Software Product Description

DESCRIPTION

SNA LAN Gateway for DOS & OS/2 is a Digital Distributed Software product from Eicon Technology Corporation. It is a PC communications software which works in conjunction with the DS206-XX or the DS216-XX synchronous communications controller. It allows all suitably configured PCs on local area networks (LAN) to be linked to local or remote host computers over SDLC or X.25/QLLC lines.

SNA LAN Gateway software is split into two components:

- The SNA Gateway software is installed on the PC which is connected to the wide area network through the DS2X6 controller. This PC is non-dedicated since most of the SNA Gateway software runs on the DS2X6 controller.

- The user (client) workstation software is installed on the PC workstations of the LAN.

All the PC workstations of the LAN can access communications services provided by the SNA LAN Gateway and the DS2X6 controller. These services include management of all communications links to local or remote hosts, full SDLC, X.25/QLLC, HDLC protocol processing, and complete emulation of multiple IBM® cluster controllers (PU and LU emulations).

PC workstation users first link to the SNA LAN Gateway through the LAN (NetBIOS®-compatible). Then, with the proper terminal emulation software they are able to establish sessions with any connected host computer (refer to *OPTIONAL SOFTWARE*).

The SNA Gateway and the workstation can be PCs running either MS–DOS® or OS/2.

Features

X.25/QLLC, SDLC Support

The SNA LAN Gateway for DOS & OS/2 supports two different links for connecting to an IBM® SNA host computer: X.25/QLLC and SDLC.

Line protocol features:

- X.25/QLLC Communications:
  - Complies with CCITT recommendations X.25, X.32, and X.21 (1980 and 1984).
  - Supports X.121 link level protocol.
  - X.25 optional user facilities.
  - Permanent or switched virtual circuits.
  - Packet sizes: 64 to 4096.
  - Window size: 1 to 127.
  - DTE/DCE addressing.
  - Internal/external clocking.
- SDLC Communications:
  - Supports multi-point and point-to-point lines.
  - Switched/constant carrier.
  - Non-return to zero inverted (NRZ/NRZI) encoding.
  - Internal/external clocking.

Supports HDLC-X32

The SNA LAN Gateway for DOS & OS/2 software supports three different implementations of HDLC protocol: HDLC, HDLC-X32, and HDLC-X32E. HDLC-X32 is a variation of HDLC and is most often found in Europe. X.32 conforms to Transpac (France), and X32E to Ericsson ERIPAX.

Physical Unit (PU)

- Full support for PU types 1.0, 2.0, and 2.1.
- PUs are centralized on the SNA Gateway.
- Up to 32 PUs can be active per communications card port, with up to four communications controllers per SNA Gateway.
- Ability to start and stop individual PUs.
- Ability to monitor PU status.

Logical Unit (LU)

- Full supports for LU types 0, 1, 2, 3, 4, 6.2, and 7.

- Supports up to 254 LUs per communications card port, all on a single PU or shared among up to 32 PUs.
- Each LAN workstation appears to the host as one or more LUs, reducing the amount of VTAM network definition required.
- Supports dependent and independent LUs.
- Supports parallel sessions.
- Supports LU pooling.

IBM Control Unit Emulation

The SNA LAN Gateway for DOS & OS/2 emulates the IBM 3174, 3274, 5394, and 5294 control units.

SNA Trace Facilities

The SNA LAN Gateway software includes utility programs to examine the communications traffic flowing through the communications card.

ECDUMP (DOS & OS/2): Dumps the contents of the communications card memory to a file.

ECTRACE (DOS & OS/2): Views the communications data streaming through the SDLC or X.25/QLLC connection.

NBTAPPC (DOS): Displays the EiconAPPC data streaming along the LAN.

SNA Configuration Facilities

The SNA LAN Gateway includes the following configuration programs:

ECCFG: Customizes the parameters associated with each protocol.

SNA CONFIG: Defines the characteristics of each SNA controller (or physical unit) to be emulated.

VT220, 3270, and 5250 Emulation Products Support

The SNA LAN Gateway for DOS & OS/2 supports the following Access products:

- Access for DOS (VT220)
- Access for DOS (3270)
- Access for OS/2 (3270)
- Access for Windows™ (3270)
- Access for DOS (5250)
- Access for Windows (5250)

HARDWARE REQUIREMENTS

Processors Supported:

80286- or 80386- or 80486-based Digital personal computers.

