

Appendix A

Related Publications

RELATED PUBLICATIONS

Tuning Considerations of IBM SNA X.25 DTE's (GG24-1646-00)
VTAM X.25 Communication Adapter Support (SC33-6171-0)
X.25 Interface for Attaching SNA Nodes to Packet-Switched Data
Networks General Information Manual (GA27-3345)
X.25 NPSI Diagnosis Reference (LY30-3073-3)
X.25 NPSI General Information (GC30-3189-3)
X.25 NPSI Installation and Operation (SC30-3201-3)
X.25 NPSI PAD Implementation Guide (GG24-1569-0)
X.25 NPSI Release 2 and 3 Guide (GG24-1567-0)
X.25 SNA Guide (GG24-1568-1)

ANSI/IEEE PUBLICATIONS

ANSI/IEEE Standard 802.5-1985

For local area networks employing token passing as the access method.

INTEL PUBLICATIONS

Intel Corporation iAPX 186/188 User's Manual

Intel Corporation iAPX 186 Data Sheet

LAN Components User's Manual

82586 Local Area Network Coprocessor Data Sheet

TEXAS INSTRUMENTS PUBLICATIONS

TMS380 Adapter Chipset User's Guide and Supplement

RELATED PUBLICATIONS

MEMOREX TELEX PUBLICATIONS

- 1374 ACS Operations Manual (1374000001M6)
- 1374 Central Site Customization Guide (1374000001M7)
- 1374 Configuration Guide (1374000001M2)
- 1374 LAN Operations Manual (1374000001M4)
- 1374 Offline Utility Operations Manual (1374000001M3)
- 1374 Product Family Guide (1374000001M1)
- 1374 Product Service Manual (1374000001M8)
- 1374 Troubleshooting Guide (1374000001M9)
- 1374 X.25 Operations Manual (1374000001M5)

IBM PUBLICATIONS

- ACF/VTAM Library Supplement for X.25 Packet-Switching Data Network Support (LY30-5568)
- ACF/VTAM Planning and Installation Reference (ST27-0610)
- IBM Cabling System Planning and Installation Guide (GA27-3361)
- IBM 3174 Subsystem Control Unit Functional Description (GA23-0218)
- IBM 3270 Information Display System Character Set Reference (GA27-2837)
- IBM 3270 Information Display System Keyboard Definition Utility User's Guide
- IBM 3710/X.25 Implementation Primer (GG24-1969-0)
- IBM 4300 X.25 Comm Adapter Support Implementation Guide (GG24-1675-0)
- Series/1 for use in X.25 Networks (GG24-1651-0)
- Token-Ring Network Introduction and Planning Guide (GA27-3677)

Appendix B

Check Error Codes

CHECK ERROR CODES

Code	Sense Codes		Probable Cause	Corrective Action
	SNA	Non-SNA		
341	--	--	Initialization failure or Token-Ring adapter check.	Press the Reset key. If the error continues, replace the Token-Ring adapter.
401	--	OP.CK.	Invalid command sequence (BSC). Host sent invalid command parameters.	Host recovery. Press the Reset key and retry the operation.
401	1003-1005	--	SFAP data stream error. Host software problem.	Press the Reset key and retry the operation. Inform the system administrator.
401	1003	COM.REJ.	Command reject. Invalid command from the host.	Press the Reset key and retry the operation.
402	1003	OP.CK.	Undefined code point. Host software problem.	Press the Reset key and retry the operation. Inform the system administrator.
402	1003	OP.CK.	Invalid or out-of-range data. The host sent invalid data after RD, RD modified, or EAU.	Press the Reset key and retry the operation.
402	1005	OP.CK.	Invalid parameters with the host program command code.	Press the Reset key and retry the operation.
402	1005	OP.CK.	SBA/RA/EAU/SF order without valid parameters. The host sent SBA, RA, EAU, or SF order without required data bytes.	Host recovery. Press the Reset key and retry the operation.
404	084C	OP.CK.	Color plane/P.S. font error. Host software problem.	Press the Reset key and retry the operation. Inform the system administrator.
407	--	OP.CK.	Invalid copy command (BSC). The host sent copy command with invalid parameters.	Host recovery. Press the Reset key and retry the operation.

CHECK ERROR CODES

MACHINE CHECK ERRORS

Sense Codes			Probable Cause	Corrective Action
Code	SNA	Non-SNA		
202	--	DC/US	Internal terminal error. Display caused keystroke/status buffer overflow.	Power off/reset the terminal.
204	--	DC/US	Terminal buffer parity error. Terminal may have been disabled by the control unit.	Press the Reset key. Power off/on the device.
207	--	DC/US	Loss of coax communications.	Power off/on the device.
208	--	--	Invalid operation completed. Asynchronous ending status received when an operation requiring it was in progress.	Press the Reset key and retry the operation.
210	--	--	Invalid keyboard attached. Terminal ID does not match the types selected during customization or the table is not available for the keyboard type.	Verify the keyboard configuration. Press the Reset key and retry the operation.
212	--	--	Terminal keyboard error. Invalid keystroke was entered.	Press the Reset key and retry the operation.
2%%	--	--	The keyboard type is not supported.	Verify the keyboard configuration. Press the Reset key and retry the operation.
315	--	--	Channel adapter failure.	Report to the system administrator. Power the device off/on.
331	--	--	Link adapter failure (SDLC). Control unit internal fault.	Report this error to the system administrator. Power off/on the control unit.

CHECK ERROR CODES

Code	Sense Codes		Probable Cause	Corrective Action
	SNA	Non-SNA		
416	2004	--	Direction error. Host software problem.	Press the Reset key and retry the operation.
418	0829	--	Change direction required. Host software SNA program check.	Press the Reset key and retry the operation. Inform the system administrator.
420	0821	--	Bind reject – invalid screen size.	Press the Reset key and retry the operation. Inform the system administrator.
420	0821	--	Bind reject – secondary protocol error. Host software SNA program check; invalid session parameter.	Press the Reset key and retry the operation. Inform the system administrator.
420	0821	--	Bind reject – common protocol error. Host software SNA program check; invalid session parameter.	Press the Reset key and retry the operation. Inform the system administrator.
420	0821	--	Bind command reject. Host software problem.	Press the Reset key and retry the operation. Inform the system administrator.
420	0821	--	Bind reject – LU profile error. Host software SNA program check; invalid session parameter.	Press the Reset key and retry the operation. Inform the system administrator.
420	0821	--	Bind reject – LU1 error. Host software SNA program check; invalid session parameter.	Press the Reset key and retry the operation. Inform the system administrator.
420	0821	--	Bind reject – encrypt/decrypt parameter error. Host software SNA program check; invalid session parameter. Improper encrypt/decrypt specification or crypto verification received in invalid state.	Press the Reset key and retry the operation. Inform the system administrator. Nonencrypt/decrypt operations may be run.

CHECK ERROR CODES

Sense Codes			Probable Cause	Corrective Action
Code	SNA	Non-SNA		
407	--	OP.CK.	Copy command error (BSC). Buffer locked.	Press the Reset key and retry the operation.
410	1002	--	RU length error. SNA RU received with a size greater than the maximum.	Press the Reset key and retry the operation.
410	1003	--	Function not supported. A host software problem.	Press the Reset key and retry the operation.
415	4006	--	Exception response not allowed. The host sent invalid or incorrect data, or last in chain carried exception response when bind specified definite response.	Press the Reset key and retry the operation. Inform the system administrator.
415	4007	--	Definite response not allowed. Host sent invalid or incorrect data, or last in chain carried definite response when bind specified exception response.	Press the Reset key and retry the operation. Inform the system administrator.
415	400F	--	Format indicator bit not allowed. Host software program check.	Press the Reset key and retry the operation. Inform the system administrator.
416	2001	--	Sequence number error. Host software problem.	Press the Reset key and retry the operation.
416	2002	--	Chaining error. Host software problem.	Press the Reset key and retry the operation.
416	2003	--	Brackets rule violation. Host software problem.	Press the Reset key and retry the operation.
416	2005	--	Data traffic reset. Host software problem.	Press the Reset key and retry the operation.

CHECK ERROR CODES

Sense Codes			Probable Cause	Corrective Action
Code	SNA	Non-SNA		
506	--	--	Unproductive time-out. No host activity. Communications link may have disappeared.	Check network. Reset with valid frame or frame containing poll.
531	--	--	NAK sent (BSC). CRC error detected; or three seconds have elapsed during read operation without receiving SYN, ETB, or ETX; or a forward abort (ENQ in text) or TTD (STX-ENQ) was received.	Host recovery. Retransmit data. Communications reminder turned off on successful host retry. Check network status.
531	--	--	ENQ received (BSC). The control unit did not receive ETB/ETX with last received text block (forced host time-out); or ENQ received while unit waiting for STX or SOH (entire message lost).	Host recovery. Retransmit last message. Check network status.
532	--	--	Link connection failure. Communications problem between the host and the control unit.	Check network status. Host recovery.
532	--	--	Idle time-out. Twenty-second period of host inactivity. Communications link may have disappeared.	Reset by receipt of valid frame or frame containing a poll.
532	--	--	Idle time-out (BSC). Control unit detected seven successive three-second time-outs without SYN characters on the line while waiting for poll/selection sequence.	Host recovery. Reset by valid poll or selection sequence. Check network status.

