

Software Product Description

PRODUCT NAME: **StrataCom® IPX® 16/32 Frame Relay Software, Version 5.1**

SPD 38.38.00

DESCRIPTION

StrataCom IPX 16/32 Frame Relay Software is produced by StrataCom, Inc. and distributed and warranted by Digital Equipment Corporation. The StrataCom IPX 16/32 System Software provides operating system support for the StrataCom IPX 16 and IPX 32 System Units. The IPX 16/32 Frame Relay Software provides an additional software application layer. Together, the IPX 16/32 Frame Relay Software, the IPX 16/32 System Software, and the IPX 16 or IPX 32 hardware provide the functionality described below.

StrataCom IPX 16/32 Frame Relay Software, Version 5.1, will only support IPX 16 or IPX 32 System Units utilizing T1 trunk interfaces. StrataCom IPX 16/32 Frame Relay Software, Version 5.1 does NOT support E1 trunk interfaces.

The StrataCom IPX 16 and IPX 32 are digital network processing systems that are used to interconnect computers, PBXs, and other communications equipment in a private corporate network environment. The IPX 16 and IPX 32 are used to build digital networks, integrating data, voice, video, and FAX over high speed digital transmission services.

The IPX 16 and IPX 32 are large systems capable of backbone network applications, such as interconnecting corporate offices and manufacturing sites. The IPX 16 and IPX 32 are both floor-standing units. The IPX 16 is a single-shelf system with 16 card slots. The IPX 32 is a double-shelf system with 32 card slots. Each system has one or two Processor Control Cards (PCCs) and up to four AC or DC power supplies.

The IPX 16 can support up to 8 T1 or E1 trunk lines and up to 8 T1/D4 or E1 circuit lines. The remaining card slots are available for voice and data ports, allowing up to 96 voice connections and up to 72 data connections.

The IPX 32 can support up to 16 T1 or 14 E1 trunk lines and up to 16 T1/D4 or 15 E1 circuit lines. The remaining card slots are available for voice and data ports, allowing up to 192 voice connections and up to 200 data connections.

Frame Relay (FR)

The Frame Relay feature provides a packet mode interface to private digital networks. Together with FastPacket® switching, the Frame Relay feature supports an integrated high performance wide area data network. It is designed to provide high speed packet transmission, low network delay, low bit error rates, and efficient use of network bandwidth. A FastPacket switch, together with the Frame Relay feature, is ideal for bursty, high speed data such as found in LAN-to-LAN interconnection applications.

The Frame Relay interface simplifies the interface between customer data equipment and the network so wide area packet switching can be accomplished with higher levels of performance. Data frames are multiplexed onto a single high-speed line, and the IPX determines where to relay the data frame by means of the frame's address field. Any device can communicate with any other device in the network simply by specifying the address.

Due to bandwidth efficiencies, the network can be implemented with fewer trunks, and the single high speed line between a router and the IPX eliminates the need to provision the router and IPX with multiple lower speed ports. In addition, routers can be less expensive because the router needs only enough processing bandwidth to forward and terminate its own traffic without the need to process other network traffic.

The Frame Relay PAD (FRP) consists of a front card and a back card that provides a V.35 physical interface. The V.35 Back Card provides four ports at speeds up to 256 kbps. A single port may operate at speeds up to 1.024 Mbps. The V.35 interface conforms to CCITT V.35. Refer to Software Product Description (SPD) 38.34.xx for more information on the IPX 16 and IPX 32 hardware components.

Network Configuration Guidelines

IPX 16/32 Frame Relay Software, Version 5.1, does NOT support E1 trunk interfaces.

Data connections using the Frame Relay feature require, at a minimum, that the StrataCom IPX Frame Relay Software, Version 5.1 be loaded to two IPX System Units, one at each end of the connection. Intermediate IPX System Units within an IPX network need not be loaded with StrataCom IPX Frame Relay Software.

Frame relay connections in an IPX network require at a minimum two Frame Relay PAD/V.35 FRP Back Card Pairs, one at each end of the connection.

IPX 12, IPX 16, and IPX 32 System Units may coexist in the same IPX network, but all must be operating with Version 5.1 System Software.

Two IPX System Units must be connected via a T1 trunk line to form a minimum IPX network.

StrataCom IPX 16/32 Frame Relay Software requires PCC-Model D or later, TXR-Model D or later, PIC-Model B or later, as well as FRP-Model A and V.35 FRP Back Card-Model A within the IPX System Unit in which the software is loaded.

