maximum: '7777 (4095 decimal). Default: '300 (192 decimal).

dmq is the size for the DMQ AMLC, ICS1, or ICS2 buffer (one character per halfword). If omitted or specified as 0, the default size is selected. Must be a power of 2 ('40, '100, '200, '400 . . .). Minimum: '20 (16 decimal). Maximum: '2000 (1024 decimal). Default. '40 (32 decimal).

AMLCLK baudrate

Sets AMLC software programmable clock to **baudrate** bits per second. Corresponds to async line speed setting of 4 in configuration halfword of AMLC command. Minimum: '35 (29 decimal). Maximum: '45400 (19200 decimal). Default: '22600 (9600 decimal).

When used for ICS1 or ICS2 async lines, AMLCLK must be one of the legal baud rates listed for the ICS JUMPER directive.

AMLIBL buffer-size

Sets DMC input tumble table sizes (for AMLC lines, one tumble table per AMLC controller) to **buffer**size in halfwords (one character per halfword). If 0 is specified, the maximum available buffer size is used. Minimum. '20 (16 decimal). Default: '60 (48 decimal).

AMLTIM [ticks [disctime [gracetime]]]

Sets three variable event timers

ticks is the time interval (in tenths of a second) between carrier check operations 0 means use the default Default 2(0.2 seconds)

disctime is the period (in tenths of a second) for forcing the Data Terminal Ready signal to the modem inactive on lines that do not have active carriers. disctime cannot be less than the value of ticks. 0 means use the default. Default '3410 (1800 decimal, 3 minutes)

gracetime is the minimum grace period (in tenths of a second) to establish terminal lines with active carriers that are not connected to logged-in processes. **gracetime** cannot be less than **ticks**. 0 disables this feature Default 0

► ASRATE key

Sets supervisor terminal baud rate when running PRI-MOS Commonly used values are.

Ker	Baud Rate (decimal)
110	110
1010	300 (default)
2010	1200
3410	9600

......

► ASRBUF 0 [in-buff-size [out-buff-size]]

Sets the supervisor terminal I/O buffer size in halfwords (two characters per halfword) Affects console port provided by the SOC, VCP, VCP II, or Diagnostic Processor Defaults. '200 (128 decimal), '300 (192 decimal)

COMDEV physical-device

Specifies command device (where CMDNC0 resides) to be **physical-device**. Must be specified.

Certain configuration parameters (such as COM-DEV, PAGDEV, and ALTDEV) are set using the system startup and configuration files residing on logical disk 0 while running under PRIMOS II All remaining configuration parameters are set using the system startup and configuration files residing on **physical-device**. Therefore, **physical-device** should be the same as logical disk 0 when running PRIMOS II, or the final system configuration may be unpredictable.

► DISLOG {YES NO }

Controls disconnect logout option. YES user is logged out if async line is disconnected. NO. user is not logged out Default NO

DTRDRP

Specifies that the DTR (Data Terminal Ready) for an async line user is to be dropped momentarily whenever that user logs out (Logged-out users can also issue the DROPDTR command explicitly) Default wait for the period of time specified via the AMLTIM gracetime value before dropping DTR

► ERASE {character } octal-value}

Sets system erase character to the specified **character** or to the character with ASCII **octal-value**. Default " ('242)

FILUNT reserved-unit max-unit

Sets guaranteed and maximum per-user file units Defaults '20 (16 decimal), '177 (127 decimal)

► GO

Marks end of configuration data file Configuration data file must include GO directive

ICS INPQSZ queuesize

Sets the size of the ICS1 and ICS2 controller-to-PRIMOS input queues to **queuesize** halfwords (one character pet halfword) Must be equal to one less than a power of two (such as '177, '377) Default: '77 (127 decimal)

► ICS JUMPER speeda speedb speedc

Defines the three optional line speeds for async lines connected to an ICS1 or ICS2 controller. **speeda**, **speedb**, and **speedc** are line speeds (bps). Legal speeds and their octal equivalents are shown in the following table. Defaults: '113 (75 decimal), '226 (150 decimal), '3410 (1800 decimal).

To Set Speed (bps)	Specify Octal Value
50	62
75	113
110	156
150	226
200	310
300	454
600	1130
1200	2260
1800	3410
2400	4540
3600	7020
4800	11300
7200	16040
9600	22600
19200	45400

The AMLC command can be used to select one of these three optional line speeds. Refer to the AMLC command for further information.

KILL {character } octal-value}

Scts system kill character to the specified **character** or to the character with ASCII **octal-value**. Default: ? ('277).

÷

LOGLOG option

Controls implicit logouts YES users can use LOGIN while logged in NO LOGIN command inhibited for logged in users Default YES

LOGMSG option

Controls printing of LOGIN/LOGOUT messages at supervisor terminal YES print messages NO do not print messages Defult YES

LOGREC value

Enables or disables system event logging 0 enables event logging 177777 disables event logging (useful when running a write protected disk). Use the EVENT_LOG command to turn event logging on or off after PRIMOS is running. Default 0

LOTLIM minutes

Sets login time limit in **minutes**, an octal number of minutes allowed for a user to login Minimum 2 Default 3

LOUTQM minutes

Sets inactivity time **minutes** is the number of minutes of inactivity (minus 1) that the user is allowed at the terminal before being automatically logged out by the system Default '1750 (1000 decimal)

MAXPAG number-of-pages

Sets the number of physical memory pages (2 Kbytes each) to be validated at cold start For best performance, set to the real number of physical memory pages on your system Default '400 (256 Kbytes)

Memory (MBytes)	Memory (pages)	MAXPAG argument
16	8192	20000
14	7168	16000
12	6144	14000
10	5120	12000
8	4096	10000
6	3072	6000
4	2048	4000
3	1536	3000
2	1024	2000
1.5	768	1400
1	512	1000
.5	256	400

NAMLC number-of-buffers

Sets number of assignable async lines NAMLC + NTUSR + NRUSR cannot exceed '200 (128 decimal) Default 0

► NET ON

Enables PRIMENET, if purchased

NETREC value

I

Enables or disables PRIMENET event logging 0 enables PRIMENET event logging 177777 disables PRIMENET event logging (useful when running a write protected disk) Use the EVENT_LOG command to turn PRIMENET event logging on or off after PRIMOS is running Default 0

NI BUF number-of-buffers

Specifies the number of 2-Kbyte locate buffers to be configured Minimum '10 (8 decimal) Maximum. '400 (256 decimal) Default '100 (64 decimal).

NPUSR number-of-phantoms

Sets number of phantom users NPUSR + NRUSR + NSLUSR + NTUSR cannot exceed '200 (128 decimal) Minimum 0 Default 0

NRUSR number-of-remote-users

Sets number of processes reserved for remote logins NRUSR + NPUSR + NSLUSR + NTUSR can not exceed '200 (128 decimal) Minimum 0 Maximum '40 (32 decimal) Default 0

NSEG number-of-segments

Sets total system virtual address space in 128 Kbyte segments Maximum '20000 (8192 decimal) Default '1776 (1022 decimal)

► NSLUSR number-of-slaves

Sets number of processes reserved for slaves Used for remote file access, OAS EMAIL, etc. NSLUSR + NRUSR + NTUSR + NPUSR cannot exceed '200 (128 decimal) If larger than maximum, system defaults to maximum Minimum 0 Maximum '77 (63 decimal) Default 0

► NTUSR number-of-users

Sets number of terminal users, including the supervisor terminal Must be specified NTUSR + NRUSR + NSLUSR + NPUSR cannot exceed '200 (128 decimal) Minimum 2 (supervisor terminal plus one local terminal user)

► NUSEG number-of-segments

Sets the per process virtual address space size in num ber of 128 Kbyte segments Maximum '360 (240 deci mal) Default '40 (32 decimal)

► PAGDEV physical-device [records]

Specifies paging device and, optionally, its size Must be specified

physical-device is the physical device number of the paging disk or partition

records is rarely used. It specifies the size of the paging device. Default, use the entire paging area of the partition.

