ComC IBM BSC

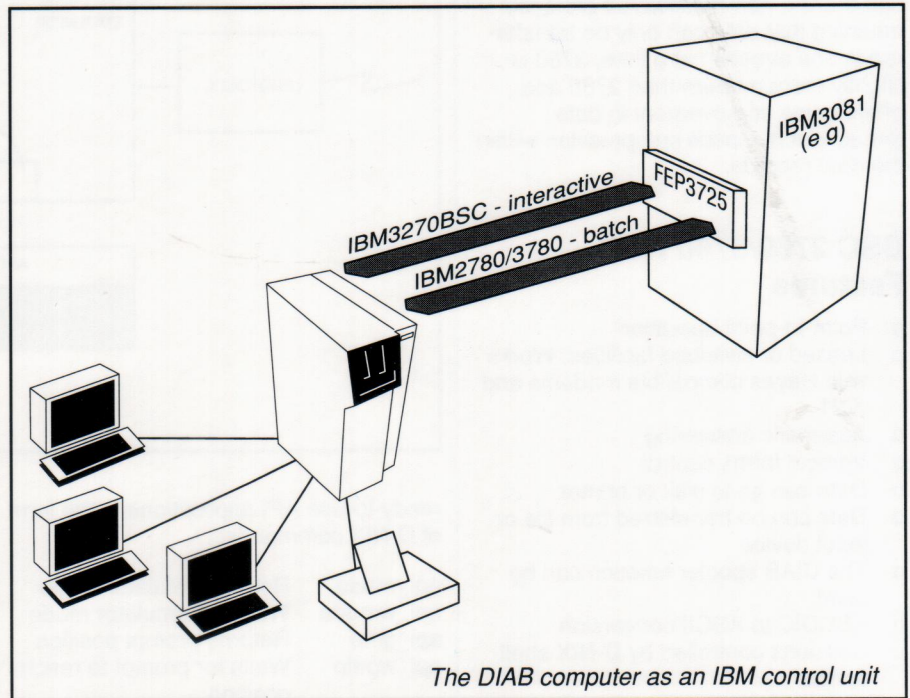■ BSC 3270   ■ BSC 2780/3780   ■ 3270 API

Diab Data offers an extensive set of powerful binary synchronous communication products which enable Diab Data's DIAB computer systems to co-exist with IBM or IBM compatible systems.

Diab Data's BSC gateway products include direct emulation of 3270 devices and RJE 2780/3780 emulation between an IBM mainframe computer system and a DIAB computer or a network of DIAB computers.

BSC data transmission is widely supported throughout the computer industry and offers a well accepted standard for data transmission between a wide variety of computer systems.

The emulator offers support for the 3270 API (Application Program Interface) as well as support for static and dynamic session allocation.

The DIAB computer as an IBM control unit

BSC 3270 emulation

Diab Data's BSC 3270 emulation software enables a DIAB computer system to appear as a 3270 cluster controller on a binary synchronous communication line to an IBM mainframe system or compatible. The BSC 3270 emulator supports point-to-point or multi-dropped communication links to the remote host as well as autodialling and X.21 support.

The BSC 3270 emulator is a software emulation of 3270 display units and 3280 printers. The standard terminal connected to the DIAB system is used for the 3270 display emulation. Standard printers connected to the DIAB system are used as 3280 printers directly or through spooler functions.

BSC 3270 Features

o   Emulates control units:
   -3271, Model 2
   -3274, Model 1C
   -3276, Model 1
o   Emulates Display Stations:
   -3277 DS, Model 2
   -3278 DS, Model 2
o   Emulates printers:
   -3284 P, Model 2 and 3
   -3286 P, Model 2

   -3287 P, Model 1 and 2
   -3288 P, Model 2
   -3289 P
o   EBCDIC to ASCII conversion
o   Local screen copy
o   Easy keyboard setup
o   Audible alarm
o   Screen attributes

BSC 2780/3780 (RJE emulation)

The 2780/3780 emulator provides the software necessary to manage an IBM 2780 or 3780 communication line under program control from a DIAB computer system. A 2780/3780 RJE station emulator task is also provided, allowing the DIAB system to appear, to a remote IBM host, as a stand-alone 2780 or 3780 Remote Job Entry station. The emulator comprises the software necessary to manage the data link and a number of emulator functions which enable the user to create procedures (shell-scripts) to run the dialogue.

