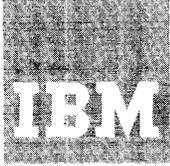


20 MAR 1969



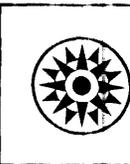
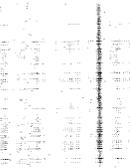
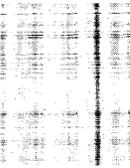
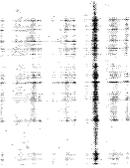
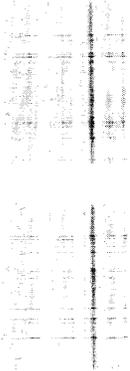
Systems Reference Library

IBM System/360 Time Sharing System Addendum

This addendum presents the specifications for program changes that have been made recently to the IBM System/360 Time Sharing System (TSS/360).

The features described herein are different from those covered in the previous Addendum, Form C28-2043-4, which has been obsoleted by a recent update of the TSS/360 publications series.

This addendum should be regarded as a required supplement to the present TSS/360 publications.



PREFACE

This publication is divided into two sections:

- Section I: User Information - This section is required reading for all TSS/360 users. It lists the current TSS/360 SRL publications. A new command, PC? (Present Catalog), is added to the system. The format of the EDIT command is changed; the data set to be processed is specified by its data set name (DSNAME) rather than its data definition name (DDNAME).
- Section II: Summary of Changes - This section is intended only for system programmers and customer engineers. It lists the current TSS/360 PLM publications. In addition, the internal specifications for the DSS?/PC? command routine (CZAEL) and the modified EDIT command and routine (CZATS) are presented in support of the command system changes.

Note: If a conflict is found between another TSS/360 publication and this document, the information here should be regarded as the correct specification.

Sixth Edition (November 1968)

This edition, Form C28-2043-5, replaces Form C28-2043-4.

This edition is current with Version 4, Modification 0 and remains in effect for all subsequent versions or modifications of IBM System/360 Time Sharing System unless otherwise indicated. Significant changes or additions to this publication will be provided in new editions or Technical Newsletters.

Requests for copies of IBM publications should be made to your IBM representative or the IBM branch office serving your locality.

A form is provided at the back of this publication for reader's comments. If the form has been removed, comments may be addressed to the IBM Corporation, System/360 Time Sharing System Programming Publications, Department 561, 2651 Strang Blvd., Yorktown Heights, N.Y. 10598.

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This section indicates the changes that have been made recently to user documents to reflect changes to TSS/360.

CHANGES IN TSS/360 USER DOCUMENTS

The TSS/360 publication series has been recently updated to reflect all specifications applicable to TSS/360 Version 4, Modification 0. The modifications to the documents include all the material that was formerly contained in Section I of IBM System/360 Time Sharing System: Addendum, Form C28-2043-4, including the changes for Version 4, Modification 0, with the following exceptions.

- A new command, PC? (Present Catalog), is added to the command system to allow a user to have presented a minimum of information about the data sets in his catalog. PC? also enables a system manager or administrator to have presented information about his data sets or those of any system user.
- The form of the EDIT command is changed; the data set to be processed is specified by its data set name (DSNAME) rather than by its data definition name (DDNAME).

Table 1 is a list of all user publications, including all the TNLs and revisions to the publications for the following releases:

- Version 1, Modification 0
- Version 1, Modification 1
- Version 1, Modification 2
- Version 2, Modification 0
- Version 3, Modification 0
- Version 4, Modification 0

The documents to the right of shaded area in the table are the publications applicable to TSS/360, Version 4, Modification 0.

PC? (Present Catalog) Command - Form 1: User

This command is used to present the name, access, and, for shared data sets, the owner's identification of one or more cataloged data sets.

Operation	Operand
PC?	[NAMES= { data set name (data set name,...) }]

NAMES

the name of one or more cataloged data sets. If a partially qualified data set name is specified, each data set possessing the same qualification is presented.

Specified as: one or more fully or partially qualified data set names.

Default: every data set in the user's catalog will be presented.