CHECK ERROR CODES

Sense Codes			Probable Cause	Corrective Action
Code	SNA	Non-SNA		
460	--	--	Invalid host-loaded Printer Authorization Matrix.	Press the Reset key and retry the operation. Inform the system administrator.
497	--	--	Segmenting error. SNA segment received with improper sequencing in transmission header.	Host recovery. SNRM required.
499	--	--	Exception request. Host software SNA program check. No SNA sense returned.	Press the Reset key and retry the operation. Inform the system administrator.
501	--	--	DSR line dropped (remote). Data set ready line to modem is not active.	Press the Reset key and retry the operation. Check the modem.
504	--	--	Disconnect received.	Try to reestablish the connection.
505	--	--	Invalid connect parameter. Host sent connect with odd number buffer length or buffer size too small.	Host recovery. New connect with valid data required.
505	--	--	Connect RCVD while connected. Host sent connect command while PU already connected.	Host recovery. ACTPU required.
505	--	--	Connection required. Prior connect problem caused channel to disconnect.	Host recovery. Connect required.
505	--	--	Disconnect while PU active. The host sent connect command while PU active.	Host recovery. Connect required.
505	--	--	Physical unit not active. The host has not issued ACTPU.	Host recovery. ACTPU required.

CHECK ERROR CODES

IBM 3174 MACHINE CHECK ERRORS

Sense Codes			Probable Cause	Corrective Action
Code	SNA	Non-SNA		
240	--	--	Synchronization error based on an IBM 3179-G problem.	Power off/on the device. Wait two minutes for testing.
241	--	--	Synchronization error based on a control unit problem.	
242	--	--	IBM 3170-G permanent error reported to the IBM 3174 control unit.	
243	--	--	Against IBM 3174's function request, the IBM 3179-G does not return either function completion or expedited status.	

IBM 3179-G MACHINE CHECK ERRORS

Sense Codes			Probable Cause	Corrective Action
Code	SNA	Non-SNA		
610	--	--	Control unit is not ready.	Check that the correct diskette is inserted, and that the disk drive door is closed. Complete IML. Power off/on the device. Wait two minutes for testing.
611	--	--	Diskette file ID does not match.	Check that the correct diskette is inserted into the drive.

NOTE: Error codes 610 and 611 may appear during the system configuration process.

CHECK ERROR CODES

Sense Codes			Probable Cause	Corrective Action
Code	SNA	Non-SNA		
532	--	--	Fifteen ENQs sent (BSC). The control unit did not receive response to the last text block; or the control unit has acknowledged a select sequence or text block and has waited 45 seconds without detection of pad SYN.	Host recovery. Reset by valid poll or selection sequence. Verify communications network operations. Retry operation.
532	--	--	Fifteen NAKs received (BSC). The control unit received 15 consecutive NAKs to its last transmission.	Host recovery. Reset by valid poll or selection sequence. Check network status. Retry the operation.
532	--	--	Fifteen incorrect NAKs received (BSC). The control unit received 15 consecutive incorrect ACK0/ACK1s to last transmission.	
532	--	--	Write-to-link time-out. DSR is OK. CTS may have dropped during transmission or clocking signal is not available from the modem.	Host recovery. SNRM required. Check the modem.
580	--	--	Unsuccessful downstream node attempt to join Token-Ring or lost Token-Ring attachment.	See the <i>1374 LAN Operations Manual</i> ; note the LCP NA command.
581	--	--	Token-Ring address with LCP NP command is already in use.	Change the address using the LCP NP command.
584	--	--	Token-Ring counter overflow.	Display counters using the LCP NS command.

CHECK ERROR CODES

Sense Codes			Probable Cause	Corrective Action
Code	SNA	Non-SNA		
630	--	--	Unknown diskette or hardware error.	Press the Reset key and retry the operation.
631	--	--	Diskette file not found.	Press the Reset key and retry the operation. Check that the correct diskette is in the device.
632	--	--	Diskette media error.	Press the Reset key and retry the operation. Replace the diskette.
633	--	--	Diskette overrun.	Press the Reset key and retry the operation.
634	--	--	Unable to write diskette file.	Make sure the correct diskette is in the device.
635	--	--	Diskette not ready.	Press the Reset key and retry the operation.
636	--	--	Diskette file locked (file being used by another operator).	Press the Reset key and retry the operation. Wait until the other operator is finished, then retry the operation.
637	--	--	Diskette file overflow.	Press the Reset key and retry the operation.
638	--	--	Not able to read the diskette file.	
639	--	--	Diskette file not locked.	
640	--	--	Incorrect diskette in the device.	Insert the correct diskette. Press the Reset key and retry the operation.
641	--	--	Mouse parity error/overrun.	Press the Reset key and retry the operation.

CHECK ERROR CODES

Sense Codes			Probable Cause	Corrective Action
Code	SNA	Non-SNA		
612	--	--	Diskette file is destroyed.	Power off/on the device. Wait two minutes.
613	--	--	Diskette language ID is not supported.	
614	--	--	Diskette language ID does not match the attached keyboard type.	
615	--	--	Invalid completion code.	Press the Reset key and retry the operation.
616	--	--	Invalid TCA interrupt 1.	Power off/on the device.
617	--	--	Invalid TCA interrupt 2.	
618	--	--	Invalid external interrupt.	See the <i>IBM 3179-G Operator Reference and Problem Solving Guide</i> (GA18-2271).
619	--	--	Invalid mail parameter.	
620	--	--	Invalid keyboard scan code.	Press the Reset key and retry the operation.
621	--	--	Keyboard parity error.	See the <i>IBM 3179-G Operator Reference and Problem Solving Guide</i> (GA18-2271).
622	--	--	Keyboard time-out.	
628	--	--	Mail queue overflow.	
629	--	--	Error log overflow.	

CHECK ERROR CODES

Sense Codes			Probable Cause	Corrective Action
Code	SNA	Non-SNA		
664	--	--	Microcode error (invalid interrupt).	
665	--	--	Microcode error.	
670	--	--	Keyboard error.	
697	--	--	Expedited status queue overflow.	
698	--	--	Asynchronous status queue overflow.	
699	--	--	Undetermined error.	

PROGRAM CHECK ERRORS

Sense Codes			Probable Cause	Corrective Action
Code	SNA	Non-SNA		
701	1007	--	Category not supported.	Press the Reset key and retry the operation.
702	1002	--	RU 1.536 bytes received (SNA buffer overrun condition).	
703	1003	OP.CK.	Function not supported. Indicates unsupported session control request, or unsupported data flow control request, or invalid signal request code (not 0001xxxx).	
704	400F	--	Format indicator (FI) bit not allowed.	Press the Reset key and retry the operation.

CHECK ERROR CODES

Code	Sense Codes		Probable Cause	Corrective Action
	SNA	Non-SNA		
642	--	--	Mouse time-out.	
643	--	--	Mouse failure.	
644	--	--	Mouse invalid data.	
645	--	--	Printer error.	
646	--	--	Printer out of paper.	
648	--	--	Expansion unit interrupt error.	Press the Reset key and retry the operation.
649	--	--	Expansion unit time-out.	
651	--	--	Permanent RAM parity error.	Power off/on the device. Wait two minutes for testing.
653	--	--	Permanent RAM parity error.	
654	--	--	Control unit to device protocol error.	
656	--	--	Ready time-out error.	Power off/on the device. Wait two minutes for testing.
660	--	--	Microcode error (divide by zero error).	
661	--	--	Microcode error (overflow error).	
662	--	--	Microcode error.	
663	--	--	Microcode error (invalid jump).	

CHECK ERROR CODES

Code	Sense Codes		Probable Cause	Corrective Action
	SNA	Non-SNA		
723	0821	--	Invalid LU type (byte 14).	
724	0821	--	Invalid screen size (bytes 20 – 24).	
725	0821	--	Cryptography not supported (byte 26).	
726	--	--	Negative SNA response.	
727	--	--	SNA exception request received.	
728	0829	--	RM, RMA, or RB command or read partition SF type received with EB and/or CD.	Press the Reset key and retry the operation.
729	0871	OP.CK.	Read partition SF received in retry state.	
750	1003	COM.REJ.	Invalid command received.	
751	0863	OP.CK.	SFE, MF, or SA order with invalid character set value in range X'01' – X'FE'.	
752	1005	OP.CK.	Invalid address received following SBA, RA, or EUA order. MF order addressed to notified attribute location.	
753	1005	OP.CK.	Data follows RM, RMA, or EAU command. GE or RA order received with invalid character. SFE, MF, or SA order with invalid attribute value for highlight or color or character set value of X'FF'.	