Disk Space and Memory Requirements:

The SNA Gateway station for DOS & OS/2 requires:

- Disk size: 3 MB minimum.
- RAM: 640 KB minimum.
- A 1.2 MB 5.25 disk drive, or a 1.44 MB 3.5-inch disk drive.

The workstation software requires:

- Disk size: 3 MB minimum.
- RAM: 640 KB minimum.
- A 1.2 MB 5.25 disk drive, or a 1.44 MB 3.5-inch disk drive.

Ethernet Controller:

One Ethernet controller for the SNA Gateway station; one Ethernet controller for each workstation.

Communications Controller:

- *ISA bus*
  - DS206-AA, EiconCard PC (EIA).
  - DS206-CA, 2-port EiconCard HSI (EIA).
- *MCA bus*
  - DS216-AA, EiconCard PC (MCA).
  - DS216-BA, EiconCard HSI (MCA).

Communications Controller Cables

- BC09U-10, Eicon PC RS232-C modem cable.
- BC09V-10, Eicon HSI V.24 modem cable.
- BC09W-10, Eicon HSI V.35 modem cable.
- BC09X-10, Eicon HSI X.21 modem cable.

SOFTWARE REQUIREMENTS

For the SNA Gateway and for the workstation:

DOS Software

- Operating system:
  - MS–DOS® 3.3 or higher.
- LAN operating system:
  - NetBIOS-compatible LAN.

OS/2 Software

- Operating system:
    - IBM OS/2 Extended Edition, Version 1.1 or later, or
    - Microsoft® OS/2, Version 1.21
- LAN operating system:
    - NetBIOS-compatible LAN.

OPTIONAL SOFTWARE

Access for DOS (3270) (SPD 38.91.xx)

Access for DOS (3270) software is a terminal emulation package for PCs running MS–DOS that provides complete 3270 host connectivity. It works in conjunction with any standalone or LAN Gateway.

Access for Windows (3270) (SPD 38.93.xx)

Access for Windows (3270) software is a terminal and printer emulation package for Windows. It works in conjunction with any standalone or LAN Gateway.

Access for OS/2 (3270) (SPD 43.28.xx)

Access for OS/2 (3270) software is a terminal emulation package for PCs running OS/2 that provides complete 3270 host connectivity. It works in conjunction with any standalone or LAN Gateway.

Access for DOS (5250) (SPD 43.29.xx)

Access for DOS (5250) software is a terminal emulation package for PCs running MS–DOS that provides complete 5250 host connectivity. It works in conjunction with any standalone or LAN Gateway.

Access for Windows (5250) (SPD 43.31.xx)

Access for Windows (5250) software is a terminal emulation package for Windows that provides complete 5250 host connectivity. It works in conjunction with any standalone or LAN Gateway.

X.25 Network-Level Developer's Toolkit for DOS (SPD 38.96.xx)

The X.25 Network-Level Developer's Toolkit for DOS contains libraries of C functions for the development of user application programs under DOS to communicate with an X.25 network.

X.25 Network-Level Developer's Toolkit for Windows (SPD 39.79.xx)

The X.25 Network-Level Developer's Toolkit for Windows contains libraries of C functions for the development of user application programs under Windows to communicate with an X.25 network.

X.25 Network-Level Developer's Toolkit for OS/2 (SPD 38.95.xx)

The X.25 Network-Level Developer's Toolkit for OS/2 contains libraries of C functions for the development of user application programs under OS/2 to communicate with an X.25 network.

Table 1
Product Family

	DOS	WIN	OS/2	UNIX®
Gateways:				
OSI PC Gateway	X		X	X
OSI LAN Gateway	X		X	IP Router
SNA PC Gateway	X		X	
SNA LAN Gateway	X		X	
Emulations:				
Access VT220	X			
Access 3270	X	X	X	
Access 5250	X	X		
Toolkits:				
X.25 Devel. Toolkits	X	X	X	X

GROWTH CONSIDERATIONS

The minimum hardware/software requirements for any future version of this product may be different from the requirements for the current version.

DISTRIBUTION MEDIA

5¼-inch and 3½-inch diskettes.

ORDERING INFORMATION

Software license, documentation, and media (5¼-inch and 3½-inch diskettes): QB-MJWAA-WW

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