Functional Description: PC? provides the user with the following information about a data set:

1. Access: if the data set is owned by the user, the owner access is given. If the data set is owned by someone else, the user access is given.
2. Ownership: if the data set is owned by someone else, the user identification of that owner is given.

Programming Notes: The PC? command can be used in conversational and nonconversational tasks. In nonconversational tasks, the information is printed in the system output data set. In conversational tasks, the information is printed at the user's terminal. In conversational mode, presentation can be terminated at any point by pressing the ATTENTION key.

System Messages

Type	Number	Text
<u>PROMPTING</u>	None	
<u>RESPONSES</u>	None	
<u>DIAGNOSTICS</u>	D013	(dsname) INVALID. REENTER DSNAME.
	D138	(dsname) UNKNOWN. REENTER DSNAME.
	DF02	ILLEGAL DELIMITERS IN PARA.STRINGS. REENTER COMMAND.
	D495	PARAMETER TOO LONG. COMMAND IGNORED.
	D498	(dsname) UNKNOWN OR NOT CATALOGED PROPERLY. REENTER DSNAME.

Examples:

1. User MOEBOW wants the names of all his data sets.

User: pc?

System: DATA SETS IN CATALOG WITH QUALIFIER MOEBOW
MOEBOW.A.B.C, ACCESS: RW
MOEBOW.A.B.D, ACCESS: RO
MOEBOW.A.C., ACCESS: RO, OWNER: JOHN45A
(presents remainder of names in catalog)

2. User MOEBOW wants the names of all his data sets with the qualifier A.B.

User: pc? a.b

System: DATA SETS IN CATALOG WITH QUALIFIER MOEBOW.A.B
 MOEBOW.A.B.C, ACCESS: RW
 MOEBOW.A.B.D, ACCESS: RO

Affected SRL

IBM System/360 Time Sharing System: Command System User's Guide, Form C28-2001-2.

PC? (Present Catalog) Command - Form 2: System Manager and System Administrator

This command is used to present the name, access, and, for shared data sets, the owner's identification of one or more cataloged data sets. The system administration can present his own data sets and any data set belonging to any user he has joined. The system manager can present any cataloged data set.

Operation	Operand
PC?	[NAMES= { data set name (data set name,...) }] [,USERID=user identification]

NAMES

the name of one or more cataloged data sets. If a partially qualified data set name is specified, each data set possessing the same qualification is presented.

Specified as: one or more fully or partially qualified data set names.

Default: every data set in the specified user's catalog will be presented.

USERID

the identification of the user whose data sets are to be presented.

Specified as: three-to-eight alphanumeric characters, the first of which is alphabetic.

Default: the administrator's or manager's own data sets will be presented.

Functional Description: PC? provides the following information about each data set requested:

1. Access: if the data set is owned by the user, the owner access is given. If the data set is owned by someone else, the user access is given.
2. Ownership: if the data set is owned by someone else, the user identification of that owner is given.

Programming Notes: The specified information will be printed at the system administrator's or system manager's terminal. He can terminate the presentation at any point by pressing the ATTENTION key.

Type	Number	Text
<u>PROMPTING</u>	None	
<u>RESPONSES</u>	None	
<u>DIAGNOSTICS</u>	D001	(userid) INVALID. REENTER USERID.
	D500	(userid) UNKNOWN. REENTER USERID. DEFAULT: YOUR OWN
	D138	(dsname) UNKNOWN. REENTER DSNAME.
	D013	(dsname) INVALID. REENTER DSNAME.
	D133	(userid) UNKNOWN. REENTER USERID.
	DF02	ILLEGAL DELIMITERS IN PARA STRING. REENTER COMMAND.
	D453	YOU HAVE NOT JOINED THIS USER, SO CANNOT ACCESS HIS DATA SET (dsname). COMMAND IGNORED.
	D495	PARAMETER TOO LONG. COMMAND IGNORED.
	D496	KEYWORD INVALID. REENTER USERID=OPERAND
	D498	(dsname) UNKNOWN OR NOT CATALOGED PROPERLY REENTER DSNAME.