PRATIO n

Sets to **n** the approximate number of times the alternate paging disk is to be used for each 10 times that paging space is allocated. Minimum: 0. Maximum: '12 (10 decimal) Default. 5

PREPAG number-of-pages

Sets number of prepaged pages to **number-of-pages.** Default[.] 3.

REMBUF in-buff-size out-buff-size

Sets terminal input and output buffer sizes in halfwords (two characters per halfword) foi all remote users. Recommended values: '200 (128 decimal), '400 (256 decimal) Minimum: '113 (75 decimal), '100 (64 decimal). Default: '200 (128 decimal), '300 (192 decimal).

RWLOCK value

Sets default file system read/write lock (SYS setting). Default. 1.

Value	Meaning
0	l reader or l writer
1	N readers or 1 writer
3	N readers and 1 writer

.

SMLC ON

Configures synchronous communications drivers for SMLC, MDLC, HSSMLC, and ICS1 communications controllers. Must be specified if synchronous lines will be used for products other than PRI-MENET.

SMLC CNTRLR controller-number [deviceaddress]

Maps an SMLC, MDLC, HSSMLC, and/or ICS1 communications controller at **device-address** as the first or second logical synchronous controller on the system. Must appear before any SMLC SMLCnn directives.

controller-number must be 0 or 1. It is used for the SMLC SMLCnn directive.

device-address identifies the controller to be associated with controller-number 0 or 1. Minimum. 0. Maximum: '77 (63 decimal). Default: '100000 (controller disabled).

Common device addresses for these controllers are:

First SMLC, HSSMLC, or MDLC at '50. Second SMLC, HSSMLC, or MDLC at '51.

First ICS1 at '36. 2nd ICS1 at '37. 3rd ICS1 at '10. 4th ICS1 at '11. If the SMLC CNTRLR directive is not used, the default is:

SMLC CNTRLR 0 50 controller-number 0 at address '50. SMLC CNTRLR 1 100000 controller-number 1 disabled.

This configuration option must be specified to enable any ICS1 controller used for synchronous communications.

A maximum of two controllers can be used to provide synchronous communications ports.

SMLC SMLCnn controller-number line-number

Maps a logical sync line onto a specified controller and physical line.

nn is the logical line number used in ASSIGN and NET commands. Minimum. 00. Maximum: 07.

controller-number is the controller identifier set by an SMLC CNTRLR directive. Can be 0 or 1 to identify a controller, or '100000 if the specified line is not to be configured or allocated memory.

line-number specifies the physical line on the controller. If the controller is an ICS1, **line-number** must be 0 Minimum: 0. Maximum: 3.

If the SMLC SMLCnn directive is not used, the default configuration maps the first four logical lines to the first controller and the second four logical lines to the second controller as follows:

First Controller

Sccond Controller

SMLC	SMLC00	0	0	SMLC SMLC04 1 C)
SMLC	SMLC01	0	1	SMLC SMLC05 1 1	
SMLC	SMLC02	0	2	SMLC SMLC06 1 2	
SMLC	SMLC03	0	3	SMLC SMLC07 1 3	

SMLC DSC line strap proc recv

Used for DPTX/BSCMAN only Specifies data set control (DSC) information used by DPTX's BSC MAN for logical line provided by an SMLC, HSSMLC, or MDLC controller If you use this directive, it must appear after any SMLC SMLCnn directives

line is the logical line number represented by **nn** in the SMLC SMLCnn directive Minimum 0 Max imum 7

strap is an octal value consisting of a bit pattern that represents specific data set signals to be strapped (or raised) when **line** is chabled by BSCMAN

Bıt	Function When Sct (1)	Reset (0)
'1	Raise DTR	
'2	(Data Terminal Ready) Raise RTS	
	(Request to Send)	
'10*	Sclect fast	Sclect slow
	data set	data sct

[#] Used with Luropean data sets

Default 1 (raise DTR) Signals remain high until reset by BSCMAN

proc is the data set control procedure for transmit ting data. Default 2

Bıt	Function When Set (1)
1	No data set orders. Used with full
	duplex lines
2	RTS, wait for CTS, send, drop RTS
	Used with half-duples or multi-drop
	lines
3	Wait for no Carrier (CD), raise RTS,
	wait for CTS, drop RTS Used for
	noisy lines or modems that accept
	RTS while carrier is high

recv determines when the receiver is turned on 0: turn on receiver before transmitting. 1: turn on receiver after transmitting. Default: 0.

TYPOUT option

Controls printing of configuration directives at supervisor terminal. YES: print directives as processed. NO: do not print directives. Default: NO.

UPS number

Control restart after power failure.

- '177777 No UPS (Default)
 - 0 UPS, but HALT on a warm start
 - >0 Number of seconds to delay after warm start

► WIRMEM

Prints out size of wired memory (in Kbytes) at supervisor terminal during a cold start.



~~~ ~



# SYSTEM STARTUP FILE

After the command to start up PRIMOS is given, the operating system attaches to CMDNC0 on logical disk 0 (under PRIMOS II) and searches for PRI-MOS COMI If it does not find this file, it looks for C\_PRMO The C\_PRMO or PRIMOS COMI file is a command file that specifies the system configuration file (via a CONFIG -DATA command) and the system startup command sequence

### SYSTEM STARTUP TEMPLATE

The C\_PRMO (or PRIMOS COMI) template is supplied in UFD PRIRUN as C\_PRMO TEMPLATE It is incomplete and must be completed to meet the needs of each installation (See the **System Administrator's Guide** for details ) The contents of the file follow

```
/* C_PRMO_TEMPLATE, PRIRUN, JK-JNS, 03/28/83
/* TEMPLATE FOR MAKING C_PRMO FILE FOR BRINGING UP PRIMOS
/* Copyright (C) 1980, Prime Computer, Inc., Wellesley, MA 02181
/*
/* Shared libraries are released as part of the unchargeable software
/* as of Rev 19.1. The commands for sharing the following libraries
/* are included as part of this file and also as part of the
/* PRODUCT-SHARE-COMI file: COBOL, FORMS, MIDAS, MIDASPLUS This
/* may cause these libraries to be shared twice at system startup.
/*
/* This is not a problem, but if you wish, you may remove the
/* duplicate commands.
CONFIG -DATA
                                /* specify CONFIG file after -DATA
ADDISK
                                /* specify local disks to be added
AMLC TTY
                               /* specify AMLC lines
OPR 1
                               /* SHARE REQUIRES OPR 1
DODS DDDSd3(M3T2Y2 39AH2
                               /* SHARE the editor - ED
ODC 02050 2050 2050 2050 2050 2050
7.1. DUDASCHERSCHERS 8
                               /* SHARE FORTRAN LITERARIES
SHARE 2050
/* EITHER MIDAS OR MIDASPLUS MAY BE SHARED AT SYSTEM STARTUP
/* REMOVE THE COMMENT DELIMITERS FROM WHICHEVER YOU WISH ON YOUR
SYSTEM.
/*
/* SHARE SYSTEM)K2014 APLOS APLOS (MIDAS LIBRARY
/# SHARE SYSTEM)K20148 2014
/* R SYSTEM)K4000 1/2
/* SHARE 2020 200
/★ R SYSTEM>IMIDAS
/*
007 E515 E5159M
/* SHARE 2124 700
/* SHARE 2125 200
/* R SYSTEM:MP4000 1/2
14 SHARE 2122
/* R SYSTEM>IMIDASPLUS SYSTEM>MPLUS CONFIG
/*
SHARE SYSTEM/CODINA 2014 700 /* SHARE COBOL LIBRARY
C2014 841053(M3T2X2 384H2
EVI DODPO(MATZY2 R
SHARF 2014
SHARE SYSTEM: 50214 2021 700 /*SHARE FORMS LIBRARY
DOS 1505 815053(M3T2Y2 3RAH2
R SYSTEM)F4000 1/4
SHARE 2021
SHARE SYSTEM/SP2121 2121 /* SHARE SPL LIBRARY
R SYSTEM>SP4000 1/10
SHARE SYSTEM)S#2167 2167
                               /★ SHARE SPOOL LIBRARIES
51/1 0004¢2/M3T2Y2 8
207 0505 39AHZ
/* MAGLIB is a shared library as of Rev 19 2
SHARE SYSTEM ML2222 2222
                               /* SHARE MAGLIB
R SYSTEM MI 4000 3735
OPR D
PROP PRO - START
                               /* START SPOOLER PHANTOM
```