CHECK ERROR CODES

Sense Codes			Probable Cause	Corrective Action
Code	SNA	Non-SNA		
705	2001	--	Sequence number error.	
706	2002	--	Chaining error.	
707	2003	--	Bracket state error.	
708	2005	--	Data traffic reset state.	
709	2004	--	HDX error.	
711	0805	--	Session limit exceeded.	
712	0813	--	Bracket bid reject.	
713	0815	--	Session already bound.	
714	8005	--	No LU-LU session established.	
715	8009	--	LU not active.	
716	0821	--	Not enough bytes in BIND RU.	
717	0821	--	Invalid support level (bytes 1 – 3).	
718	0821	--	Invalid PLU protocol (byte 4).	
719	0821	--	Invalid SLU protocol (byte 5).	
720	0821	--	Invalid common protocol (bytes 6 – 7).	
721	0821	--	Less than 64-byte RU length specified (byte 10).	

CHECK ERROR CODES

Sense Codes			Probable Cause	Corrective Action
Code	SNA	Non-SNA		
764	084C	OP.CK.	Load PS SF addressed PS invalid. Load PS SF extension invalid color bits.	
765	1005	OP.CK.	Load PS SF; with invalid load start point; invalid code point of X'FF'; contains too many symbol definitions.	
766	1005	OP.CK.	Load PS SF; with incomplete PS cell data; with invalid end flag for type 2 PS; with invalid type 2 header (end flag encountered and not end of data).	
767	1003	OP.CK.	Create partition structure field; with invalid address mode; with bits 0 – 3 of byte 4, not zero.	

CHECK ERROR CODES

Sense Codes			Probable Cause	Corrective Action
Code	SNA	Non-SNA		
754	1005	OP.CK.	Data stream ended before all required bytes for SBA, RA, EUA, SF, SFE, MF, SA, or GE order were received.	
755	1003	OP.CK.	Invalid order received (EBCDIC value less than X'40' not recognized).	
756	1003	OP.CK.	Invalid, structured field type. Structured field type not supported for current configuration.	
757	1003	OP.CK.	Load PS SF with invalid PS alias. Load PS SF load type not supported.	
758	1003	OP.CK.	Set reply mode SF received with invalid mode.	
759	1005	OP.CK.	Read partition SF not last SF. SF type incomplete; length invalid. Set reply mode SF with field/ext field mode and data following SF. Length 0000 but not last SF. Load PS SF length error.	
760	1003	OP.CK.	Erase/reset SF reserved fields not zero. Set reply mode SF attribute type reserved.	Press the Reset key and retry the operation.
761	1005	OP.CK.	Structured field type PID invalid. Query PID is not X'FF'.	
762	1005	OP.CK.	Create partition structured field. Parameter error.	

Appendix C

Error Messages

ERROR MESSAGES

If you see the message ...	It means ...
"Copy aborted."	An error occurred during the copying process. Try operation again.
"Could Not Connect Host Session."	Host status is busy. Retry host connection later.
"Could Not Disconnect Host Session."	Host connection is not active. No user action is required.
"Could Not Establish Connection for Host Session."	No resources are available for host activation.
"Deactivate All DSNs for This Host Before Configuration."	Deactivate the downstream node prior to using the CH command on a remote gateway.
"Descriptor Attribute Error."	This is a host-loaded Printer Authorization Matrix message.
"Descriptor Device Error."	This is a host-loaded Printer Authorization Matrix message.
"Device Not Attached to This Port."	A port number does not have an attached maximum number of supported logical ports. Delete the extra logical port numbers.
"Device Not Authorized to This Pool."	Use the Configure Device Authorization Matrix command to authorize device access to A/A hosts.
"Device type must be 0 or 1."	Valid entries are 0 indicating a PC or 1 indicating a control unit.
"Dial Can Not Be Performed. Enter Next Option Or Use PF3 to Exit."	This is an X.25 error message.
"Dial Set Invalid, Current Dial Set Will Be Used."	This is an X.25 error message.
"Disc Can Not Be Performed. Enter Next Option Or Use PF3 to Exit."	This is an X.25 error message.
"Disconnection Complete, Try DIAL Again."	This is an X.25 error message.
"Disconnection in Process, Try DIAL Again."	This is an X.25 error message.
"Disk error."	Try the operation again. If the message is repeated, you may have a bad diskette.
"Diskette Configuration Conflict."	Non matching retrieval requested, such as SNA retrieve to a non SNA diskette. Ensure that the configuration retrieval request matches the diskette.
"Disk is not ready."	Disk drive door may be open; close door.
"DSN already mapped to another LAN entity."	Two entries have the same DSN address.

ERROR MESSAGES

If you see the message ...	It means ...
"0 file(s) deleted."	The program failed to find the correct file to delete. Ensure that the correct diskette is in the disk drive.
"Address already mapped."	Two entries have the same LAN address. All LAN addresses must be unique.
"Archive Configuration Conflict."	Non matching update requested, such as SNA update to a non SNA archive. Ensure that the configuration update matches the archive.
"Attempted open of file with wild card file characters."	Do not use wild card characters to open files.
"Attempted rename with wild card names."	Do not use wild card characters with the RENAME command.
"Cannot close file Copy #... failed."	Try the operation again. If the message is repeated, you may have a bad diskette.
"Cannot copy file onto itself."	You tried to copy with the same source and destination file names without specifying -t.
"Cannot map different DSNs to the same LAN entity."	Two entries have the same LAN address, including SAP. All LAN addresses must be unique.
"Cannot map DSN to multiple LAN entities."	Two entries have the same DSN address.
"Cannot open file Copy #... failed."	Try the operation again. If the message is repeated, you may have a bad diskette.
"Cannot open foreign language file."	Try the operation again. If the message is repeated, you may have a bad diskette.
"Cannot open keyboard file."	Try the operation again. If the message is repeated, you may have a bad diskette.
"Cannot read configuration file"	Try the operation again. If the message is repeated, you may have a bad diskette.
"Cannot rename on different drives."	Cannot RENAME, for example, the "A:" drive to "B:" drive.
"Cannot update file Copy #... failed."	Try the operation again. If the message is repeated, you may have a bad diskette.
"Cannot write file Copy #... failed."	Try the operation again. If the message is repeated, you may have a bad diskette.
"Checksum error."	Something is wrong with the utilities files; you need a new diskette.
"Contact in Progress, Use PF3 to Exit."	This is an X.25 error message.

ERROR MESSAGES

If you see the message ...	It means ...
"Format error."	An incorrect parameter or command has been entered. For example, an incorrect value has been entered in a field or an extra character has been entered on the command line.
"Format Error - xxx"	Incorrect data (xxx) are detected in the LCP command field after a valid mnemonic. Reenter the LCP command in the command field. OR No sessions are authorized for selection. OR The password was entered in the command field rather than the password field. Reenter the password in the password field. OR A space was not entered after the E (Echo command mnemonic) in the command field. Type E space and the desired characters you want echoed back on the screen.
"Frame size must be 265, 521, 1033, or 2042 bytes."	Valid entries are 265 for a PC; 265, 521, 1033, or 2042 for a Memorex Telex control unit; 2042 for other control units.
"Hardware Missing."	Ensure the correct feature cards are installed in the control unit. For example, the A/A card may not be installed and you are trying to use this feature.
"Header Error."	This is a host-loaded Printer Authorization Matrix message.
"Host Link Request Active."	The host connection is already active. No user action is required.
"Host Name Already Configured."	You are attempting to assign an IBM host name to an A/A host. This is not supported.
"Host Name Already Configured for ASCII Pool."	This occurs when you are trying to assign an A/A host name to an IBM host. This is not supported
"Illegal command."	You executed a command that does not exist on the menu.
"IML Required."	IML the control unit to reset the configuration parameters.
"Incompatible Message File."	The LCP language file does not match the version on the diskette. Use the correct system diskette.
"Indicate which DSN(s) to activate."	Enter a host DSN address on the command line. On dual host systems, also enter a host designator number.

ERROR MESSAGES

If you see the message ...	It means ...
"Duplicate file name."	You designated a file with a name already in existence. Change one of the file names.
"Duplicate Value"	A logical port is assigned multiple times. Enter the Configure Logical Units screen and check the logical unit assignments.
"End of directory reached."	An internal software problem occurred. Contact your Customer Support Specialist.
"Error opening configuration file"	Try the operation again. If the message is repeated, you may have a bad diskette.
"Error closing"	Try the operation again. If the message is repeated, you may have a bad diskette.
"Error Pool Not Configured."	A preferred host name has been entered at the Configure Terminal Options screen and this name has not been configured as a host name. Configure the host name using the CH or the CO command.
"Error reading"	Try the operation again. If the message is repeated, you may have a bad diskette.
"Error writing"	Try the operation again. If the message is repeated, you may have a bad diskette.
"Exceeding Number of LUs Configured."	Enter a lower number in the number of LUs parameter in the CH screen, or enter more LUs in the CL screen.
"Exceeds Maximum Number of LUs Supported."	Enter a lower number in the number of LUs parameter in the CH screen. The control unit can only support a specified number of LUs.
"Failed delete."	Try the operation again. If the message is repeated, you may have a bad diskette.
"Failed rename."	Try the operation again. If the message is repeated, you may have a bad diskette.
"File is already open."	An internal software problem occurred. Contact your Customer Support Specialist.
"File is not open."	Ensure that the correct diskette is in the disk drive. If correct diskette is installed and message still appears, contact your Customer Support Specialist.
"File not found."	Ensure that the correct diskette is in the disk drive.
"File pointer does not point to file structure."	An internal software problem occurred. Contact your Customer Support Specialist.