Example: The administrator wants the names of all data sets for user MOEBOW.

administrator: pc? userid=moebow

system: DATA SETS IN CATALOG WITH QUALIFIER MOEBOW
 MOEBOW.A.B.C, ACCESS: RW
 MOEBOW.A.B.D, ACCESS: RO
 MOEBOW.A.C, ACCESS: RO, OWNER: JOHN45A
 (presents remainder of names in the catalog)

Affected SRL

IBM System/360 Time Sharing System: Manager's and Administrator's Guide, Form C28-2004-1

EDIT Command

This command invokes the facilities of the text editor.

Operation	Operand
EDIT	[DSNAME=data set name] [,MNAME=member name]

Note: The user may omit either operand, but he cannot omit both.

DSNAME

the data set name of the data set to be edited.

Specified as: a fully qualified data set name.

MNAME

identifies a member of a VPAM data set or library (referenced by the DSNAME operand). If a member is part of USERLIB, no prior DDEF command is necessary.

Specified as: three-to-eight alphameric characters, the first of which is alphabetic.

Functional Description: At least one operand is required. If the DSNAME is given, the Command processor determines, via FINDDS, whether the data set is already defined in the task. If it is, processing continues. If the EDIT command processor must define the data set, the following DDEF operand values are assumed:

<u>Operand</u>	<u>Value</u>
DSORG	{ VI (If member name not specified) VP (If member name specified)}
KEYLEN	15
Max. LRECL	256
RKP	4
RECFM	V

The user can still define his own data set before issuing the EDIT command.

Affected SRL

IBM System/360 Time Sharing System: Command System User's Guide Form C28-2001-2.

Table 1. TSS/360 SRL Series

SRL Title	Version 1 (Initial Release)	Version 1, Modification 1		Version 1, Modification 2		Version 2, Modification 0		Version 3, Modification 0		Version 4, Modification 0	
		TNL	Revision	TNL	Revision	TNL	Revision	TNL	Revision	TNL	Revision
Addendum	C28-2043-0		C28-2043-1		C28-2043-2		C28-2043-3		C28-2043-4		C28-2043-5
Concepts and Facilities	C28-2003-2	N28-3005		N28-3016		N28-3022			C28-2003-3	N28-3048	
Assembler Language	C28-2000-2	N28-3000		N28-3015		NONE		N28-3034		N28-3047	
Assembler User Macro Instructions	C28-2004-1	N28-3006		N28-3020		N28-3021			C28-2004-2	N28-3038	
Assembler Program- mer's Guide	C28-2032-0	N28-3012			C28-2032-1	N28-3030			C28-2032-2	N28-3037	
IBM FORTRAN IV	C28-2007-1	NONE		N28-3007		N28-3023		N28-3036		N28-3045	
FORTRAN IV Library Subprograms	C28-2026-0	NONE		NONE		N28-3032		NONE			C28-2026-1
FORTRAN Program- mer's Guide	C28-2025-0	N28-3011			C28-2025-1	N28-3031			C28-2025-2	N28-3039	
Linkage Editor	C28-2005-1	N28-3001		NONE		N28-3025			C28-2005-2	N28-3040	
Command System User's Guide	C28-2001-1	N28-3003		N28-3013		N28-3027			C28-2001-2		C28-2001-3
Command System for Managers & Administrators	C28-2024-0	N28-3004		NONE		N28-3026			C28-2024-1	NONE	
Operator's Guide	C28-2033-0		C28-2033-1	N28-3014			C28-2033-2		C28-2033-3		C28-2033-4
Independent Utilities	C28-2038-0	N28-3002		NONE		N28-3024		N28-3033		NONE	
System Program- mer's Guide	C28-2008-0	N28-3008		N28-3018		N28-3028		N28-3035			C28-2008-1
System Generation and Maintenance	C28-2010-0	N28-3009			C28-2010-1		C28-2010-2		C28-2010-3	N28-3042	
Terminal User's Guide	C28-2017-1	N28-3010		NONE		N28-3029			C28-2017-2	N28-3044	
System Messages	C28-2037-0		C28-2037-1	N28-3017			C28-2037-2		C28-2037-3 N28-3046	N28-3049	
Time Sharing Support System	NONE		NONE	NONE		NONE			C28-2006-0	NONE	
Master Index	NONE		NONE		C28-2023-0	NONE			C28-2023-1	NONE	

SECTION II: SUMMARY OF CHANGES

This section indicates the changes that have been made recently to the TSS/360 command system and the changes required to the program logic manuals to reflect these changes.