INSTALLATION

The StrataCom IPX 16/32 Frame Relay Software is factory installed in Flash EPROM, which resides on the Processor Control Card within the StrataCom IPX 16/32 System Hardware Unit. However, the Frame Relay functionality must be keyed on via a software switch. Digital recommends that StrataCom IPX software installation services be purchased with the product. These services provide for installation of the hardware and software by an experienced Digital specialist.

Customer Responsibilities

Before product installation can be done by Digital, the customer must:

- Install, and demonstrate as operational, the necessary synchronous communication line(s).
- Obtain, install, and demonstrate as operational any modems, CSUs, channel banks, echo cancelers, or other equipment and facilities necessary to interface to Digital's communication equipment.
- Make available for a reasonable period of time, as mutually agreed to by Digital and the customer, all hardware, communication facilities, and terminals that are to be used during installation.

HARDWARE REQUIREMENTS

One of the following system hardware units is required to run the StrataCom IPX 16/32 DFM Software Product.

DIXSA-BA	StrataCom IPX 16 System Unit, Processor Control Card Model E, flash EPROM, 120V, 600W power supply, StrataCom IPX 16 System Software License
DIXSA-BB	StrataCom IPX 16 System Unit, Processor Control Card Model E, flash EPROM, 240V, 600W power supply, StrataCom IPX 16 System Software License
DIXSA-BC	StrataCom IPX 16 System Unit, Processor Control Card Model E, flash EPROM, 48Vdc, 600W power supply, StrataCom IPX 16 System Software License
DIXSA-CA	StrataCom IPX 32 System Unit, Processor Control Card Model E, flash EPROM, two 120V, 600W power supplies, StrataCom IPX 32 System Software License
DIXSA-CB	StrataCom IPX 32 System Unit, Processor Control Card Model E, flash EPROM, two 240V, 600W power supplies, StrataCom IPX 32 System Software License
DIXSA-CC	StrataCom IPX 32 System Unit, Processor Control Card Model E, flash EPROM, two 48Vdc, 600W power supplies, StrataCom IPX 32 System Software License

Other Hardware Requirements

Frame Relay PAD Group Modules

Frame Relay PAD (FRP): DIXFA-AA

FRP Back Card/4 Port/V.35: DIXFA-BA

As part of Digital's set of software product services, remote diagnostic support of the StrataCom IPX 16 and IPX 32 may be available from a Digital Support Center. To receive this remote diagnostic service, a Bell™ 212A compatible modem is required to be connected to the Auxiliary port of the Processor Control Card located in the StrataCom IPX System Hardware Unit. The customer must maintain a dial-in communications line to the modem.

OPTIONAL HARDWARE

The StrataCom IPX 16 and IPX 32 can be uniquely configured to fit the requirements of the customer's network. The following hardware options can be ordered individually depending on the configuration of the customer's network. Refer to StrataCom IPX 16/32 System Software Software Product Description (SPD 38.34.xx) for more information.

Processor Group Modules

Processor Control Card W/Flash EPROM (redundant):
DIXCA-CA

Digital Trunk Interface Group Modules

Network Trunk Card Model B: DIXTA-AA
E1 Back Card/Single Port: DIXTA-BA
T1 Back Card/Single Port: DIXTA-BB
Transceiver Card Model D (TXR/D): DIXTA-CA
Protection Interface Card/8 Port (PIC): DIXTA-DA

FastPacket Voice PAD Group Modules

Voice Compressor Decompressor (VCD): DIXVA-BA
Utility Bus (VDP-UB): DIXVA-CA
Voice Data Pad u-Law (VDP/u): DIXVA-DB
Voice Data Pad A-Law (VDP/A): DIXVA-DA
Channelized Interface Port Model B (CIP/B): DIXVA-EB

FastPacket Data PAD Group Modules

Synch Data Pad: DIXDA-AA
SDP Back Card/4 Port/RS232C: DIXDA-AB
SDP Back Card/4 Port/RS232D: DIXDA-AC
SDP Back Card/4 Port/V.35: DIXDA-AD
SDP Back Card/4 Port/RS422/499: DIXDA-AE
Low Speed Data PAD (LDP): DIXDA-BA
LDP Back Card/4 Port/RS232C: DIXDA-BB
LDP Back Card/8 Port/RS232C: DIXDA-BC
Utility Bus (SDP-UB): DIXDA-CA