```
BATCH START
                                /* STARTUP BATCH MONITOR
CO SYSTEM>BASICV SHARE COMI 7
                                /* SHARE BASICV COMPILER
                                /* SHARE COBOL COMPILER AND LIBRARY
CO SYSTEM COBOL SHARE COMI 7
CO SYSTEMODBG SHARE COMI 7
                                /* SHARE DEBUGGER
CO SYSTEM: DBMS SHARE COMI 7
                                /* SHARE DBMS
CO SYSTEM: DSC SHARE COMI 7 /* SHARE DPTX-DSC
CO SYSTEM) DPTX TCF SHARE COMI 7 /* SHARE DPTX-TCF
CO SYSTEM EMACS SHARE COMI 7
                               / # SHARE EMACS
CO SYSTEM>FED SHARE COMI 7
                               /* SHARE FED
CO SYSTEM FORMS SHARE COMI 7
                               /★ SHARE FORMS LIBRARY
CO SYSTEMOFTS SHARE COMI 7
                               ZT3 3842 #\
CO SYSTEM)F77 SHARE COMI 7
                               /* SHARE E77 COMPILER
CO SYSTEM MIDAS SHARE COMI 7
                               /* SHARE MIDAS LIBRARY
CO SYSTEM MIDASPLUS SHARE COMI 7/* SHARE MIDASPLUS LIBRARY
CO SYSTEM/PASCAL SHARE COMI 7 /* SHARE PASCAL COMPILER
CO SYSTEM PLIG SHARE COMI ?
                               /* SHARE PLIG COMPILER
CO SYSTEM>POWERPLUS SHARE COMI 7/* SHARE POWER
7 INOS STARA ATZIV(MATZY2 0)
                               /* SHARE VISTA
CO SYSTEM>VRPG SHARE COMI 7
                                /∗ SHARE VRPG
CLOSE 7
/* SET THE DATE AND TIME *********
/* TYPE MAXUSE TO ALLOW USERS TO LOG IN
CO END
```

### SYSTEM STARTUP COMMANDS

This section contains information about startup commands, including commands for configuring and starting up disks, communications lines, system event logging, and file transfer. Use these commands only at the supervisor terminal or as part of the C\_PRMO file.

#### ► ADDISK { [PROTECT] pdev-1 [pdev-2]... } pdev -RENAME packname

Starts up local disk partitions identified by physical device number **pdev**. If PROTECT is included, each disk partition is write-protected.

-RENAME allows you to specify a new name for a disk when adding it to the system.

# Sets async line characteristics, including line protocol and speed

nodename

(FAM II only.)

[lword]]

protocol specifies the async protocol to be used:

► AMLC [protocol] line [configuration]

ADDISK diskname-1 [diskname-2]...-ON

Makes disk partitions identified by **diskname** on the remote computer **nodename** available to local users.

| Protocol | Meaning                                     |
|----------|---------------------------------------------|
| TTY      | Normal (default) terminal protocol          |
| TTYUPC   | Lowercase alphabetic characters translated  |
|          | to uppercase for output, uses normal termi- |
|          | nal protocol for input                      |
| TRAN     | Transparent (no character conversion).      |
| TTYNOP   | All traffic ignored                         |

TTYHUP, TTYHS, and TRANHS protocols are used <u>only</u> with obsolete DMT AMLCs (model 505x).

**line** is the async line number in octal Minimum 0. Maximum. '177 (127 decimal)

**configuration** is a 16-bit halfword (octal) used to set the line configuration. Sample values for **configura***t***ion**:

| Configuration | Baud Rate |
|---------------|-----------|
| 2213          | 300       |
| 2313          | 1200      |
| 2413          | 9600*     |

\*Default for 2413 if AMLCLK is not set

The configuration number is constructed in the following way. (The bit count is read from left to right, beginning at 1)

| Bits    | Meaning                                                                 |  |  |  |
|---------|-------------------------------------------------------------------------|--|--|--|
| 1,2,3,4 | Line number on controller Set by PRIMOS.                                |  |  |  |
| 5       | Reserved Set to 0.                                                      |  |  |  |
| 6       | 1 Data set control on.                                                  |  |  |  |
|         | 0: Data set control off.                                                |  |  |  |
| 7       | 1: Loop line                                                            |  |  |  |
|         | 0: Do not loop line.                                                    |  |  |  |
| 8,9,10  | Async line speed (bits per second).                                     |  |  |  |
|         | 000 110                                                                 |  |  |  |
|         | 001 134 5                                                               |  |  |  |
|         | 010 300                                                                 |  |  |  |
|         | 011 1200 (Default)                                                      |  |  |  |
|         | 100 Programmable clock (1)                                              |  |  |  |
|         | 101 75 (2)                                                              |  |  |  |
|         | 110 150 (2)                                                             |  |  |  |
|         | 111 1800 (2)                                                            |  |  |  |
|         | (1) Moons see AMI CI K directive                                        |  |  |  |
|         | (1) Means see AMLCLK directive                                          |  |  |  |
|         | (2) Means assigned by hardware jumper or ICS<br>IUMPER CONFIG directive |  |  |  |
| 11      | Reserved. Set to zero.                                                  |  |  |  |
| 12      | 0: 1 stop bit.                                                          |  |  |  |
| 10      | 1: 2 stop bits                                                          |  |  |  |
| 13      | 0. Enable parity                                                        |  |  |  |
|         | 1: Disable parity.                                                      |  |  |  |
| 14      | 0. Odd parity.                                                          |  |  |  |
|         | 1. Even parity                                                          |  |  |  |
| 15,16   | Character length.                                                       |  |  |  |
|         | 00 5 bits                                                               |  |  |  |
|         | 01 6 bits                                                               |  |  |  |
|         | 10 7 bits                                                               |  |  |  |
|         | 11 8 bits                                                               |  |  |  |

**lword** is a 16 bit halfword (octal) constructed as follows

| Bits | Meaning                                          |
|------|--------------------------------------------------|
| 1    | 0 Full duplex                                    |
|      | 1 Half duplex                                    |
| 2    | 0 Echo LF for RETURN                             |
| 2    | 1 Do not ccho LF for RETURN                      |
| 3    | 0 Disable XON/XOFF                               |
|      | 1 Enable XON/XOFF ( $\land Q/\land S$ )          |
| 4    | 0 Terminal output permitted                      |
|      | 1 Terminal output suspended (XOFF seen) See      |
| _    | also bit 6                                       |
| 5    | 1 Use buffered output                            |
| 6    | Data sense switch Determines polarity of bit 4   |
|      | Example Bit $6 = 1$ and bit $4 = 1$ means output |
| _    | permitted (XON)                                  |
| 7    | 0 Disable data detection                         |
|      | 1 Enable error detection (send NAK if parity or  |
|      | overflow sensed)                                 |
| 8    | Reserved Set to 0                                |
| 9-16 | Buffer number Normally line number plus 2 0      |
|      | means assignable line                            |

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#### ► BATCH -START [options]

I

Brings up the Batch monitor Other forms of the BATCH command control and monitor the Batch subsystem Refer to the System Operator's Companion for further information

| Option        | Function                                                                                                                  |
|---------------|---------------------------------------------------------------------------------------------------------------------------|
| -RLE VEL rlv  | Sets monitor priority and highest<br>batch job priority to <b>rlv</b> Minimum<br>0 Maximum 3 Default 1                    |
| -TIMESLICE ts | Sets monitor timeslice and highest<br>batch job timeslice to ts (tenths of<br>seconds) Minimum 1 Maximum<br>99 Default 20 |

# ► CHAP {-userno} [priority [timeslice]]

Changes priority level (range 0 to 3) and/or timeslice (in tenths of seconds) for a specified user or for all users