CHANGES IN TSS/360 PROGRAM LOGIC MANUALS

The TSS/360 PLM series has been recently updated to reflect the detailed program logic applicable to TSS/360 Version 4, Modification 0. The modifications to the documents include all the material formerly contained in Section II of IBM System/360 Time Sharing System: Addendum, Form C28-2043-4, including the changes for Version 4, Modification 0, with the following exceptions. The DSS?/PC? command routine and the modified EDIT command routine are described.

Table 2 is a list of publications containing detailed program logic information, including all the TNLs and revisions to the publications for the following releases:

Version 1, Modification 0
Version 1, Modification 1
Version 1, Modification 2
Version 2, Modification 0
Version 3, Modification 0
Version 4, Modification 0

The documents to the right of shaded area in the table are the publications applicable to TSS/360, Version 4, Modification 0.

DSS?/PC? Command Routine (CZAEL)

This routine presents the fully qualified name(s) and certain attributes of the cataloged data set(s) specified by the user. If a partially qualified data set name is specified, all data sets under that name are presented.

ENTRY POINTS

CZAEL1 - entry for DSS?
CZAEL2 - entry for PC?

MODULES CALLED

GATWR	(CZAAB3)	To present the information to the user.
LOCFQN	(CZAEH1)	To get the TBLOCK structure for the name.
MSGWR	(CZAAD2)	To issue system messages.
MTREQ	(CZCAA1)	To mount private volumes.
MTREQ	(CZCAA2)	To obtain SDA or SDAT for public volumes.
LOCATE	(CZCFL1)	To locate the owner's fully qualified name.
OBTAIN	(CZCF01)	To obtain DSCB for a VAM or SAM data set on a direct-access device.
NEXTPAR	(CZAAC1)	To obtain input parameters.
CHECKDS	(CZAAC2)	To validate data set name.
ALPHNUM	(CZAAC3)	To validate user identification.

EXITS

The routine returns to the calling routine, via the RETURN macro instruction. If a system error occurs, the routine exits to ABEND.

OPERATION

If entry is made at CZAELL, a flag is set for DSS? processing; if entry is made at CZACL2, a flag is set for PC? processing.

The routine then calls NEXTPAR to scan the parameter string. After the input name is validated, LOCFQN is called with the input name prefixed to the userid. LOCFQN returns with a TBLOCK containing sharing and volume information. The TBLOCKS are examined for volume information, and DSS? prints the volume information. MTREQ is called to mount the required volumes.

In the case of direct-access (either public or private), the routine calls OBTAIN in order to extract and print information from the data set control block.

ERROR CONDITIONS

The routine checks for acceptable operands and notifies the user, through user prompter, of any errors found. For messages issued, see System Messages. In each case, the severity is minor, and the ABEND message is MINOR SOFTWARE ERROR.

The routine may issue these system errors.

<u>YSER Code</u>	<u>Explanation</u>
050503601	Invalid LOCFQN return code.
050503606	Device code in TBLOCK not being direct-access or tape.
050503607	Invalid TBLOCK.
050503609	Invalid type in TBD Block.
050503610	Invalid MTREQ return code.
050503611	Invalid DSORG in DSCB.
050503612	Invalid year or day in DSCB.

SYSTEM CONTROL BLOCK USAGE

<u>Control Block</u>	<u>Purpose</u>
Task Common (CHATCM)	
TCMPRV	To determine task's privilege class.
TCMUID	To determine user identification.
TBLOCK Data Set Descriptor (CHATBD)	
TBDDSN	To get data set name.
TBDDVF	To get first device code.
TBDFLL	To determine if any Bulk I/O tasks are pending.
TBDOWN	To get owner identification.
TBDVIF	To get first volume identification.
TBDVOF	To get first volume field.
TBDVON	To get number of volumes on which data set resides.