ERROR MESSAGES

If you see the message ...	It means ...
"Invalid Parameter."	An incorrect parameter was entered in a field or on the command line. OR The same LU/host address was assigned to more than one physical unit. Correct this error at the Configure Logical Units screen. OR An incorrect LAN address or SAP has been entered on the command line via the NS command, or an incorrect value has been entered in a field via the NP command. When using the CS command, 00 is not valid as a remote host DSN address.
"Invalid Port ID."	The specified port ID is not a valid decimal number or is not in the range of available port IDs. Reenter the port ID number.
"Invalid Printer Class - cc."	The indicated printer class (cc) is not valid.
"Invalid Printer ID."	Ensure all printer parameters and assignments are entered correctly.
"Invalid Printer Mode - mmm."	The indicated mode (mmm) is not valid.
"Invalid Printer Port."	An invalid port number was entered using the CM command. Enter a different printer port number.
"Invalid SAP."	SAP number must be hex 04, 08, or multiple of 04.
"Invalid SAP-must be a multiple of 04."	SAP number must be hex 04, 08, or multiple of 04.
"Invalid sector number."	An internal software problem occurred. Contact your Customer Support Specialist.
"Invalid System Diskette."	A non system or non ACS diskette was inserted in the system disk drive. Insert the correct diskette and continue.
"Keyboard File exceeds allocated size."	Try the operation again. If the message is repeated, you may have a bad diskette.
"LCP: I/O Error."	This error message displays when LCP unsuccessfully attempts to read or write a file from/to the system diskette. This occurs when the system diskette is not inserted into the control unit drive, the system diskette is corrupt, or the control unit's disk drive has a problem. If this occurs, first ensure the system diskette is inserted into the control unit drive. Second, try using a new system diskette. Third, if you suspect the disk drive is the problem, contact the system administrator.

ERROR MESSAGES

If you see the message ...	It means ...
"Indicate which DSN(s) to deactivate."	Enter a host DSN address on the command line. On dual host systems, also enter a host designator number.
"Insufficient Memory."	The control unit does not have enough memory to support the features of an additional device. This error occurs when too many devices with extended attributes are attached to the control unit.
"Insufficient Memory to Display Response."	No memory is left. You must upgrade your control unit's memory capacity, or free up some of your memory space.
"Invalid ASCII Host Port."	This port cannot be used as a host port.
"Invalid command."	Something is wrong with the .util files; you need a new diskette.
"Invalid Command Option."	An incorrect command was entered in the LCP command field. Reenter the parameter.
"Invalid disk allocation string."	An internal software problem occurred. Contact your Customer Support Specialist.
"Invalid Display ID - dd."	The indicated display ID (dd) is not a decimal number, or is in the range of supported port IDs.
"Invalid Downstream Node Address."	The downstream node LAN address must be a unique 12 hexadecimal digit (6 bytes).
"Invalid file access mode."	You attempted to access a hidden or system file, or a subdirectory.
"Invalid Hardware Configuration."	Ensure the correct feature cards are installed in the control unit.
"Invalid Host ID."	The host designator number must be either 1 or 2. The number 2 is valid only if the control unit is configured for two hosts.
"Invalid LAN Address."	LAN address must be a 12 hexadecimal digit (6 bytes).
"Invalid Language ID."	An invalid language was selected.
"Invalid load file header."	Something is wrong with the .util files; you need a new diskette.

ERROR MESSAGES

If you see the message ...	It means ...
"Port Not Authorized for ASCII Host Access."	Using the CO command, set up A/A host authorization. Using the CD command, make sure ports are assigned to the A/A hosts.
"Premature end of load file."	Something is wrong with the .util files; you need a new diskette.
"Reset/Clear Error Received, Try Dial Again."	This is an X.25 error message.
"Selected Host is Currently Busy."	The selected A/A host has no available ports.
"Selected Language Already in Use."	The selected language has already been selected. No action is required.
"Selection Already in Session."	At the Host Selection menu, you attempted to select a host session that has already been connected. No user action is required.
"Selection Out of Range."	The selection number is greater than the maximum number of authorized sessions per terminal.
"Session Not Active."	The specified host session has not been connected. If the terminal is authorized to communicate with that host, enter the Host Selection menu and connect to the host.
"Session Not Configured."	The specified host session is not configured for that port.
"Source file not found."	Ensure that the correct diskette is in the disk drive.
"Start address missing."	Something is wrong with the .util files; you need a new diskette.
"Too Many Logical Ports."	The number of logical ports exceeds the maximum number of supported logical ports. Delete the extra logical port numbers.
"Too many open files."	An internal software problem occurred. Contact your Customer Support Specialist.
"-t option invalid on dual disk controller."	Insert diskette into second disk drive.
"Trailer Error."	This is a Printer Authorization Matrix error message.
"Unexecutable Command."	You are trying to use a command that is invalid with the control unit's configuration.

ERROR MESSAGES

If you see the message ...	It means ...
"Mapping Incomplete."	Completely fill in the entry line.
"Maximum Number of Host Sessions Already Active."	The maximum host session limit has been reached.
"Missing Diskette Type."	The system, Offline Utilities, or RPQ key diskette designation is missing. Enter the missing diskette type in the appropriate field.
"Must specify SAP."	Type the SAP number (hex 04, 08, or multiple of 04) following the LAN address.
"No ASCII Hosts Available."	A/A hosts have not been assigned to the device. Use the Configure Device Authorization Matrix to assign devices to A/A hosts, or use the Configure Terminal Options to define an A/A host.
"No configuration files found."	The diskette you inserted is not a system diskette.
"No Existing Assignment."	No ports have been authorized through the CO command.
"No Host Address Configured."	Enter the Configure Host screen and enter the host processor address or verify all logical units are assigned correctly.
"No LUs Configured."	Assign LUs using the CL command.
"Non Selectable Field Changed."	The non changeable fields or NEX were selected for redesignation. The original PC Environment screen reappears. Do not change a non changeable screen.
"Not a diskette drive."	The incorrect diskette drive label has been entered in the Drive field. Enter a usable diskette drive label.
"Not enough arguments."	The DOS command was entered without parameters or one of the parameters contained an error.
"Not enough local memory to execute copy function."	If you think you should have enough memory in the machine, IML the control unit and try the operation again. If the message is repeated, contact your Customer Support Specialist.
"Not enough memory"	There is an internal problem with the control unit. Contact your Customer Support Specialist.
"Number of LUs Less Than Currently Assigned."	The number of LUs currently assigned exceeds the number entered in the number of LUs parameter in the CH screen. If this occurs, enter a larger number of LUs in the number of LUs parameter in the CH screen.
"Pool Not Configured."	Using the CO command, set A/A host parameters.

ERROR MESSAGES

If you see the message ...	It means ...
“User Is Not Authorized to Issue This Command.”	<p>A privilege-level command was typed at the basic-level LCP menu. Enter privilege-level mode to use a privilege-level command.</p> <p>OR</p> <p>The user is attempting to send an operator generated Alert when the Alert feature is not enabled. Enable the Alert feature.</p>
“Window size must be between 1 and 7.”	<p>Recommended entries are 1 for a PC and 2 for a control unit.</p>
“Wrong diskette; cannot continue keyboard selection.”	<p>Ensure that the installed Utility diskette has the appropriate release level.</p>

Appendix D

Decimal – Hexadecimal Conversion Table

DECIMAL - HEXADECIMAL CONVERSION TABLE

DEC	HEX	DEC	HEX	DEC	HEX	DEC	HEX	DEC	HEX	DEC	HEX
0	00	44	2C	88	58	132	84	176	B0	220	DC
1	01	45	2D	89	59	133	85	177	B1	221	DD
2	02	46	2E	90	5A	134	86	178	B2	222	DE
3	03	47	2F	91	5B	135	87	179	B3	223	DF
4	04	48	30	92	5C	136	88	180	B4	224	E0
5	05	49	31	93	5D	137	89	181	B5	225	E1
6	06	50	32	94	5E	138	8A	182	B6	226	E2
7	07	51	33	95	5F	139	8B	183	B7	227	E3
8	08	52	34	96	60	140	8C	184	B8	228	E4
9	09	53	35	97	61	141	8D	185	B9	229	E5
10	0A	54	36	98	62	142	8E	186	BA	230	E6
11	0B	55	37	99	63	143	8F	187	BB	231	E7
12	0C	56	38	100	64	144	90	188	BC	232	E8
13	0D	57	39	101	65	145	91	189	BD	233	E9
14	0E	58	3A	102	66	146	92	190	BE	234	EA
15	0F	59	3B	103	67	147	93	191	BF	235	EB
16	10	60	3C	104	68	148	94	192	C0	236	EC
17	11	61	3D	105	69	149	95	193	C1	237	ED
18	12	62	3E	106	6A	150	96	194	C2	238	EE
19	13	63	3F	107	6B	151	97	195	C3	239	EF
20	14	64	40	108	6C	152	98	196	C4	240	F0
21	15	65	41	109	6D	153	99	197	C5	241	F1
22	16	66	42	110	6E	154	9A	198	C6	242	F2
23	17	67	43	111	6F	155	9B	199	C7	243	F3
24	18	68	44	112	70	156	9C	200	C8	244	F4
25	19	69	45	113	71	157	9D	201	C9	245	F5
26	1A	70	46	114	72	158	9E	202	CA	246	F6
27	1B	71	47	115	73	159	9F	203	CB	247	F7
28	1C	72	48	116	74	160	A0	204	CC	248	F8
29	1D	73	49	117	75	161	A1	205	CD	249	F9
30	1E	74	4A	118	76	162	A2	206	CE	250	FA
31	1F	75	4B	119	77	163	A3	207	CF	251	FB
32	20	76	4C	120	78	164	A4	208	D0	252	FC
33	21	77	4D	121	79	165	A5	209	D1	253	FD
34	22	78	4E	122	7A	166	A6	210	D2	254	FE
35	23	79	4F	123	7B	167	A7	211	D3	255	FF
36	24	80	50	124	7C	168	A8	212	D4		
37	25	81	51	125	7D	169	A9	213	D5		
38	26	82	52	126	7E	170	AA	214	D6		
39	27	83	53	127	7F	171	AB	215	D7		
40	28	84	54	128	80	172	AC	216	D8		
41	29	85	55	129	81	173	AD	217	D9		
42	2A	86	56	130	82	174	AE	218	DA		
43	2B	87	57	131	83	175	AF	219	DB		