**priority** is the user priority Higher values usually result in more favorable scheduling for the user Minimum 0 Maximum 3 Default 1

**timeslice** is the user timeslice in tenths of seconds, specified in octal Minimum 1 Maximum '177777 (infinite timeslice) Default '24 (20 decimal or 2 seconds)

#### ELIGTS deciseconds

Sets time (in tenths of a second) that users run before being placed in the eligibility scheduler queue Default. 3

#### ► EVENT\_LOG [-NET] [-ON [-OFF]

Turns event logging for the system or for PRIMENET on or off -NET specifies PRIMENET logging Usc -ON to initiate logging, -OFF to terminate logging System log files are stored in UFD LOGREC\*, PRIMENET log files are stored in UFD PRIME-NET\* Use the LOGREC and NETREC configuration directives to turn event logging on or off during PRIMOS cold start Default -ON

#### FTOP option [name]

Starts file transfer servers and the file transfer manager, YTSMAN Other forms of the FTOP command control and monitor the FTS subsystem Refer to the System Operator's Companion for further information

| Option      | Function                                                                                                                   |
|-------------|----------------------------------------------------------------------------------------------------------------------------|
| -START_MNGR | Starts the FTS manager process,<br>YTSMAN If <b>name</b> is specified, it<br>overrides the name YTSMAN as<br>the user name |
| -START_SRVR | Starts a server process named<br>name if it is not already running<br>name must be specified                               |

#### MAXSCH[n]

Controls amount of overlapped processing performed by the system n must be specified in octal Minimum 1 Default depends on system type, amount of main memory, and configuration Algorithm is

(m + 3) \* x + y

where

m is the number of megabytes of main memory

**x** is 1 if system is not using an alternative paging device or if alternate paging device and paging device are both using same controller  $\mathbf{x}$  is 1 2 if alternate paging device and paging device are on different controllers

y is 1 if CPU is an 850 Otherwise, y is 0

#### ► MAXUSR[n]

Allows users to log in If issued before system date and time are set, it is ignored

**n** (octal) is the maximum number of allowable users (terminal, phantom, and remote) If number of users on system is greater than **n**, none are logged out, but no logins are allowed until number of users is less than **n** Default maximum number of configured users

# $\blacktriangleright \text{ OPRPRI} \begin{bmatrix} 0\\ 1 \end{bmatrix}$

Enables or disables use of the SHARE command from the supervisor terminal 1 Allow SHARE command to be used; 0: Do not allow SHARE command to be used Default 0.

#### ► SHARE [pathname] segment-number [access]

Incorporates **pathname** into segment **segmentnumber** with **access** access rights. If **pathname** is omitted, the access rights of **segment-number** are changed.

| Access | Allows Users                      |
|--------|-----------------------------------|
| 0      | No access                         |
| 200    | Read access                       |
| 600    | Read and execute access (Default) |
| 700    | Read, write, and execute access   |

### SHARED PRODUCTS INFORMATION

This section contains information on shared products that have been allocated shared segments and shared library package numbers.

#### SHARED SEGMENT ASSIGNMENTS

Segment

Product

| 2000<br>2001-2003<br>2004-2011<br>2012<br>2013<br>2014<br>2015<br>2016<br>2017<br>2020<br>2021<br>2022-2023<br>2024-2025<br>2026-2027<br>2030-2037<br>2040-2042<br>2043<br>2044-2045<br>2046-2047<br>2050 | Editor (ED)<br>DBMS<br>SPSS<br>DBMS<br>BASIC/VM<br>Shared libraries<br>DPTX<br>COBOL<br>BASIC/VM<br>MIDAS writable shared segment<br>FORMS library<br>Reserved for Prime<br>PRIME/POWER<br>File Transfer Service<br>Reserved for customers<br>DBG<br>SPSS<br>PL/1-G<br>FORTRAN 77<br>V-FTNLIB |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2051                                                                                                                                                                                                      | PL/I-G                                                                                                                                                                                                                                                                                        |
|                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                               |

| Segment                | Product                            |
|------------------------|------------------------------------|
| 2052<br>2053-2056      | FORTRAN 77<br>Reserved for Prime   |
| 2057-2063              | OAS                                |
| 2064-2066              | PASCAL                             |
| 2067                   | FORTRAN 77                         |
| 2070<br>2071           | DBMS<br>OAS                        |
| 2071                   | SPSS                               |
| 2073-2077              | DBMS/QUERY (VISTA)                 |
| 2100                   | EDMS                               |
| 2101                   | OAS                                |
| 2102-2114              | EDMS                               |
| 2115                   | DBG                                |
| 2116-2121              | Reserved for Prime                 |
| 2122-2125<br>2126-2127 | MIDASPLUS<br>File Transfer Service |
| 2120-2127<br>2130-2137 | MEDUSA                             |
| 2140                   | EDMS                               |
| 2141-2143              | EMACS                              |
| 2144-2146              | VRPG                               |
| 2147-2150              | EMACS                              |
| 2151-2153              | FED                                |
| 2154-2160              | CBL                                |
| 2161                   | EMACS                              |
| 2162-2163<br>2164-2166 | EDMS<br>Reserved for Prime         |
| 2167                   | SPOOL                              |
| 2170-2177              | Reserved for customers             |
| 2200-2207              | Reserved for Prime                 |
| 2210-2216              | TAPS                               |
| 2217-2220              | Reserved for Prime                 |
| 2221                   | EMACS                              |
| 2222<br>2223-2267      | MAGLIB<br>Reserved for Prime       |
| 2270-2276              | INFORMATION                        |
| 2277                   | Reserved for Prime                 |
| 2300-2317              | Reserved for customers             |
| 2320                   | MIDASPLUS                          |
| 2321                   | CBLLIB                             |
| 2322-2337              | Reserved for Prime                 |

#### Segment

#### Product

| 2340-2347 | EMACS                    |
|-----------|--------------------------|
| 6001      | Per-user linkage segment |
| 6006      | Per-user linkage segment |
| 6007      | Per-user linkage segment |
| 6010      | Per-user linkage segment |

#### 1 SEGMENT 2014

#### Allocated

#### Product

| 100-277      | COBOL library (VCOBLB) |
|--------------|------------------------|
| 300-377      | MIDAS library (VKDALB) |
| 1000-37777   | COBOL library (VCOBLB) |
| 40000-177777 | MIDAS library (VKDALB) |

#### 2 SEGMENT 6001

#### Allocated

#### Product

| 0-32777       | FORMS          |
|---------------|----------------|
| 33000-40777   | COBOL (VCOBLB) |
| 41000-66777   | MIDAS (VKDALB) |
| 67000-67767   | SPOOL          |
| 67770-67777   | BATCH          |
| 70000-105777  | FORMS          |
| 106000-112777 | ED             |
| 113000-117777 | NPX            |
| 120000-131777 | ABBREV         |
| 132000-177777 | V-FTNLIB       |

#### 3 SEGMENT 6006

#### Allocated

#### Product

| 0-37777       | File Transfer Service |
|---------------|-----------------------|
| 40000-51777   | MIDASPLUS             |
| 52000-137777  | Reserved for Prime    |
| 140000-163777 | CBLUB                 |
| 140000-163777 | CBLLIB                |
| 164000-177777 | Reserved for Prime    |
|               |                       |

#### - .

#### 4 THIRD-PARTY SOFTWARE

SPSS and TAPS, although third-party software, have been assigned shared segments.

#### PACKAGE NUMBER ASSIGNMENTS

| Package<br>Number | Library               |
|-------------------|-----------------------|
| I                 | V-FTNLIB              |
| 2                 | VKDALB and MPLUSLB    |
| 3                 | VCOBLB                |
| 4                 | VFORMS                |
| 5                 | DBMSLB                |
| 6                 | OAS                   |
| 7                 | EMACS                 |
| 10                | Reserved for Prime    |
| 11                | File Transfer Service |
