digital
Software Product Description

PRODUCT NAME: RT-11 2780/3780 Protocol Emulator, Version 4.0   **SPD 10.16.0**

DESCRIPTION:

The RT-11 2780/3780 Protocol Emulator (PE) provides suitably configured PDP-11 systems running RT-11, Version 4.0 with communications capabilities similar to IBM 2780 and 3780 remote batch terminals.

The emulator runs under the RT-11 Version 4.0 Foreground/Background (FB) or Extended Memory (XM) monitor as either a foreground or background job. The emulator accepts commands interactively or from indirect command files. Commands are provided for operation in unattended environments. The emulator supports operation of a single full- or half-duplex synchronous point-to-point line at transmission speeds up to 9600 bits per second on an otherwise idle system (maximum line speed on PDT-11 is 4800 bits per second). Support for automatic answer to incoming calls is also available for use with those modems that provide this capability.

The communications discipline implemented by the RT-11 2780/3780 PE is a subset of IBM's Binary Synchronous Communications (BSC) protocol that uses the EBCDIC transmission code. Horizontal format control records can be received and processed. A subset of vertical format control escape sequences is supported, specifically single, double, and triple space, form feed, and space suppress. Any block addressable storage device supported by RT-11, Version 4.0 can be used as a source of transmission files. Both fixed length (80 character card image) and variable length transmitted as either EBCDIC (automatically translated from ASCII) or binary data (no translation). BSC control characters are automatically added to the data before transmission and stripped upon reception. Any block addressable storage device or line printer supported by RT-11, Version 4.0 can be used to receive files.

The following 2780/3780 remote batch terminal features are supported:

- 2780 multiple record transmission option
- Transparent mode
- 3780 space compression
- Variable horizontal forms control
- Print and punch component selection on receive

MINIMUM HARDWARE REQUIRED:

Any valid RT-11 Operating System, Version 4.0 FB or XM configuration with at least 32K bytes of memory and one of the following devices:

- On PDP-11 - DU11 or DUP11
- On LSI-11 - DUV11
- On PDT-11/130 or PDT-11/150 - SCI

OPTIONAL HARDWARE:

KG11 CRC arithmetic unit
(The KG11 will not be supported in future releases.)

PREREQUISITE SOFTWARE:

RT-11 Operating System, Version 4.0 with FB or XM monitor. The RT-11, Version 4.0 FB monitor is suitable, as distributed, for RT-11 2780/3780 PE operation. Certain optional RT-11 2780/3780 PE features will require an RT-11 sysgen.

OPTIONAL SOFTWARE:

None

TRAINING CREDITS:

None

SUPPORT CATEGORY:

DIGITAL SUPPORTED
RT-11 2780/3780 PE is a DIGITAL Supported Software Product.

SOFTWARE INSTALLATION:

DIGITAL INSTALLED
DIGITAL installation is required for Software Product Support. There is no charge for installation if performed at the time of system installation. DIGITAL installed software products, except for operating systems, are subject to an add-on installation fee when purchased subsequent to system installation.

SOFTWARE PRODUCT SUPPORT

RT-11 2780/3780 PE includes standard warranty services as defined in the Software Support Categories Addendum of this SPD.

PREREQUISITE SUPPORT:

A Customer Support Plan with its accompanying Network Profile must be prepared jointly by DIGITAL and the customer. This is a plan detailing support services

to be provided. It includes descriptions of the DIGITAL and IBM systems, the physical communications link(s), the application, the expected data traffic, the required level of support, and recommendations for additional support service.

CUSTOMER RESPONSIBILITIES:

Before installation of the software, the customer must:

- Previously have installed all requisite hardware including terminals

- Obtain, install, and demonstrate as operational any modems and other equipment and facilities necessary to interface to DIGITAL's communication equipment

- Demonstrate equivalency of operation for modems other than Bell 201C and 208, or in Europe, PTT approved synchronous modems

- Provide a know working relevant file or job that can be submitted to the remote system to facilitate installation verification of the software

- Make available for a reasonable period of time, as mutually agreed by DIGITAL and the customer, all hardware, communication facilities terminals, and relevant remote system personnel that are to be used during installation.

- Accept responsibility for the proper operation of equipment or software not provided by DIGITAL and conformance of such equipment or software to the IBM specifications cited below

WARRANTY LIMITATIONS:

DIGITAL has designed this software according to the specifications for IBM 2780 and 3780 data transmission terminals as defined in IBM documents GA27-3005, and GA27-3063 respectively.

The following is an example of a specific configuration against which the software has been tested:

IBM OS/VS2 JES2

Since the introduction of this product, other configurations may have been tested. Please contact your local DIGITAL office for up-to-date information.

ORDERING INFORMATION:

All binary licensed software, including any subsequent updates, is furnished under the licensing provisions of DIGITAL's Standard Terms and Conditions of Sale, which provide in part that the software and any part thereof may be used on only the single CPU on which the software is first installed, and may be copied, in whole or in part (with the proper inclusion of the DIGITAL copyright notice and any DIGITAL proprietary notices on the software) only for use on such CPU.

All source licensed software is furnished only under the terms and conditions of a separate Software Program Sources License Agreement between Purchaser and DIGITAL.

Options with no support services are only available after the purchase of one supported license.

A single-use license only option is a license to copy the software previously obtained under license.

Sources and/or listings options are only available after the purchase of at least one supported license and after a source license agreement is in effect.

The following key (D, E, G, H, Q, R, X, Y, Z) represents the distribution media for the product and must be specified at the end of the order number, e.g., QJD59-AY = binaries on RX01 Floppy Diskette.

D = 9-track 800 BPI Magtape (NRZI)
E = RK05 Disk Cartridge
G = TU58 DECtape II Cartridge
H = RL02 Disk Cartridge
Q = RL01 Disk Cartridge
R = Microfiche
X = RX02 Double Density Diskette
Y = RX01 Floppy Diskette
Z = No hardware dependency

QJD59 -A— Single-use license, binaries, documentation, support services (media: D, E, G, H, Q, X, Y)

QJD59 -C— Single-use license, binaries, documentation, no support services (media: D, E, G, H, Q, X, Y)

QJD59 -D— Single-use license only, no binaries, no documentation, no support services (media: Z)

Sources/Listings Options

QJD59 -E— All sources (media: Y)

QJD59 -F— Listings (media: R)

Update Options

Users of PDT-11 2780/3780 PE, RT-11/2780 (CTS-300/2780), or RT-11 (CTS-300)/LSI-11 2780 whose specified Support Category warranty has expired may order under license the following software update at the then current charge for such update. The update is distributed in binary form on the appropriate medium and includes no installation or other services unless specifically stated.

QJD59 -H— Binaries, documentation (media: D, E, G, H, Q, X, Y)

QJD59   -H— Right to copy for single-use (under exist-
               ing license), no binaries, no documenta-
               tion (media: Z)

Sources/Listings Update Options

The following options are available to licensed users as updates to sources and/or listings options. The update is distributed in source form on the appropriate medium and includes no installation or other services unless specifically stated.

QJD59   -N— Sources update (media: Y)

QJD59   -N— Sources update listings (media: R)

Miscellaneous Options

QJD59   -G— Documentation only kit (media: Z)

ADDITIONAL SERVICES:

Post-warranty Software Product Services for this software product are available with the prerequisite being the purchase of the RT-11 Self-Maintenance Service for Software. Customers should contact their local DIGITAL office for additional information.