Appendix E

Device Support

DEVICE SUPPORT

IBM

- 3178 Display Station models:
 - C1 1920-char w/75-key Data Entry
 - C2 1920-char w/87-key Typewriter
 - C3 1920-char w/87-key Keyboard-Numeric
 - C4 1920-char w/87-key Keyboard-Numeric
- 3179 Display Station models:
 - 1 1920-char, 7-color with configurable 122-key keyboard
 - G 1920-char, 7-color with configurable G1/G2 122-key keyboard
- 3180 Display Station model (Emulation and Native modes):
 - 1 Selectable screen format with configurable 122-key keyboard
- 3191 Display Station models:
 - A10 122-Key keyboard (modifiable)
 - A20 102-Key enhanced keyboard
 - A30
 - B10 122-Key keyboard (modifiable)
 - B20 102-Key enhanced keyboard
 - B30
 - D10
 - D20
 - D30
 - E10
 - E20
 - E30
 - L10
 - L20
 - L30
- 3192 Display Station models:
 - C
 - D
 - G
 - F10
 - F20
 - F30
 - L10

- L20
- L30
- W10
- W20
- W30
- 3193 Display Station models:
 - 010 122-Key typewriter keyboard
 - 020 102-Key typewriter keyboard
- 3194 DFT models:
 - H50 122-Key typewriter keyboard
 - C
 - D
 - H
- 3194 Cut Mode models:
 - C10
 - C20
 - C30
 - D10
 - D20
 - D30
 - H10
 - H20
 - H30
- 3230 Printer model:
 - 2 Electromatrix Print Technology
Aluminized single-ply paper only
350 CPS at 10 CPI, 450 CPS at 13.3 CPI
- 3262 Line Printer models:
 - Band Printers, Pin-Feed forms only
 - 3 650 LPM (48 char), 364 LPM (96 char)
253 LPM (128 char)
 - 13 325 LPM (48 char), 180 LPM (96 char)
125 LPM (128 char)
- 3268 Printer model:
 - 2,2 C340 CPS max in 3270 mode (BSC or SNA LU3) or in SCS
mode (SNA LU1)
 - APL/Text, Dual Case, Audible Alarm, and Cancel Print are all
standard

DEVICE SUPPORT

- 3270 Personal Computer

NOTE: The 3270 PC is supported for 3270 PC Control Program version 1.22 and above.

- 3278 Display Station models:

- 1 960-char, 12 x 80
- 2 1920-char, 24 x 80
- 3 2560-char, 32 x 80
- 4 3440-char, 43 x 80
- 5 3564-char, 27 x 132

- Keyboards:

- #4621 – 75-key EBCDIC Typewriter
- #4622 – 75-key EBCDIC Data Entry
- #4623 – 75-key EBCDIC Data Entry, Keypunch Layout
- #4624 – 75-key ASCII Typewriter
- #4626 – 87-key EBCDIC Typewriter/APL
- #4627 – 87-key EBCDIC Typewriter
- #4628 – 87-key ASCII Typewriter
- #4629 – 87-key EBCDIC Typewriter/Text
- #4640 – 87-key EBCDIC Typewriter Overlay
- #4651 – 87-key EBCDIC Attribute Select
- #4652 – 87-key EBCDIC Attribute Select

- Additional Features:

- #3620 – Character Set Extension
- #5790 – Programmed Symbols

- 3279 Color Display Station models:

(Self-converging models only)

- S2A-1 1920-char, 4-color
- S2B-1 1920-char, 7-color
- S3G-1 2560-char, 7-color & programmed symbols
- 2X-1 1920-char, 4-color to 7-color
- 3X-1 2560 char, 4-color to 7-color

- Keyboards:

- #4621 – 75-key EBCDIC Typewriter
- #4622 – 75-key EBCDIC Data Entry
- #4623 – 75-key EBCDIC Data Entry, Keypunch

- #4624 – 75-key ASCII Typewriter
- #4626 – 87-key EBCDIC Typewriter/APL
- #4627 – 87-key EBCDIC Typewriter
- #4628 – 87-key ASCII Typewriter
- #4629 – 87-key EBCDIC Typewriter/Text
- #4640 – 87-key EBCDIC Typewriter Overlay
- #4651 – 87-key EBCDIC Attribute Typewriter
- #4652 – 87-key EBCDIC Attribute Typewriter/APL
- 3287 Printer models (with #8331):
 - 1 80 CPS, bi-directional, dot matrix
 - 2 120 CPS, bi-directional, dot matrix
 - 1C 80 CPS, single color (of 4) at time
 - 2C 120 CPS, single color (of 4) at time

Models 1C and 2C must be equipped with feature #3610 – Extended Character Set Adapter.
- 3289 Line Printer models:
 - 1 155 LPM (48 char) to 40 LPM (125 char)
 - 2 400 LPM (48 char) to 160 LPM (125 char)
- 3290 Display Station models:
 - 220
 - 230
 - T30
- 5210 Letter-Quality Printer models G1 and G2
- PC and XT Personal Computers (when equipped with an asynchronous communications adapter)
- 4554 Printer (emulation mode only) models:
 - 201
 - 202
 - 2E2
 - 2C2
- 5210 Letter-Quality Printer models G1 and G2
- PC, PC/XT, and PC/AT Personal Computers (when equipped with an asynchronous communications adapter)

DEVICE SUPPORT

IDEA COURIER

- 1778 Display Station
- 9291-1DG Terminal
- 9291-1DA Terminal
- 9291-1B/W Terminal
- 9291-01D Terminal
- 9291 Terminal
- 9292C Terminal
- 929201C Terminal
- 9292DG Terminal
- 9292-1DG Terminal
- 9292-1DA Terminal
- 9292-1F Terminal
- 9345 Line Printer
- 9347 Line Printer

MEMOREX TELEX

- 078 Display Station
- 079 Display Station
- 080 Display Station
- 178 Display Station
- 179 Display Station
- 180-1 Display Station
- 187 Matrix Printer
- 191 Display Station
- 262 Matrix Printer
- 278 Display Station
- 279 Display Station

- 286 Matrix Printer
- 287 Matrix Printer
- 289 Matrix Printer
- 299 Terminal Multiplexer
- 387 Matrix Printer
- 0220 Display Station
- 1091 Display Station
- 1092 Display Station
- 1187 Matrix Printer
- 1191 Display Station
- 1192 Display Station
- 1199-2 Terminal Multiplexer
- 1210-1 Matrix Printer
- 1299-2 Terminal Multiplexer
- 1387A/E Matrix Printer
- 1815-1 Laser Printer
- 2062 Printer
- 2068 Printer
- 2078 Display Station models:
 - 1 960-char, 12 x 80
 - 2 1920-char, 24 x 80
 - 3 2560-char, 32 x 80
 - 4 3440-char, 43 x 80
 - 5 3564-char, 27 x 132
- Keyboards:
 - 75-key EBCDIC Typewriter
 - 75-key EBCDIC Data Entry
 - 75-key ASCII Typewriter
 - 87-key EBCDIC Typewriter/APL
 - 87-key EBCDIC Typewriter