Power Supplies

Power Supply IPX 12 600W 110VAC: DIXPA-AA
Power Supply OEM 600W 110VAC: DIXPA-CA

Miscellaneous

IPX Installation Kit (TYPE II): DIXSA-XA
IPX OEM Equipment Cabinet: DIXSA-XD

SOFTWARE REQUIREMENTS

StrataCom IPX 16/32 System Software License
(included as part of StrataCom IPX 16/32 system
units option number): QL-GKYAA-A7

StrataCom IPX 16/32 System Software Media and
Documentation (included as part of StrataCom IPX
16/32 system units option number): QA-GKYAA-H7

OPTIONAL SOFTWARE*Network Management Software*

StrataView/DOS License, Media, and Documentation
Kit, V5: QB-GKZAA-W7

SOFTWARE LICENSING

A separate Frame Relay software license is required for each StrataCom IPX 16 or IPX 32 System Hardware Unit that will run the Frame Relay feature within the customer's IPX network at the time of the Frame Relay Software application upgrade. In addition, a StrataCom IPX 12 Frame Relay Software License is required for each IPX 12 System Unit that will run the Frame Relay feature within the customer's network at the time of the Frame Relay Software application upgrade. The software may be copied in its entirety solely for back-up or archival purposes, or for downline loading to all properly licensed StrataCom IPX System Hardware Units within a network.

This software is furnished under the licensing provisions of Digital Equipment Corporation's Standard Terms and Conditions. For more information about Digital's licensing terms and policies, contact your local Digital office.

ORDERING INFORMATION

IPX 16/32 Frame Relay Software License:
QL-GKXAX-AA

SOFTWARE PRODUCT SERVICES

The following Standard Software Product Services are prerequisite services required for Layered Product Services. These include:

Software Product DECservice System Service (SSS/OS):
QT-GKYA9-A9
Software Product DECservice Node Service (SNS/OS):
QT-GKYA9-N9

The following Layered Product Services (LPS) are available:

Layered Product Service (LPS): QT-GKXA9-L9
Media and Documentation Distribution Service (MDDS):
QT-GKXAA-E7
Software Documentation Update Service:
QT-GKXAA-KZ

SOFTWARE WARRANTY

Warranty for this software product is provided by Digital with the purchase of a license for the product. The software product is warranted to conform to the Software Product Description (SPD). Digital will remedy any non-conformance when it is reported to Digital by the customer during the warranty period.

The warranty period is one year. The warranty period begins when the software is installed or thirty days after delivery to the end-user, whichever occurs first, and expires 360 days later. All warranty related support for this software will end 180 days after release of a subsequent version.

Warranty is provided in the country of purchase in accordance with the provisions of Digital's Standard Terms and Conditions of Sale. Digital will provide the following services if the customer encounters a problem when using licensed software under normal conditions as defined by the SPD:

- a. If Digital also determines the problem to be a defect in the Software Product, Digital will provide remedial service on site if necessary to apply a temporary correction or make a reasonable attempt to develop an emergency bypass if the software is inoperable,
- b. Assist the customer in preparing a Software Performance Report (SPR). If a customer diagnosis indicates the problem is caused by a defect in the Software Product, the customer may submit an SPR to Digital.

Digital will respond to a problem reported in an SPR that is caused by a defect in the current, unaltered release of the Software Product. The response will provide temporary corrections, useful emergency by-passes and/or notice of the availability of the corrected software code.

Telephone support may be available from the Digital Telephone Support Center. Please contact your local Digital office for information on the provision of telephone support as part of the warranty.

DIGITAL DOES NOT WARRANT THAT THE SOFTWARE LICENSED TO THE CUSTOMER SHALL BE ERROR FREE, THAT THE SOFTWARE SHALL OPERATE WITH ANY HARDWARE AND SOFTWARE OTHER THAN SPECIFIED IN THIS SPD, THAT THE SOFTWARE SHALL SATISFY THE CUSTOMER'S OWN SPECIFIC REQUIREMENTS, OR THAT COPIES OF THE SOFTWARE OTHER THAN THOSE PROVIDED OR AUTHORIZED BY DIGITAL SHALL CONFORM TO THE SPD. DIGITAL MAKES NO WARRANTIES WITH RESPECT TO THE FITNESS AND OPERABILITY OF MODIFICATIONS NOT MADE OR AUTHORIZED BY DIGITAL.

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