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AIX X.25 Functional Comparison

SPECIAL NOTICES

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ABOUT THIS DOCUMENT

This document applies to AIX releases 3.2, 3.2.5 and 4.1.2. It provides a Functional Comparison to AIX X.25.

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AIX X.25 Functional Comparison

	AIX V 3 BOS	AIX X.25 V 1.1	AIXLink/X.25 V1.1
AIX Operating Sys:	AIX V 3.2	AIX 3.2.5 (minimum)*	AIX 4.1.2 (minimum)*
Packaging:	Basic X.25 support in BOS	X.25 support via LPP Note: Concurrent operation of both the X.25 BOS and LPP products are supported on a single system running AIX V 3.2.5 (minimum)	X.25 support via LPP Selectable v.c. capacity: **Entry** Up to 4 per sys **Basic** Up to 16 **Extended** Up to 64 **Advanced** Up to 256 **Full** unrestricted
Applications:			
TCP/IP	X (xt#), x25xlate	X (xs#), x25ip	
PAD support	from a third party	X	
PAD printing support	from a third party	–	X
SNMP agent/MIB	–	X (x25smuxd) (subsets of RFCs 1381 and 1382)	
NPI (packet layer API)	–	X	
DLPI (frame layer API)	–	X*	
Application Compatibility	–	COMIO emulation provides X.25 access via /dev/x25s# for AIX BOS applications and commands (up to 128 sessions per port)	
SNA Server/6000	X	via COMIO emulation*	
X.25 API (for AIX V3.2.5)	X	via COMIO emulation	
IBM-written commands:			
xroute	X	utilized by COMIO applications only	
xtalk (sample application)	X	via COMIO emulation	
xmanage	X	xmanage via COMIO or x25status*	use "x25status" command*
X.25 line trace	xmonitor -packet -frame x25s#	x25mon -p -f -n sx25a#	
Installation:			
SMIT Installation	All X.25 software is installed at once		Selectable Install: **All** **DLPI** **TCP/IP*** **Runtime*** **NPI** **Triple-X PAD** **COMIO**
Adapter microcode	copy from Options diskette	packaged with LPP (exception: ARTIC960 requires the AIX ARTIC support program, shipped on diskette with adapter!)	

*** Notes:** *9/96 revision*

– X.25 LPP enhancements: V1.1.2 (APAR IX52536 for AIX V4, PTF U440663 for AIX V3.2.5) V1.1.3 (APAR IX56707, AIX V4 only)

– A port cannot be used for running both frame and packet layer applications – DLPI interface is enabled via SMIT

– Use SNA Server/6000 licensed program product (LPP) V 2.1 for systems running AIX 3.2.5 and V 2.2 for AIX 4.1.1 systems

– With the X.25 LPPs, xmanage via COMIO or the x25status command allows the user to view, but not change, the connection status

– The Runtime software component is the minimum required for X.25 – all other components require the runtime software

– To run TCP/IP over X.25, the user must also install the TCP/IP software component

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(continued)	AIX V 3 BOS	AIX X.25 V 1.1	AIXLink/X.25 V1.1
Miscellaneous:			
Driver names	x25s# (device driver)	twd# (streams device driver)	
X.25 port name	x25s#	sx25a#	
CCITT Conformance	1980, 1984	1980, 1984, 1988	
Hardware:			
X.25 Interface CoProcessor/2 (MCA bus)	X x25s# (until AIX 3.2.3e) ampx# (from AIX 3.2.3e)	X ampx#	
	Both versions (MCA and ISA) use the same modem cables (V.24, V.35, X.21)		
X.25 Interface CoProcessor (ISA bus)	–	–	X* ampx#
ARTIC Portmaster/A (MCA) or Multiport Model 2 (ISA) V.24 (8-port fanout) V.35 (6-port fanout) X.21 (6-port fanout)	– –	X* apm# –	X* apm# daughter cards and fanout boxes are interchangeable between the Micro Channel (MCA) and ISA base adapters. The Multiport must be ordered with a PS/2 order number.
ARTIC960 (MCA) X.21 (8-port octopus) V.24 (8-port octopus) V.36 (6-port octopus) V.35 (6-port fanout) ← *Use V.36 daughter card with Portmaster/A V.35 fanout*	–	–	X* ricio#
Max. adapters per sys	4 per bus (8 on dual Micro Channel models)	no limit imposed by software – ultimate limit is determined by specific system unit and performance	
Max. virtual circuits and pps (assumes 128-byte packets measured at the packet level API)	64 virtual circuits and 35 pps (packets per second) per adapter	1024 virtual circuits per adapter (512 on a single port) and up to 100 pps per X.25 adapter, 200 pps per Portmaster or Multiport, and 1000 pps per ARTIC960	
Modem Cable Interfaces/Maximum Speeds:			
X.21 (15-pin)	64 Kbps	64 Kbps	64 Kbps
V.24 (25-pin)	19.2 Kbps	19.2 Kbps	19.2 Kbps
V.35 (34-pin, rectangular)	64 Kbps	64 Kbps	64 Kbps
V.36 (37-pin)	–	–	2 Mbps (E1/T1/J1)
Network Attachment (synchronous, full duplex, network/modem clocking)			
Dedicated (leased line)	X	X	
Dial-up (X.32, V.25bis)	–	X	

*** Notes:** *9/96 revision*

– ARTIC Portmaster and Multiport Model 2 support is built from four components: a base adapter with at least 1 MB memory, a V.24, V.35, or X.21 EIB (Electrical Interface Board or daughter card) and the matching interface cable (also called fanout box or brick). A separate modem cable connects the 25-pin fanout connector and the modem or DSU/CSU.

– ARTIC960 support is built from three components: a base ARTIC960 adapter with at least 4 MB memory, a V.24, V.36, or X.21 AIB (Application Interface Board or daughter card) and the matching interface cable. The "octopus" design combines the single adapter connector with the six or eight modem cables. Due to it's 4.5-inch height, this adapter will not fit in RS/6000 models 7006 (such as 41T or 41W) and 7011 (such as a 250).

– Because the X.25 Interface Co-Processor adapters have only one port, 512 virtual circuits is the recommended maximum

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