| 12                | SPOOL                 |
| 13                | Reserved for Prime    |
| 14                | Reserved for Prime    |
| 15                | Reserved for Prime    |
| 16                | MAGLIB                |
| 17                | INFORMATION           |
| 20                | Reserved for Prime    |

## PRIORITY ACCESS

This section contains information about commands used for listing, adding, and removing priority access for a disk partition.

#### LIST\_PRIORITY\_ACCESS partition-name

Allows listing of the priority ACL on any partition at any time.

#### REMOVE\_PRIORITY\_ACCESS partitionname

Removes priority access from partition. System Administrator or supervisor terminal command only.

#### ► SET\_PRIORITY\_ACCESS partition-name acl

Sets priority access for any partition. System Administrator or supervisor terminal command only. The format of **acl** is:

id:rights [...]

where **id** is the username, groupname, or \$REST and **rights** are any combination of P (Protect), D (Delete),

A (Add), L (List), U (Use), R (Read), or W (Write). **rights** may also be ALL to indicate PDALURW rights, or NONE to indicate no rights.

Unlike regular access control lists, priority access does <u>not</u> include an implicit \$REST NONE

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### SUBSYSTEM CONFIGURATION

This section contains information about configuring, starting, and tracking subsystems including Batch, Spool, and the File Transfer Service.

#### BATGEN pathname

Defines, modifies, and monitors the Batch environment. **pathname** specifies the Batch definition file, usually this is BATCHQ>BATDEF. Batch Administrator command only

#### BATGEN SUBCOMMANDS

Subcommand

Function

ADD queue

BLOCK (queue)

DELETE {queue ALL} Instructs BATGEN to create a new queue Initiates queue definition subcommand mode

Tells an existing queue (or all queues) to disallow submission of further jobs to the queue

Flags an existing queue (or all queues) for deletion Queue accepts no more jobs and is deleted when all currently pending jobs have been run

| -                                                                                                      |                                                                                                                                                                                    |
|--------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Subcommand                                                                                             | Function                                                                                                                                                                           |
| $\begin{array}{c} \text{DISPLAY} \begin{bmatrix} \text{queue} \\ \text{ALL} \end{bmatrix} \end{array}$ | Lists queue characteristics.                                                                                                                                                       |
| FILE [pathname]                                                                                        | Writes new Batch environ-<br>ments to file named<br><b>pathname</b> . Default:<br>pathname specified on<br>BATGEN command line.                                                    |
| MODIFY queue                                                                                           | Instructs BATGEN to modify<br>an existing queue. Initiates<br>queue definition subcommand<br>mode.                                                                                 |
| QUIT                                                                                                   | Terminates session without<br>changing file. If anything was<br>modified during the session,<br>BATGEN prompts Environ-<br>ment modified, OK to<br>quit? Type Y oi (CR) to<br>quit |
| STATUS                                                                                                 | Summarizes queue status.                                                                                                                                                           |
| UNBLOCK {queue<br>ALL }                                                                                | Resets a previously blocked<br>queue (or all queues), allowing<br>job submissions to be made.<br>Initial status is unblocked.                                                      |
| BATGEN QUEUE DEI                                                                                       | FINITION SUBCOMMANDS                                                                                                                                                               |
| Subcommand                                                                                             | Function                                                                                                                                                                           |
| CPTIME dflt [max] Sets CPU time parameters (in sec-                                                    |                                                                                                                                                                                    |

- onds) for jobs submitted to this queue. Specify NONE for no time limit. Minimums: 1, 1. Defaults: NONE, NONE.
- **ETIME dflt [max]** Sets elapsed time parameters. Same as CPTIME except that its values are given in minutes rather than seconds.

| Subcommand       | Function                                                                                                                                                          |
|------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| FUNIT number     | Sets default file unit for command<br>file jobs submitted to this queue<br>Minimum: 1 Maximum depen-<br>dent on number of file units (usu-<br>ally 126) Default 6 |
| PRIORITY value   | Sets default value for a job's prior-<br>ity (vis-a-vis other jobs in the same<br>queue) Minimum 0 Maximum<br>9 Default 5                                         |
| QUIT             | Aborts the queue subcommand session, leaving an existing queue unchanged or not adding a new queue                                                                |
| RETURN           | Commits new or modified queue<br>characteristics to the current envi-<br>ronment for future display and/or<br>filing Returns to BATGEN com-<br>mand mode          |
| RLEVEL delta-rlv | Sets the amount job priority is<br>lowered from priority of Batch<br>monitor Minimum 0 (no lower-<br>ing) Maximum 7 (maximum low-<br>cring) Default 0             |
| TIMESLICE value  | Sets timeslice value (in tenths of<br>seconds) for jobs in the queue<br>Minimum 1 Maximum 99<br>Default. 20 (2 seconds)                                           |

#### FIXBAT [options]

Handles startup protocol for the Batch monitor, fixes broken pointers in the queue files, and deletes inactive jobs specified by age FIXBAT is supplied as BATCHQ)FIXBAT.SAVE, not as a command in CMDNC0 It runs every time the Batch monitor is started with BATCH – START Batch Administrator command only

BATGEN /  $H\lambda BAT$ 

#### FIXBAT OPTIONS

#### -DAYS n

Removes all canceled, completed, or aborted jobs which are **n** or more days old from the Batch queues Mini mum: 0. Maximum: 60 Default no jobs removed

#### -QUIET

Does not send a message to the terminal when FIXBAT removes a job from a queue. (Useful only if -DAYS is also specified.)

#### -STARTUP argument

Starts the BATCH monitor, specified only in the file BATCHQ>START\_BATCH\_MONITOR COMI

Takes one of four arguments (SAVE, SPOOL, DELETE, or NOLOG) to tell FIXBAT what to do with the Batch COMOUTPUT file

| Argument | Meaning                                                                                                            |
|----------|--------------------------------------------------------------------------------------------------------------------|
| SAVE     | Renames current COMOUTPUT log to<br>OLDLOG (deleting any existing<br>OLDLOG) Creates new COM-<br>OUTPUT file O_LOG |
| SPOOL    | Spools current COMOUTPUT file, call-<br>ing it BATCH LOG Creates and opens<br>a new O_LOG file.                    |
| DELETE   | Opens O_LOG as COMOUTPUT file.                                                                                     |
| NOLOG    | Takes no action with regard to COM-<br>OUTPUT files                                                                |

#### FTGEN

Defines, modifies, and monitors the File Transfer Service (FTS) environment FTGEN has three sepa rate subcommand modes for specifying more detailed configuration information. One mode is for queues, another for servers, and a third for sites. These modes are entered via the ADD or MODIFY subcommand for the type of object being modified and are used to specify detailed information. User SYSTEM command only