<u>Control Block</u>	<u>Purpose</u>
Data Set Control Block (CHADSC)	
DSCCRD	To get creation date of data set.
DSCEXD	To get expiration date of data set.
DSCLRC	To determine record length.
DSCRFM	To determine record format.

Text Editor Controller -- EDIT Command Routine (CZATS1/CZATS2)

This routine is the language processor controller (LPC) for the text editor (TE); its function is to initiate the TE, and monitor any succeeding editor commands. It also terminates TE processing.

ENTRY POINTS

- CZATS1 - entry exclusively via the command analyzer.
- CZATS2 - entry is via the command analyzer upon recognition of the END command, or if the user initiates another LPC.
- CZATS4 - contains disposition code from JFCB.

MODULES CALLED

None

EXITS

The routine normally returns to the calling routine, via the RETURN macro instruction. The error prompt and exits are given under error conditions.

OPERATION

Upon entry, a FINDDS is issued to determine if the data set name specified in the EDIT command exists. If it does, processing continues as before; otherwise, this routine issues a DDEF for the data set using the DDNAME of EDDN. The operand entries for the DDEF specified by this routine are:

<u>Operand</u>	<u>Value</u>
DSORG	{ VI (If member name not specified) VP (If member name specified) }
KEYLEN	15
Max. LRECL	256
RKP	4
RECFM	V

SYSTEM CONTROL BLOCK USAGE

Data Control Block	(CHATRN)
Task Data Definition Table	(CHATDT)
Transaction table	(CHATRN)

Table 2. TSS/360 PLM Series

PLM Title	Version 1 (Initial Release)	Version 1, Modification 1		Version 1, Modification 2		Version 2, Modification 0		Version 3, Modification 0		Version 4, Modification 0	
		TNL	Revision								
System Logic Summary	Y28-2009-0	Y28-3051		Y28-3061		Y28-3079			Y28-2009-1	Y23-3094	
Resident Super- visor	Y28-2012-0	Y28-3052		Y28-3062		Y28-3081			Y28-2012-1		Y28-2012-2
Task Monitor	Y28-2041-0	Y28-3050		Y28-3071			Y28-2041-1	Y28-3085 Y28-3096		NONE	
System Service Routines	Y28-2018-0	Y28-3056		Y28-3070		Y28-3077		Y28-3089		Y28-3095	
Dynamic Loader	Y28-2031-0	NONE		Y28-3063		Y28-3076		Y28-3086			Y28-2031-1
Access Methods	Y28-2016-0	Y28-3055		Y28-3064			Y28-2016-1	Y28-3084		Y28-3088	
Command System	Y28-2013-0	Y28-3053		Y28-3065		Y28-3075			Y28-2013-1		Y28-2013-2
Program Control System	Y28-2014-0	Y28-3054		Y28-3066		Y28-3078			Y28-2014-1	NONE	
Assembler	Y28-2021-0	Y28-3058		Y28-3067		Y28-3080		NONE		NONE	
FORTAN IV	Y28-2019-0	Y28-3057		Y28-3068		Y28-3082		Y28-3087		Y28-3091	
Linkage Editor	Y28-2030-0	Y28-3059		NONE		NONE		NONE		Y28-3083	
System Generation and Maintenance	Y28-2015-0		Y28-2015-1	Y28-3072		Y28-2015-2			Y28-2015-3	Y28-3093	
Independent Utilities	Y28-2039-0	Y28-3060			Y28-2039-1	Y28-3073		NONE		NONE	
On Line Test Control Program	Y28-2042-0		Y28-2042-1		Y28-3069	NONE		NONE		NONE	
System Control Blocks	Y28-2011-0		Y28-2011-1		Y28-2011-2	Y28-3074			Y28-2011-3	Y28-3092	
Time Sharing Support System	NONE		NONE		NONE		NONE			Y28-2022-0	Y28-3090

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IBM System/360 Time Sharing System
Addendum

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