DEVICE SUPPORT

- 87-key ASCII Typewriter
- 87-key EBCDIC Typewriter/Text
- 87-key EBCDIC Typewriter Overlay Keytops
- 87-key EBCDIC Attribute Select Typewriter
- 87-key EBCDIC Attribute Select Typewriter/APL
- 87-key EBCDIC Typewriter – 10-Key Numeric Pad
- 75-key or 87-key EBCDIC or ASCII Typewriter with modified PF functions, Alternate Key
- 2079 Color Display Station models:
 - S2A 1920-char, 4-color
 - S2B 1920-char, 7-color
 - S3G 2560-char, 7-color and programmed symbols
 - S2X 1920-char, 4-color, configurable for 7
 - S3X 2560-char, 4-color, configurable for 7
- Keyboards:
 - 75-key EBCDIC Typewriter
 - 75-key EBCDIC Data Entry
 - 75-key ASCII Typewriter
 - 87-key EBCDIC Typewriter/APL
 - 87-key EBCDIC Typewriter
 - 87-key ASCII Typewriter
 - 87-key EBCDIC Typewriter/Text
 - 87-key EBCDIC Typewriter Overlay Keytops
 - 87-key EBCDIC Attribute Select Typewriter
 - 87-key EBCDIC Attribute Select Typewriter/APL
 - 87-key EBCDIC Typewriter – 10-Key Numeric Pad
 - 75-key or 87-key EBCDIC or ASCII Typewriter with modified PF functions, Alternate Key
- 2080 Monochrome Display Station
- 2087 Matrix Printer
- 2108 Laser Printer
- 2114 Printer Model 1
- 2114 Multifunction Printer 1
- 2115 Laser Printer

- 2124 Multifunction Printer 2E
- 2178 Monochrome Display Station model
 - C1
 - C2
 - C3
 - C4
- 2179 Color Display model 1
- 2180 Display Station models:
 - 1 Monochrome
 - 1C Color
- 2192 Display models:
 - D Monochrome
 - C Color
 - DS Monochrome Split Screen
- 2291 Monochrome Display Station
- 2292-2 Terminal Multiplexer
- 2299-2 Terminal Multiplexer
- 2391 Display Station
- 6273 Workstation

MOMENTUM TECHNOLOGIES (Formerly MDS)

- 8010 Letter Quality Printer
- 8078 Display Station models:
 - 1 960-char, 12 x 80
 - 2 1920-char, 24 x 80
 - 3 2560-char, 32 x 80
 - 4 3440-char, 43 x 80
 - 5 3564-char, 27 x 132
- Keyboards:
 - 75-key ASCII Typewriter
 - 87-key ASCII Typewriter
 - 75-key EBCDIC Typewriter
 - 87-key EBCDIC Typewriter

DEVICE SUPPORT

- 75-key EBCDIC Data Entry
- 75-key EBCDIC Data Entry, Keypunch Layout
- 8087 Serial Printer
- 9178 Display Station
- 1920-char, w/ all keyboard features
- 9179 Display Station
- 9214 Printer
- 9278 Display Station

PHAZE INFORMATION MACHINES

- P3278 Display Station models:
 - 2 1920-char, 24 x 80
- Keyboards:
 - 75-key EBCDIC Typewriter
 - 87-key EBCDIC Typewriter

3278 EMULATION ADAPTERS

- For IBM Personal Computers and Compatibles
 - CXI 3278/3279 Plus
 - DCA Irma
 - Forte PJ
 - IBM 3278/79 Emulation Adapter
 - IDEAssociates IDEAcomm 3278
 - MICROPLUS

ASYNCHRONOUS/ASCII DEVICES

TERMINALS

APPLIED DIGITAL DATA SYSTEMS

- ADDS Viewpoint A2 and /78

BRITISH TELECOMMUNICATIONS

- Microcolour 1779

DATA GENERAL

- DG 210

DIGITAL EQUIPMENT CORPORATION

- VT100 (ANSI mode)
- VT100 (VT52 mode)
- VT220
- VT220 (VT100 mode)
- VT241

ESPRIT SYSTEMS

- Esprit Executive 10/78

HEWLETT-PACKARD

- HP 2621B

IBM

- IBM PC, PC/XT, and PC/AT (when equipped with an asynchronous adapter)
- 3101
- 3151
- 3161
- 3162
- 3163
- 3164
- Compatible PCs equipped with an asynchronous communications adapter

LEAR SIEGLER

- ADM 3A
- ADM 5
- ADM 11

DEVICE SUPPORT

- ADM 12
- ADM 1178

TELEVIDEO SYSTEMS

- TeleVideo 912C
- TeleVideo 970
- User-defined compatible A/A terminals

PRINTERS

EPSON

- FX80 Matrix Printer (with serial interface)
- FX100 Matrix Printer (with serial interface)

IBM

- IBM 4201 Proprinter and Proprinter II
- IBM 4202 Proprinter XL
- IBM 4207 Proprinter X24
- IBM 4208 Proprinter XL24

NEC CORPORATION

- NEC 3515 Spinwriter

OKI AMERICA

- Okidata 82 Matrix Printer
- Okidata 82A Matrix Printer (compressed and normal)
- Okidata 83 Matrix Printer (normal, 132-column)
- Okidata 92A Matrix Printer (compressed and normal)
- Okidata 93 Matrix Printer (normal, 132-column)

Appendix F

Configuration Worksheet

CONFIGURATION WORKSHEET

This worksheet contains tables designed to help you determine and lay-out host and device parameters. The tables only list the parameters and options you may want to select. Details about the parameters and options are discussed in Chapter 2. Complete this worksheet prior to configuration and use it during the actual configuration. Upon completion of these worksheets, all the host and/or device parameters will be listed, thus helping to simplify the configuration process.

The configuration worksheet contains:

- Device Table
- A/A Host(s) Table
- IBM Host(s) Table
- Coax Device(s) Table
- A/A Device(s) Table
- Printer Table
- A/A Host(s) and Corresponding Devices Table

DEVICE TABLE

INSTRUCTIONS

Port # – Lists the maximum number of ports. This number may not apply to your control unit model. Refer to the *1374 Product Family Guide* for information regarding the number of available ports for your control unit model and its options. A/A device assignments start at port number 32.

Device Type – List the appropriate type. Device types are IBM host, A/A host, coax terminal, A/A terminal, and printer.

Assigned Printers – List all printers the corresponding device is allowed to use. If the device type is a printer, do not assign any printers to that port.

Logical Units – List the number of logical units assigned to the corresponding port number. Up to five LUs may be assigned to coax and A/A terminals. Printers may have up to two LUs.

Host 1 and Host 2 pertain to dual IBM host support. If you have single IBM host support, write the LU assignments in the Host 1 column.

When finished assigning LUs, subtotal each column, then total the two columns together. The total should not exceed 254 LUs. Refer to Chapter 2 for details about LU assignments.

CONFIGURATION WORKSHEET

Device Table				
Port #	Device Type	Assigned Printers	Logical Units	
			Host 1	Host 2
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				

CONFIGURATION WORKSHEET

Device Table				
Port #	Device Type	Assigned Printers	Logical Units	
			Host 1	Host 2
31				
32				
33				
34				
35				
36				
37				
38				
39				
40				
41				
42				
43				
44				
45				
46				
47				
48				
49				
50				
51				
52				
53				
54				
55				
			(Subtotal)	
			(TOTAL)	

CONFIGURATION WORKSHEET

A/A HOST(S), IBM HOST(S), COAX DEVICE(S), AND A/A DEVICE(S) TABLES

INSTRUCTIONS

Copy each table for each host and/or device you are configuring. One table should apply to only one host or device.

Circle the desired parameter option. Fill in the blank where no option is listed.

A/A Host(s) Table	
Parameter	Parameter Options
ASCII Host Name	
Speed	300, 1200, 2400, 4800, 9600, 19200
Parity	Even, Odd, None, Mark, Space
Bits Per Character	7 Bits, 8 Bits
Flow Control	XON/XOFF, CTS, DTR
Number of Stop Bits	01, 02
Physical Connection Type	Normal, PTT, Smart Modem
Auto Disconnect Time-Out	
Port Used for ASCII Host Printer Session	Yes, No
Auto Dial	Disabled, Enabled

CONFIGURATION WORKSHEET

SNA/SDLC Host Table	
Parameter	Parameter Options
Single IBM Host Support	Yes, No
Single Host Environment	BSC, SNA Local, SNA/SDLC
Dual IBM Host Support	Yes, No
Dual IBM Host Combination Type	Dual SNA/SDLC, SNA Local and SNA/SDLC, Non-SNA Local and SNA/SDLC, BSC and SNA/SDLC
Host You are Configuring	Host 1, Host 2
Host Name	(up to 8 characters)
Host Processor Interface Address	
XID Byte 0	
XID Byte 1	
XID Byte 2	
XID Byte 3	
XID Byte 4	
XID Byte 5	
Interface Type	RS 232/V.35, Other (X.21)
Facility Connect	Switched, Non-Switched
Link Configuration	Multipoint, Point-to-Point
NRZI	Yes, No
Duplex Facility	Full, Half
Modem Rate	Full Speed, Half Speed
Number of LUs	

CONFIGURATION WORKSHEET

BSC Host Table	
Parameter	Parameter Options
Single IBM Host Support	Yes, No
Single Host Environment	BSC, SNA Local, SNA/SDLC
Dual IBM Host Support	Yes, No
Dual IBM Host Combination Type	Dual SNA/SDLC, SNA Local and SNA/SDLC, Non-SNA Local and SNA/SDLC, BSC and SNA/SDLC
Host You are Configuring	Host 1, Host 2
Host Name	(up to 8 characters)
Host Processor Interface Address	
Facility Connect	Switched, Non-Switched
Link Configuration	Multipoint, Point-to-Point
Duplex Facility	Full, Half
Modem Rate	Full Speed, Half Speed
Number of Devices Supported	10, 20
BSC Code Set	EBCDIC, ASCII