#### FTGEN SUBCOMMANDS

#### ADD\_QUEUE

Adds a new queue, prompting for queue subcommands

#### ADD\_SERVER server-name

Adds 1 new server, prompting for server subcommands

#### ADD\_SITE site-name

Adds a new site, prompting for site subcommands

#### BLOCK\_QUEUE

Blocks an existing queue, preventing new requests from being submitted to the queue

#### DELETE\_QUEUE

Deletes an existing, empty queue, which is not being serviced by a server

#### DELETE\_SERVER server-name

Deletes an existing server, which cannot be running at the time

#### DELETE\_SITE site-name

Deletes an existing site

#### HELP [subcommand]

Displays information on general usage or a specific sub command

#### INITIALIZE\_FTS

Initializes the FTS data base to a consistent state, then performs a STATUS command

#### LIST\_QUEUE {queue-name -ALL

Displays the characteristics of the specified queue or all queues

# LIST\_SERVER {server-name}

Displays the characteristics of the specified server or all servers

#### LIST\_SITE {site-name -ALL}

Displays the characteristics of the specified site or all sites

#### MODIFY\_QUEUE queue-name

Modifies an existing queue, prompting for queue subcommands. The queue cannot be modified if it is being serviced by a server

#### MODIFY\_SERVER server-name

Modifies an existing server, prompting for server subcommands. The server cannot be modified while it is running

#### MODIFY\_SITE

Modifies an existing site, prompting for site subcommands

#### PURGE\_QUEUE queue-name

Deletes all requests from the queue, except those currently in progress

#### QUIT

Leaves FTGEN

#### STATUS

Displays the current state of the FTS configuration

#### UNBLOCK\_QUEUE queue-name

Reverses the effect of BLOCK\_QUEUE, allowing submissions to proceed

#### FTGEN QUEUE SUBCOMMANDS

#### BLOCK\_QUEUE

Blocks the queue

#### FILE

Files the queue configuration, returning to FTGEN subcommand mode

#### LIST\_QUEUE

Displays the characteristics of the queue.

# LOG {filename}

Enables logging of queue events in FTSQ')filename or disables logging Default -OFF

#### MAXIMUM\_REQUESTS number

Specifies the maximum number of requests the queue can hold at one time. Only valid during an ADD\_QUEUE operation. Default: 16384

#### MESSAGE\_I EVEL level

Specifies the level of information to be entered into the log file. See the table of message levels below. Default NORMAL

#### QUIT

Aborts the queue subcommand session, leaving an existing queue unchanged or not adding a new queue

#### UNBLOCK\_QUEUE

Reverses the effect of BLOCK\_QUEUE, allowing submissions to proceed

#### FTGEN SERVER SUBCOMMANDS

#### FILE

Files the server configuration, returning to FTGEN sub-command mode

#### LIST\_SERVER

Displays the characteristics of the server

# LOG {filename}

Enables logging of server events in FTSQ<sup>+</sup> ) filename or disables logging Default -OFF

#### MESSAGE\_LEVEL level

Specifies the level of information to be entered into the log file. See the table of message levels, below Default: NORMAL

#### PASSWORD password

Specifies the password for the server **password** must conform to the rules for a legal filename, but cannot contain the characters , /, or - Password checking is case-sensitive Default blank password

#### PORT port

Must be used to specify the unique port number for the server Minimum 1 Maximum 99

#### PRIORITY level

Sets the PRIMOS priority level for the server Used when the server is started up. Minimum. 0 Maximum: 3 Default 1

#### PROGRAM filename

Specifies the program to be run when the server starts up The command line is SEG FTSQ\*>filename server-name. Default FTPSEG

#### QUEUE queue-name

Must be used to specify the queue that this server is to service. The queue must exist and cannot be serviced by another server.

#### QUIT

Aborts the server subcommand session, leaving an existing server unchanged or not adding a new one

#### TIMESLICE ts

Sets the PRIMOS timeslice for the server. Used when the server is started up. Expressed in tenths of seconds. Minimum, 1. Maximum, 99. Default, 20.

#### ADDRESS site +server[(password)]

Must be used to specify the address of the site site is either the nodename of a configured site or the PRI MENET address of a nonconfigured site server is the name of the remote FTS server password is the optional password of the remote server

#### FILE

Files the site configuration, returning to FTGEN sub command mode

#### LIST\_SITE

Displays the characteristics of the site

# LOG {filename}

Enables logging of site events in FTSQ\*)filename or disables logging Default -OFF

#### MESSAGE\_LEVEL level

Specifies the level of information to be entered into the log file. See the table of message levels, below. Default NORMAL

#### QUEUE queue-name

Must be used to define the default queue for local requests for transfers to the current site

#### QUIT

Aborts the site subcommand session, leaving an existing site unchanged, or not adding a new one

#### FTGEN MESSAGE LEVELS

| Message    | Level Function                                    |
|------------|---------------------------------------------------|
| NORMAL     | Only enters minimum details in the log<br>Default |
| DETAILED   | Log all events                                    |
| STATISTICS | Log all events and include statistics             |
| TRACE      | Log all events, statistics, and trace information |

FTGEN

#### NETCFG [options]

Creates a NETCON file for configuring the local node within PRIMENET For more information, see the **PRIMENET Guide**.

#### PROP name [option]

Configures and modifies the printer spooling phantoms **name** is a unique (1–16 character) name identifying the printer phantom

#### PROP OPTIONS

#### -CREATE

Sets up a new spooler environment. Enters environment definition subcommand mode

#### -MODIFY NOW FINISH IDLE

Modifies spooler invironment Enters environment definition subcommand mode Modifications take effect sometime after FILE subcommand NOW immediately FINISH after spooler finishes the currently printing file IDLE when spooler has no more work to do. If spooler is not running, modifications take effect immediately Default FINISH

#### -START

Starts up spooler

#### PROP SUBCOMMANDS

#### COMOUT {ON OFF}

ON keep a COMOUTPUT file (SPOOLQ(O\_label) of all spooler actions. Append to file if it already exists OFF turn COMOUTPUT off Default OFF.

#### DEST synonym

Adds the destination printer name synonym



Sets output device If AMLC is selected, it must be followed by an octal line number. The async line is used as configured on the supervisor terminal. Default PRO

#### DISPLAY

Displays all environment parameters with their latest values

# $EVFU \begin{cases} -ON \\ -OFF \\ -NAME evfu \end{cases}$

-ON is used for a PRÍME Matrix Line Printer, model 3173 or 3126 with EVFU When -ON is used, the LINES parameter must specify the exact number of lines per page -OFF makes spooler treat the printer normally -NAME makes use of the special EVFU file SPOOLQ)evfu, which explicitly defines channels Default -OFF

#### FILŁ

Exits the environment definition mode, modifying an existing environment (for -MODIFY) or creating a new one (for -CREATE)

#### FORM synonym

Adds the printer form name synonym.

# HEADER 1

Sets number of header pages A setting of 2 gives a trailer page Default 1

#### LARGE [n OFF]

Print files whose length in records is less than  ${\bf n}$  before larger files. Default 20

#### LENGTH n

Print n lines per page Default 38

#### 

Do not print any files bigger than  ${\bf n}$  disk records Default OFF

#### LINES [n

LOFF

Sets number of physical lines per page OFF the value LENGTH + 13 is assumed Default OFF

#### LOWER n

Sets starting logical disk number for queue scanning  ${\bf n}$  is a decimal number Default 0

#### MESSAGE [text]

Print text on every header page text is one line of up to 80 characters. Default null message

#### PAPER name

Mount name forms name is from 1-6 characters All FORM synonyms are deleted Default blank form name

# PLOT (ON )

ON scan queue for PLOT files OFF ignore PLOT files in queues Default OFF

#### PRINT (ON OFF)

ON scan the qucue for PRINT files OFF ignore PRINT files in the qucue Default ON

#### QUIT

Aborts environment definition mode, leaving an exist ing environment unchanged or not creating a new one

## TYPE $\begin{cases} 0 \\ 1 \end{cases}$

0 300 lpm printer/plotter 1 band printer Default 0 UPCASE {ON }

#### loff

ON convert all lower case characters to up before printing OFF do no conversion Def

#### UNDEST synonym

Deletes the destination printer name synonym

#### UNFORM synonym

Deletes the printer form name synonym.

#### UPPE**R** n

Sets highest logical disk number for queue scanning  $\mathbf{n}$  is decimal Default 63