The basic 2780 or 3780 binary synchronous protocols are often used as accepted standard means of data file communication between systems via a BSC communication line. Diab Data's 2780/3780 RJE emulator provides an implementation of this protocol and

allows simple, flexible communication under program control with other systems supporting the 2780/3780 protocol.

Both protocols are batch oriented half-duplex, non-multileaved protocols meaning that data can only be transferred in one direction at a time. 3780 is slightly more modern than 2780 and offers some improvement in data throughput by space compression within the data records.

BSC 2780/3780 RJE Features

o Point-to-point operation
o Leased or switched facilities. Works with Hayes compatible modems and X.21
o Automatic answering
o Vertical forms control
o Data can go to disk or printer
o Data can be transferred from file or input device
o The DIAB spooler function can be used
o EBCDIC to ASCII conversion
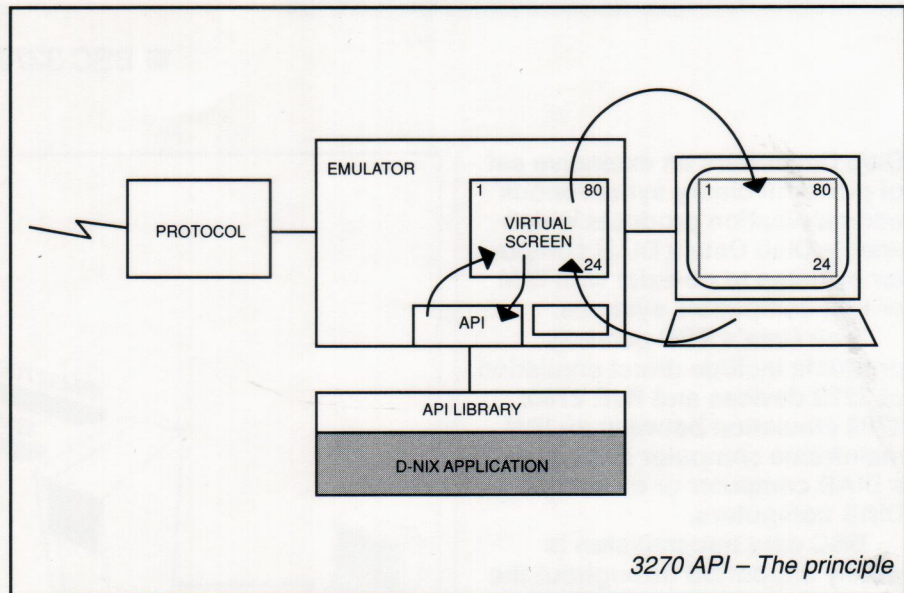o Sessions controlled by D-NIX shell-scripts

API - Application Program Interface

The application program interface is an extension of the BSC3270 product and is compatible with IBM's 3270 Application Program interface. The API permits access to the presentation memory of the terminal emulator from user defined processes. The API program can be used in conjunction with the capabilities of D-NIX to improve the ability of the D-NIX developer to conduct interactive sessions with an IBM host application.

The API protocol allows a user to generate a host transaction from an application in a DIAB computer, enables the user to read data from a host session into a D-NIX process, simplifies operator interaction with D-NIX process control functions, and simplifies host interaction and set up.

The API product comprises a C function library that is linked into the user's applications.

The product comes with a set of

3270 API – The principle

ready-to-use API applications in the form of D-NIX commands:

api_mode	Returns emulator mode
api_wmode	Waits for emulator mode
api_getp	Returns prompt position
api_wgetp	Waits for prompt to reach position
api_finds	Looks for and returns position of text string
api_wfinds	Returns position of text string
api_gets	Returns text string at position
api_waits	Waits for text string in position
api_puts	Write text string at position

System requirements

Any DIAB system (model 20 or larger) and ComC Main Software 072-8385-XX.

Ordering information

072-8416-XX BSC 3270 for ComC
072-8440-XX BSC 2780/3780 for ComC
072-8420-XX 3270 API for ComC

XX is computer related, see price list for further information.