Software Product Description

PRODUCT NAME: OSI LAN Gateway for DOS & OS/2®, Version V2R2   **SPD 38.77.00**

DESCRIPTION

OSI LAN Gateway for DOS & OS/2 software is a Digital Distributed Software product from Eicon Technology Corporation. It is a PC communications software product which works in conjunction with the DS206-XX board or the DS216-XX synchronous communications controller. It allows all suitably configured PCs on local area networks (LAN) to connect to Packet Switching Data Networks (PSDN), conforming to CCITT recommendation X.25 (1980 or 1984).

OSI LAN Gateway for DOS & OS/2 software is split into two components:

- The OSI Gateway software is installed on the PC which is connected to the wide area network through the DS2X6 controller. This PC is nondedicated since most of the OSI 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 OSI LAN Gateway and the DS2X6 controller. These services include management of all communications links to local or remote hosts, full ISO transport (class 0, 2), X.25 level API, PAD (X.3, X.28, X.29), X.25, and HDLC protocol processing.

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

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

Features

OSI Gateway Features

- CCITT recommendations X.25 and X.121 (1980 and 1984) compliance.

- X.32 compliance.

- Complete set of X.3/X.28/X.29 PAD functions and COM port redirectors.

- Implementation of the OSI transport class 0 and 2.

- Support for HDLC protocol layer and for the GOSIP-compliant LAPB protocol layer.

- Installation utility.

- Configuration utility.

- Protocol Trace utility.

- Dump File program.

- Provides support for most third-party terminal emulation software to function over X.25 networks.

- Support of up to 254 workstations.

X.25 and X.121 (1980 and 1984) compliance

OSI LAN Gateway for DOS & OS/2 complies with CCITT recommendations X.25 and X.121 (1980 and 1984).

The X.25 features include:

- Support of the X.21 link level protocol.

- The X.25 optional user facilities include:
    — Reverse charging
    — Fast select
    — Closed user group
    — Throughput class negotiation
    — Packet and window size negotiation
    — Network User Identifier (NUI)
    — DTE address extension

- Up to 254 virtual circuits.

- Permanent or switched virtual circuits.

- Packet size: 64 to 4096.

- Window size: 1 to 127.

- DTE/DCE addressing.

- Internal/external clocking.

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X.32 Compliance

The OSI LAN Gateway 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.

X.3/X.28/X.29 PAD Functions and COM Port Redirectors

The OSI LAN Gateway for DOS & OS/2 software provides a complete implementation of CCITT X.3, X.28, and X.29 PAD functions and supports COMs port redirectors.

The CCITT PAD interfaces provide transparent access to the integrated PAD via industry-standard interfaces for asynchronous communications.

OSI Transport Class 0 and 2

The OSI LAN Gateway software implements OSI transport class 0 and 2 (ISO 8073/CCITT X.224) and serves as a platform for OSI applications such as X.400, or File Transfer, Access & Management (FTAM).

HDLC Protocol Layer and GOSIP-compliant LAPB Protocol Layer

The OSI LAN Gateway software supports three HDLC protocol layers: HDLC-X32 as used by the Transpac network in France; HDLC-X32E as used by Ericsson switches; and the GOSIP-compliant LAPB protocol layer as used for connection-oriented network services.

Installation Utility

The OSI LAN Gateway software includes the software utility, INSTALL, which guides the user through the installation process using a series of screen selections and online Help.

Configuration Utility

The OSI LAN Gateway software includes the software configuration utility, SETUP, which guides the user to configure the protocol software that will be loaded onto the communications controller. The communications protocol software has a number of parameters which are set to default values that in most cases will not have to change. However, there are certain parameters that are directly dependent upon the connections.

Protocol Trace Utility

The Protocol Trace utility is used to view the communications data streaming through an X.25 connection. In most cases, the Protocol Trace utility will be used under the guidance of Digital Customer Services, who will analyze the trace.

Dump File Program

The Dump File program is used to dump the content of memory to a file of the communications controller. In most cases, the Dump File program will be used under the guidance of Digital Customer Services, who will analyze the dump.

Support of Most Third-Party Terminal Emulation Software

X.PAD software (included in the OSI LAN Gateway) provides PAD services to standalone PCs or PC LANs. X.PAD redirects data traffic from the COM ports to up to eight virtual PADs.

Support of up to 254 Workstations

The OSI LAN Gateway supports up to 254 host sessions per communications controller, allowing up to 254 workstations to be connected to the remote host simultaneously.

Workstation Software Features

- Support for up to four OSI Gateways on a LAN.

- Full support for Access for DOS. (VT220)

Access for DOS (VT220) Support

Access for DOS (VT220) software is a terminal emulation package for PCs running MS–DOS. Access for DOS (VT220) software works in conjunction with the DOS Workstation software, allowing the user to establish sessions with a remotely X.25 connected host computer.

HARDWARE REQUIREMENTS

Processors Supported:

80286-, 80386-, and 80486- Digital personal computers.

Disk Space and Memory Requirements:

The OSI Gateway station requires:

- Disk size: 3 MB minimum.

- RAM: 640 KB minimum.

- A 1.2 MB 5.25-inch 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-inch disk drive, or a 1.44 MB 3.5-inch disk drive.

Ethernet Controller:

One Ethernet controller for the OSI 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 OSI Gateway and 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 (VT220) (SPD 38.90.xx)

Access for DOS (VT220) software is a terminal emulation package for PCs running MS–DOS. Access for DOS (VT220) lets the user emulate multiple terminals simultaneously. At any one time, the user can connect and communicate with nine different hosts.

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.

Product Family

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

5.25-inch and 3.5-inch diskettes.

ORDERING INFORMATION

Software license, documentation, and media (5.25-inch and 3.5-inch diskettes): QB-MJSAA-WW

SOFTWARE LICENSING

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