#### WIDTH n

Sets number of physical columns on a page Used for formatting header and/or trailer pages Default 108

- -

## USER PROFILES

This section contains information about the EDIT\_PROFILE command, used to create, modify, and delete user and project profiles The general form of the command is

EDIT\_PROFILE {[pathname][-PROJECT proj]} {-MFD\_PASSWD password

EDIT\_PROFILE allows System Administrators to list and change system-wide parameters and to define, list, modify, and delete projects It allows System Administrators (SA) and Project Administrators (PA) to list and modify project characteristics, and to add, list, modify, and delete user profiles. Specify the –PROJECT option to enter Project Administrator mode Specify **pathname** to use a SAD other than  $\langle 0 \rangle$ MFD $\rangle$ SAD Specify –MFD\_PASSWD if no SAD exists in  $\langle 0 \rangle$ MFD and if  $\langle 0 \rangle$ MFD is not an ACL MFD

#### SYSTEM SUBCOMMANDS

#### CHANGE\_SYSTEM\_ADMINISTRATOR [user-id][-ALL]

[SA only] Instructs EDIT\_PROFILE to change the user-id of the System Administrator Specify –ALL to change Project Administrators with the same user-id as the outgoing System Administrator to the user-id of the incoming System Administrator –ALL is assumed if the only project is DEFAULT EDIT\_PROFILE automatically terminates after the System Administrator has been changed Default prompt for user-id.

#### ► FORCE\_PASSWORD [-ON [-OFF]]

[SA only] -ON requires users to wait for a system prompt before typing a login password so that the password is not echoed -OFF allows users to specify a login password on the LOGIN command line Default -ON

#### HELP [command name]

Displays arguments, options, and option arguments for one or all EDIT\_PROFILE subcommands Default display summary of all subcommands

#### ▶ LIST\_SYSTEM [options]

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[SA only] Displays system, group, project, and user attributes, depending on the options specified Default display only system attributes

| Option           | Function                                                                                                                                                                                              |
|------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| -APPEND          | Used only with -OUTPUT<br>to append to file If the<br>-APPEND option is not<br>specified, the file named by<br>the -OUTPUT option is<br>overwritten and the contents<br>of the original file arc lost |
| -ALL             | Same as specifying –USERS,<br>–GROUPS, and –PRO<br>JECTS Lists information on<br>all three categories                                                                                                 |
| -DETAIL          | Lists complete membcrship<br>information on users,<br>groups, and piojects (keyed<br>by whether -USERS,<br>-GROUPS, or -PROJECTS<br>was also specified)                                               |
| -GROUPS          | Lists all groups on the sys tem                                                                                                                                                                       |
| –OUTPUT pathname | Directs output into file<br><b>pathname</b> . If only a<br>filename is specified, rather<br>than a full pathname, the file<br>is opened in the SAD                                                    |
| -PROJECTS        | Lists all projects on the sys-<br>tem with their attributes                                                                                                                                           |
| -TTY             | Send output to terminal<br>Can be used with<br>-OUTPUT (Default )                                                                                                                                     |
| -USERS           | Lists system-wide attributes of all system users.                                                                                                                                                     |

LIST\_SYSTEM

#### ► NO\_NULL\_PASSWORD [-ON [-OFF]

[SA only] Inhibits or enables the specification of null login passwords Use -ON to disallow null passwords, -OFF to allow them Defaulr -ON

#### QUIT

Leaves EDIT\_PROFILE, returns to PRIMOS com mand level

# REBUILD [-PROJECT [proj]] [-SIZE entries]

Rebuilds user profile data base Specify –PROJECT to rebuild a project, otherwise the entire system data base is rebuilt Specify –SIZE to reserve space for **entries** users The –SIZE option can be used by the System Administrator only Default depends on current number of entrics

Users must not attempt to log into the system during a rebuild Type MAXUSR 0 at the supervisor terminal before starting to rebuild a file

#### SET\_DEFAULT\_PROTECTION [-CONVERT]

[SA only] Restorcs ACL protection and read/write lock settings in the SAD to the default states Specify -CONVERT only to convert a password SAD to ACL protection

#### PROJECT SUBCOMMANDS

#### ADD\_PROJECT [project-id [options]]

[SA only] Creates a new project named project-id.

| Option          | Function                                                                                                                                         |
|-----------------|--------------------------------------------------------------------------------------------------------------------------------------------------|
| -CREATE_PA      | Makes Project Administrator a member of the new project                                                                                          |
| -LIKE reference | Identifies an existing project<br>named <b>reference</b> whose attributes<br><b>are</b> used to determine the attrib-<br>utes of the new project |
| -NO_QUERY       | Prevents EDIT_PROFILE from<br>asking whether you want to check<br>or change the newly-created pro-<br>ject definition                            |
| -PA [user-id]   | Specifies Project Administrator for this project Default prompt for <b>user-id</b> .                                                             |
| -PROFILE        | Instructs EDIT_PROFILE to<br>prompt for the profile of the new<br>project Default null profile                                                   |
| -SIZE entries   | Specifies the expected number of users in the project Default 20                                                                                 |

#### ATTACH\_PROJECT [project-id]

Specifies the new current project for this EDIT\_PRO-FILE session. Default. prompt for **project-id**.

#### CHANGE\_PROJECT [project-id [options]]

Changes the attributes or size of **project-id**. A blank line in response to any CHANGE\_PROJECT prompt results in no change to the attribute defined in that prompt.

| Option        | Function                                                                                                                                                    |  |  |
|---------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|
| -LIMITS       | [SA only] Specifies that the master<br>project limits are to be changed Lim-<br>its are the set of access groups that<br>can be associated with the project |  |  |
| -LIST         | Displays updated project attributes.                                                                                                                        |  |  |
| –PA [user-id] | [SA only] Changes Project<br>Administrator to <b>user-id</b> . Default<br>prompt for <b>user-id</b> .                                                       |  |  |
| -PROFILE      | Instructs EDIT_PROFILE to<br>prompt for changes to the profile of<br>the project                                                                            |  |  |
| -SIZE [n]     | [SA only] Updates reserved space<br>for the project to hold <b>n</b> users<br>Default. depends on current number<br>of users.                               |  |  |

#### DELETE\_PROJECT [project-id]

[SA only] Deletes the specified project from the system. Cannot be used on a non-ACL system. If any project members are using the system when you try to delete their project, EDIT\_PROFILE asks you if you are sure that you want to delete the project Default. current project.

#### DETACH\_PROJECT [project-id]

Clears the definition of the current project, leaving it undefined If project-id is specified, it must be the name of the current project Reverse of the ATTACH\_PROJECT command

#### LIST\_PROJECT [project-id [options]]

Displays project attributes, project limits, and user attributes, depending on the options specified. Default display only project limits

| Option           | Function                                                                                                                                                |
|------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|