CONFIGURATION WORKSHEET

SNA Local Host Table	
Parameter	Parameter Options
Single IBM Host Support	Yes, No
Single Host Environment	BSC, SNA Local, SNA/SDLC
Dual IBM Host Support	Yes, No
Dual IBM Host Combination Type	Dual SNA/SDLC, SNA Local and SNA/SDLC, Non-SNA Local and SNA/SDLC, BSC and SNA/SDLC
Host You are Configuring	Host 1, Host 2
Host Name	(up to 8 characters)
Host Processor Interface Address	
Number of LUs	
Burst Size	
High-Speed Transfer	Yes, No, Streaming
Command Retry	Yes, No
Attention Delay	
UCW	Non-Shared, Shared

CONFIGURATION WORKSHEET

Non-SNA Local Host Table	
Parameter	Parameter Options
Single IBM Host Support	Yes, No
Single Host Environment	BSC, SNA Local, SNA/SDLC
Dual IBM Host Support	Yes, No
Dual IBM Host Combination Type	Dual SNA/SDLC, SNA Local and SNA/SDLC, Non-SNA Local and SNA/SDLC, BSC and SNA/SDLC
Host You are Configuring	Host 1, Host 2
Host Name	(up to 8 characters)
Host Processor Interface Address	
Burst Size	
High-Speed Transfer	Yes, No, Streaming
Command Retry	Yes, No
Number of Devices Supported	10, 20

CONFIGURATION WORKSHEET

Coax Device(s) Table

Parameter	Parameter Options
Keypad Type	C2, RPQ (C3), C4
3270 ASCII Keyboard	Yes, No
Numeric Lock	Default, Enabled, Disabled
PC File Transfer	Yes, No
Operator Information Area Mode	EXTRA 1, EXTRA 2, IBM
Magnetic Stripe Reading Devices	Alphanumeric Secure Data Only, Alphanumeric All Data 3277-Compatible Numeric
IBM Keyboard	Default, Standard, Modified
Asynchronous Emulation	Standard, Custom
Asynchronous Emulated Keyboard	Default, Standard, Modified
Preferred Host Name	
Maximum Number of Sessions	
Host Language	Primary, Secondary
Keyboard Language	Primary, Secondary

CONFIGURATION WORKSHEET

A/A Device(s) Table	
Parameter	Parameter Options
Speed	300, 1200, 2400, 4800, 9600, 19200, Auto
Operator Information Area Mode (A/A Terminal Only)	EXTRA 1, EXTRA 2, IBM
Parity (Auto is for A/A Terminal Only)	Even, Odd, None, Mark, Space, Auto
Bits Per Character	7 Bits, 8 Bits
Flow Control	XON/XOFF, CTS, DTR
Number of Stop Bits	01, 02
Physical Connection Type (Smart Modem for A/A Terminal Only)	Normal, PTT, Smart Modem
Password Retry Count (A/A Terminal Only)	
Password (A/A Terminal Only)	
Auto Disconnect Time-Out (A/A Terminal Only)	
Preferred Host Name	
Maximum Number of Sessions (A/A Terminal Only)	
Host Language (A/A Terminal Only)	Primary, Secondary
Keyboard Language (A/A Terminal Only)	Primary, Secondary
Terminal 3270 Emulation Mode (A/A Terminal Only)	1920 Characters, 2560 Characters, 3440 Characters, 3564 Characters
Extended Attribute Processing (A/A Terminal Only)	Yes, No
Compress Printer (A/A Printer)	Default, Yes, No

Appendix G

Memory Tables and Worksheets

MEMORY TABLES AND WORKSHEETS

This appendix contains memory information about each 1374 Control Unit with and without optional features such as dual IBM host gateway support. It contains memory tables and worksheets designed to help you easily determine how many devices you can attach to the control unit and how many concurrent sessions you can establish.

This appendix contains:

- Device and Session Support Table for all 1374 Control Unit models,
- Coax Device Memory Table for 1374 models 1L, OXR, 4XR, and 5XR,
- Coax Device and Session Memory Worksheet for 1374 models 1L, OXR, 4XR, and 5XR,
- ASCII Device Memory Table for 1374 models 1L, OXR, 4XR, and 5XR,
- ASCII Device and Session Memory Worksheet for 1374 models 1L, OXR, 4XR, and 5XR,
- Token-Ring Gateway Memory Table for 1374 models 1L, 01R, 02R, 41R, 42R, 51R, and 52R,
- Coax Device Memory Table for 1374 models 61R and 7XR,
- Coax Device and Session Memory Worksheet for 1374 models 61R and 7XR,
- ASCII Device Memory Table for 1374 models 61R and 7XR, and
- ASCII Device and Session Memory Worksheet for 1374 models 61R and 7XR.

MEMORY TABLES AND WORKSHEETS

Device and Session Support Table
All Memorex Telex Control Unit Models

Control Unit Model	Features	Coax Devices	ASCII Devices	Total Sessions
1L	SNA Local	32	24	254
	Non-SNA Local	32	24	32
	SNA/SDLC Gateway	32	24	254
	Dual IBM Host	32	24	236
	Dual IBM Host Gateway	32	24	226
01R, & 02R	SNA/SDLC	32	24	254
	BSC	32	24	32
	X.25	32	24	198
	Dual IBM Host: SNA/SDLC	32	24	254
	Dual IBM Host: SNA/SDLC & BSC	32	24	184
	SNA/SDLC Gateway	32	24	254
03R		32	24	156
41R & 42R	SNA/SDLC	32	8	200
	BSC	32	8	32
	X.25	32	8	126
	Dual IBM Host: SNA/SDLC	32	8	200
	Dual IBM Host: SNA/SDLC & BSC	32	8	110
	SNA/SDLC Gateway	32	8	88
43R		16	8	200
51R & 52R	SNA/SDLC	16	8	120
	BSC	16	8	32
	X.25	16	8	120
	Dual IBM Host: SNA/SDLC	16	8	120
	SNA/SDLC Gateway	16	8	74
53R		16	0	80
61R	SNA/SDLC No ACS	16	0	80
	BSC No ACS	16	0	32
	X.25 No ACS	16	0	80
	SNA/SDLC With ACS	16	2	80
	BSC With ACS	16	2	32
	X.25 With ACS	16	2	80
71R & 72R	SNA/SDLC With ACS	8	2	50
	BSC With ACS	8	2	32
	X.25 With ASC	8	2	50
73R	SNA/SDLC With ACS	8	2	50

MEMORY TABLES AND WORKSHEETS

Coax Device Memory Table
1374 Models 1L, 0XR, 4XR, and 5XR

Control Unit	Memory Available
Base Unit	384
Base Unit Plus 512K Memory	832
Base Unit Plus 1M Memory	1280
Base Unit Plus 1.5M Memory	1728
Base Unit Plus 2M Memory	2176

Device	Memory Requirements
Model 2-5 Coax Terminal No EAB	4
Model 2-5 Coax Terminal With EAB	8
DFT Terminal	4
IBM 3180/3192D Native Mode No EAB	8
IBM 3180/3192D Native Mode With EAB	16
Coax Printer No EAB	8
Coax Printer With EAB	16

MEMORY TABLES AND WORKSHEETS

Coax Device and Session Memory Worksheet 1374 Models 1L, 0XR, 4XR, and 5XR

Device	Number of Devices	x	Number of Sessions Per Device	x	Memory Per Session	=	Total Memory Required
Model 2-5 Coax Terminal No EAB	_____	x	_____ (1-5)	x	4	=	_____
Model 2-5 Coax Terminal With EAB	_____	x	_____ (1-5)	x	8	=	_____
DFT Terminal	_____	x	1	x	4	=	_____
IBM 3180/3192D Native Mode No EAB	_____	x	1	x	8	=	_____
IBM 3180/3192D Native Mode With EAB	_____	x	1	x	16	=	_____
Coax Printer No EAB	_____	x	1	x	8	=	_____
Coax Printer With EAB	_____	x	1	x	16	=	_____
	_____ (TOTAL)		_____ (TOTAL)				_____ (TOTAL)

MEMORY TABLES AND WORKSHEETS

**ASCII Device Memory Table
1374 Models 1L, 0XR, 4XR, and 5XR**

**Memory Available Per ASCII Board: 160
(8 Devices Per Board – All Models)**

Device	Memory Requirements
A/A Terminal Emulating Model 2 Coax Terminal No EAB	2
A/A Terminal Emulating Model 3-5 Coax Terminal No EAB	4
A/A Terminal Emulating Model 2 Coax Terminal With EAB	4
A/A Terminal Emulating Model 3-5 Coax Terminal With EAB	8
A/A Printer No EAB	8
A/A Printer With EAB	16
ACS PC Program Model 2 With EAB	4

MEMORY TABLES AND WORKSHEETS

ASCII Device and Session Memory Worksheet 1374 Models 1L, 0XR, 4XR, and 5XR

Device	Number of Devices	x	Number of Sessions Per Device	x	Memory Per Session	=	Total Memory Required
A/A Terminal Emulating Model 2 No EAB	<u> </u> (1-8)	x	<u> </u> (1-5)	x	2	=	<u> </u>
A/A Terminal Emulating Model 3-5 No EAB	<u> </u> (1-8)	x	<u> </u> (1-5)	x	4	=	<u> </u>
A/A Terminal Emulating Model 2 With EAB	<u> </u> (1-8)	x	<u> </u> (1-5)	x	4	=	<u> </u>
A/A Terminal Emulating Model 3-5 With EAB	<u> </u> (1-8)	x	<u> </u> (1-5)	x	8	=	<u> </u>
A/A Printer No EAB	<u> </u> (1-8)	x	1	x	8	=	<u> </u>
A/A Printer With EAB	<u> </u> (1-8)	x	1	x	16	=	<u> </u>
ACS PC Program Model 2 With EAB	<u> </u> (1-8)	x	<u> </u> (1-5)	x	4	=	<u> </u>
	<u> </u> (TOTAL)		<u> </u> (TOTAL)				<u> </u> (TOTAL)

MEMORY TABLES AND WORKSHEETS

Token-Ring Gateway Memory Table
1374 Models 1L, 01R, 02R, 41R, 42R, 51R, and 52R

Control Unit	Number of Devices	Additional Memory Required
1L*	1-40	.5M
	41-82	1M
	83-125	1.5M
	126-140	2M
01R & 02R*	1-80	.5M
	81-140	1M
41R, 42R, 51R & 53R	Up to 140	No Additional Memory Required

*Memory installed on Token-Ring Gateway board.

MEMORY TABLES AND WORKSHEETS

- Coax Device Memory Table
1374 Models 61R and 7XR

Control Unit	Memory Available
61R Base Unit	288
61R Base Unit Plus 512K Memory	448

Device	Memory Requirements
Model 2-5 Coax Terminal No EAB	4
Model 2-5 Coax Terminal With EAB	8
DFT Terminal	4
IBM 3180/3192D Native Mode No EAB	8
IBM 3180/3192D Native Mode With EAB	16
Coax Printer No EAB	8
Coax Printer With EAB	16

MEMORY TABLES AND WORKSHEETS

Coax Device and Session Memory Worksheet 1374 Models 61R and 7XR

Device	Number of Devices	x	Number of Sessions Per Device	x	Memory Per Session	=	Total Memory Required
Model 2-5 Coax Terminal No EAB	_____	x	_____ (1-5)	x	4	=	_____
Model 2-5 Coax Terminal With EAB	_____	x	_____ (1-5)	x	8	=	_____
DFT Terminal	_____	x	1	x	4	=	_____
IBM 3180/3192D Native Mode No EAB	_____	x	1	x	8	=	_____
IBM 3180/3192D Native Mode With EAB	_____	x	1	x	16	=	_____
Coax Printer No EAB	_____	x	1	x	8	=	_____
Coax Printer With EAB	_____	x	1	x	16	=	_____
	_____ (TOTAL)		_____ (TOTAL)				_____ (TOTAL)

MEMORY TABLES AND WORKSHEETS

**ASCII Device Memory Table
1374 Models 61R and 7XR**

Device	Memory Available
61R Base Unit	
SNA/SDLC, BSC With ACS	160
Plus 512K Memory	448
61R Base Unit	
X.25 With ACS	128
Plus 512K Memory	448
71R & 72R Base Unit	
SNA/SDLC, BSC With ACS	192
Plus 512K Memory	360
71R & 72R Base Unit	
X.25 With ACS	168
Plus 512K Memory	360
73R Base Unit	
SNA/SDLC, BSC With ACS	360
Plus 512K Memory	N/A

Device	Memory Requirements
A/A Terminal Emulating Model 2	
Coax Terminal No EAB	2
A/A Terminal Emulating Model 3-5	
Coax Terminal No EAB	4
A/A Terminal Emulating Model 2	
Coax Terminal With EAB	4
A/A Terminal Emulating Model 3-5	
Coax Terminal With EAB	8
A/A Printer No EAB	8
A/A Printer With EAB	16
ACS PC Program Model 2 With EAB	4

MEMORY TABLES AND WORKSHEETS

ASCII Device and Session Memory Worksheet 1374 Models 61R and 7XR

Device	Number of Devices	x	Number of Sessions Per Device	x	Memory Per Session	=	Total Memory Required
A/A Terminal Emulating Model 2 No EAB	_____ (0-2)	x	_____ (1-5)	x	2	=	_____
A/A Terminal Emulating Model 3-5 No EAB	_____ (0-2)	x	_____ (1-5)	x	4	=	_____
A/A Terminal Emulating Model 2 With EAB	_____ (0-2)	x	_____ (1-5)	x	4	=	_____
A/A Terminal Emulating Model 3-5 With EAB	_____ (0-2)	x	_____ (1-5)	x	8	=	_____
A/A Printer No EAB	_____ (0-2)	x	1	x	8	=	_____
A/A Printer With EAB	_____ (0-2)	x	1	x	16	=	_____
ACS PC Program Model 2 With EAB	_____ (0-2)	x	_____ (1-5)	x	4	=	_____
	_____ (TOTAL)		_____ (TOTAL)				_____ (TOTAL)

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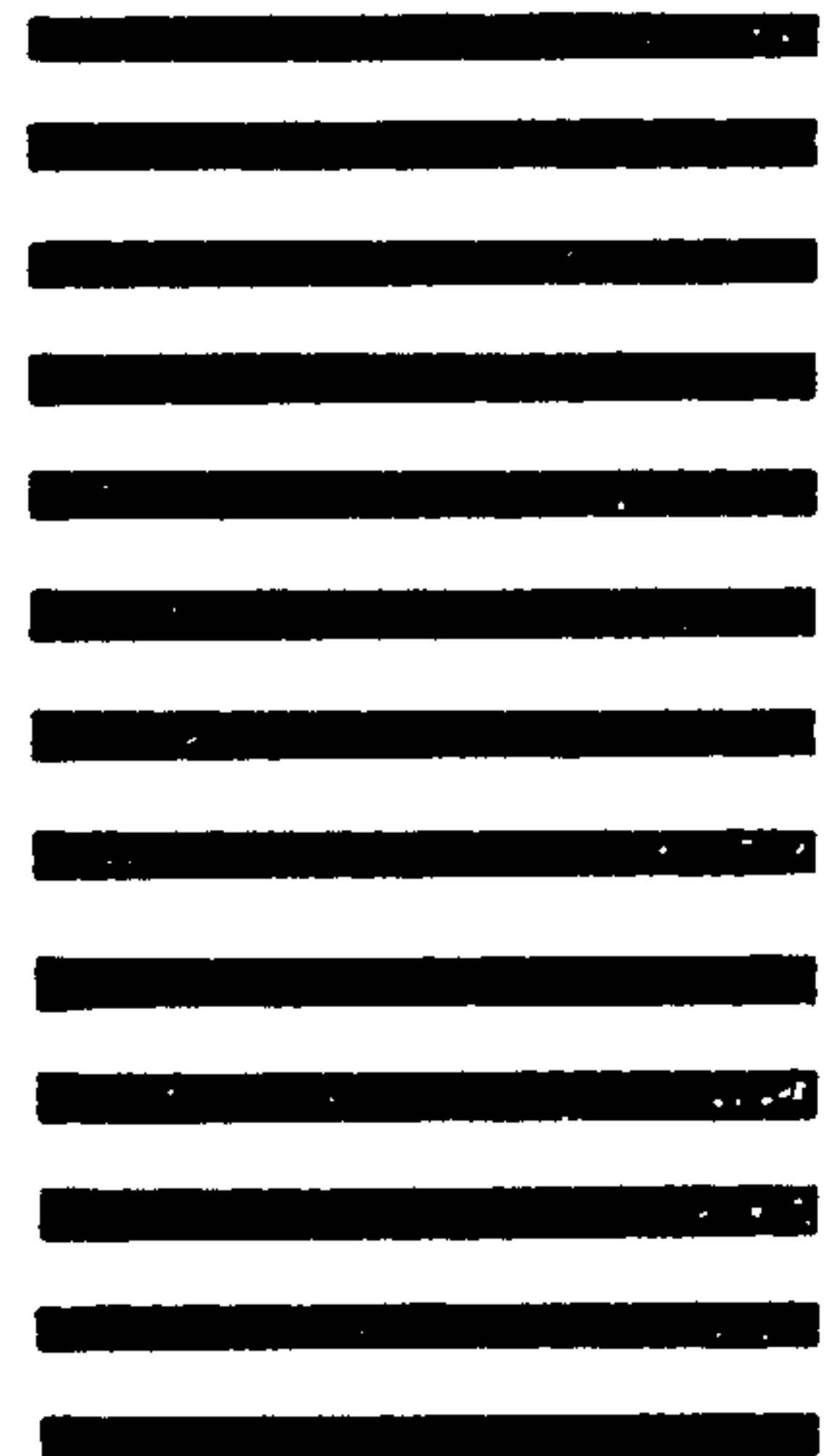
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Usefulness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Your specific comments are especially helpful in improving our publications. Please note the actual pages or sections involved, where applicable.



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