| -ALL             | Lists the profiles of all project members                                                                                                               |
| -APPEND          | Used with -OUTPUT to append to file, rather than overwrite it                                                                                           |
| -OUTPUT pathname | Directs output into file<br><b>pathname</b> . If only a<br>filename is specified, rather<br>than a full pathname, then<br>the file is opened in the SAD |
| -PROFILE         | Displays the project attrib<br>utes                                                                                                                     |
| -TTY             | Send output to terminal<br>Can be used with<br>-OUTPUT (Default)                                                                                        |
| –USER user-id    | Lists the profile of the speci-<br>fied project member                                                                                                  |

#### USER CONTROL SUBCOMMANDS

#### ► ADD\_USER [user-id [options]]

Adds a user to the system, a project, or both, and creates a user's profile Default prompt for **user-id**.

| Option          | Function                                                                                                                                                                                                                                                                            |  |
|-----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| -LIKE reference | Gives new user the same attrib-<br>utes as user <b>reference</b> .                                                                                                                                                                                                                  |  |
| -NO_QUERY       | Prevents EDIT_PROFILE from<br>asking whether you want to<br>check or change the newly<br>created user profile                                                                                                                                                                       |  |
| -PASSWORD [pwd] | [SA only] Specifies the login<br>password for the new user,<br>implies that you are adding the<br>user to the system When you<br>add a user to the system, you<br>must specify a password If null<br>passwords are allowed, then you<br>can set a null password for the<br>new user |  |
| -PROFILE        | Instructs EDIT_PROFILE to prompt for the profile of the new user Default project profile                                                                                                                                                                                            |  |
| -SYSTEM         | [SA only] Specifies that the<br>new user is to be added to<br>the system This is the default if<br>EDIT_PROFILE is in System<br>Administrator mode                                                                                                                                  |  |
| -PROJECT [proj] | Specifies the project to which<br>the user is to be added Cannot<br>be specified with -DEFAULT                                                                                                                                                                                      |  |

Function

Option

-DEFAULT [proj]

-VERIFY\_NS

[SA only] Same as -PROJECT and makes the specified project the user's default login project

[SA only] Scarches the SADs of all systems on PRIMENET, sees whether the user-id that you selected is already set up on a remote system as a valid id If the user id is already set up on another system, EDIT\_PRO-FILE displays a warning message that lists the PRIMENET nodenames of the duplicate userids

#### CHANGE\_USER [user-id [options]]

Changes a user's system-wide attributes, project based attributes, or both

| Option          | Function                                                                                                      |
|-----------------|---------------------------------------------------------------------------------------------------------------|
| -LIST           | Displays the modified user's attributes                                                                       |
| -PASSWORD [pwd] | Changes the user's login<br>password                                                                          |
| -PROJECT [proj] | Specifics that the user's project-based attributes in project project-id are to be changed                    |
| -SYSTEM         | Instructs EDIT_PROFILE to<br>allow the user's system wide<br>groups or default login project<br>to be changed |

ADD\_USER / CHANGE\_USER

# DELETE\_USER [user-id [-PROJECT [project-id]]]

Deletes a user from the system or from a project if -PROJECT is specified

# LIST\_USER [user-id] [-PROJECT [project-id]] \_ALL

Lists a user's attributes, either as a member of one project using the -PROJECT option, or as a member of each project to which the user belongs using the -ALL option

#### ► VERIFY\_USER [user-id] \_ALL

[SA only] Searches the SADs of the systems attached to yours by PRIMENET, checking for userids that are the same as the user-id that you have specified (or all user-ids on your system if you specified -ALL) If duplicate ids are found on remote systems, then it displays a warning message and shows a list of the systems on which the duplicate id appears

### OCTAL TO DECIMAL AND DECIMAL TO OCTAL CONVERSION CHARTS

Use the chart on the right, the decimal-to-octal conversion, <u>only</u> if you know how to add/subtract in octal.

| Octal  | Decimal | Decimal | Octal  |
|--------|---------|---------|--------|
| 1 to 7 | 1 to 7  | 1 to 7  | 1 to 7 |
| 10     | 8       | 8       | 10     |
| 11     | 9       | 9       | 11     |
| 12     | 10      | 10      | 12     |
| 13     | 11      | 11      | 13     |
| 14     | 12      | 12      | 14     |
| 15     | 13      | 13      | 15     |
| 16     | 14      | 14      | 16     |
| 17     | 15      | 15      | 17     |
| 20     | 16      | 16      | 20     |
| 30     | 24      | 17      | 21     |
| 40     | 32      | 18      | 22     |
| 50     | 40      | 19      | 23     |
| 60     | 48      | 20      | 24     |
| 70     | 56      | 30      | 36     |
| 100    | 64      | 40      | 50     |
| 200    | 128     | 50      | 62     |
| 300    | 192     | 60      | 74     |
| 400    | 256     | 70      | 106    |
| 500    | 320     | 80      | 120    |
| 600    | 384     | 90      | 132    |

| Octal  | Decimal | Decımal | Octal  |
|--------|---------|---------|--------|
| 700    | 448     | 100     | 144    |
| 1000   | 512     | 200     | 310    |
| 2000   | 1024    | 300     | 454    |
| 3000   | 1536    | 400     | 620    |
| 4000   | 2048    | 500     | 764    |
| 5000   | 2560    | 600     | 1130   |
| 6000   | 3072    | 700     | 1274   |
| 7000   | 3584    | 800     | 1440   |
| 10000  | 4096    | 900     | 1604   |
| 20000  |         |         | 1750   |
| 30000  | 12288   | 2000    | 3720   |
| 40000  | 16384   | 3000    | 5670   |
| 50000  | 20480   | 4000    | 7640   |
| 60000  |         |         | 11610  |
| 70000  | 28672   | 6000    | 13560  |
| 100000 | 32768*  | 7000    | 15530  |
| 177777 | 65535*  | 8000    | 17500  |
|        |         | 9000    | 21450  |
|        |         | 10000   | 23420  |
|        |         | 20000   | 47040  |
|        |         | 30000   | 72460  |
|        |         | *40000  |        |
|        |         | *50000  |        |
|        |         | *60000  |        |
|        |         | *65535  | 177777 |
|        |         |         |        |

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<sup>\*</sup>Indicates negative numbers when signed

### SERIAL INTERFACE CONTROLLER

The table below shows the values for the B, X, and Keys register settings of the BOOT program on disk for various supervisor terminal speed settings (bits per second). To change the supervisor terminal speed of the BOOT program, use the following command sequence:

| ATTACH MFD<br>RESTORE BOOT<br>SAVE BOOT 4/b-reg x-reg keys-reg |         |       |          |  |
|----------------------------------------------------------------|---------|-------|----------|--|
| Speed                                                          | l B-reg | X-reg | Keys-reg |  |
| 110                                                            | 110     | 27    | 74006    |  |
| 300                                                            | 1010    | 76    | 74006    |  |
| 1200                                                           | 2010    | 373   | 34006    |  |
| 4800                                                           | 3010    | 1756  | 34006    |  |
| 9600                                                           | 3410    | 3735  | 34006    |  |

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