

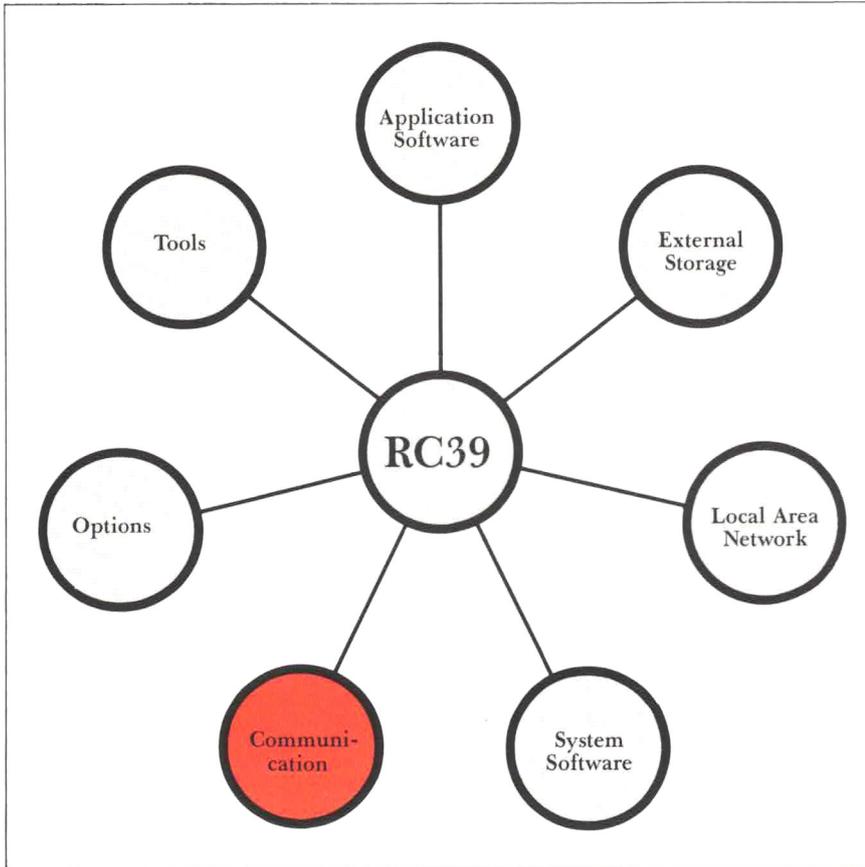
SW3803 – IBM 3274 Emulator

Using SW3803, RC39 is enabled to operate as an IBM 3274 CU cluster control unit via the RC3931 communication control unit.

SW3803 handles up to 128 parallel sessions. With this advanced software package, it is possible to use all 32 possible RC45/RC855 terminals connected to an IBM host computer. The software package handles both BSC and SNA/SDLC communication via V.24 as well as X.21 interfaces.

Other computers, such as Rc Partner, connected to the RC39 via a local area network, can use the communication facilities.





Outstanding features:

- emulates IBM 3274 CU
- dual host: simultaneous communication with two host computers
- up to 128 3270 devices
- devices can be freely distributed on connected RC45 and RC855 terminals and Rc Partner personal computers
- one or two display devices per physical terminal, up to four for Rc Partner
- optional BSC or SNA/SDLC protocol
- optional V.24 or X.21 communication interface

SW3803 is a software package containing the programs to be executed on the RC3911 communication processors with associated adaptor F641/F642. SW3803 permits the communication processor to operate as an IBM 3274 cluster control unit. In order that a terminal or personal computer can operate as a 3270 device, or possibly as several devices linked with a cluster control unit, an emulator program is required. This program is available as a separate package. For terminals connected to RcCircuit, this program can be downloaded from RC39 through the communication processor.

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The Cluster Control Unit

Functioning as IBM 3274 cluster control unit (CU), the communication processor constitutes a particularly flexible “patch field”, connecting terminals and personal computers in the local environment with one or more host computers, which can be remotely located and communicate via leased line with modems (DATEL) or the public data networks (DATEX).

The cluster control unit is able to simultaneously handle up to 128 emulated 3270 display or printer devices. It should be noted that in this context, 3270 devices are not to be understood as physical, but as abstract (“logical”) devices, as the most significant feature is that separate sessions can be established between a host computer and different devices. Thus, each terminal can operate as one or two display devices and one printer device, as the printer itself is connected to the terminal. When a terminal operates as two 3270 display devices, one will, at all times, be displayed on the screen, while the other one can simultaneously be in session with a host computer, without it being influenced by the fact that the device is “invisible”. Shifting between the visible and the invisible unit is done in an instant by simply pressing two keys. Correspondingly, each Rc Partner personal computer can operate as up to four display devices and up to four printers.

In addition to 3270 devices emulated on physical terminals or personal computers, the cluster control device supports so-called “soft units” existing exclusively in software. In relation to the host computer, these devices operate as ordinary display devices, and they are also accessible for application software in the local environment, either on RC39 or Rc Partner. A special programmer’s kit is required for this application.

The cluster control device can externally handle dual host communication connections. For each of these, there is optional selection between BSC and SNA/SDLC protocol and between DATEL and DATEX connection. All combinations, except DATEX-BSC, are supported on the host computer side by IBM products, DATEL-BSC is supported however by a number of other suppliers. DATEX-BSC can be used in connection with an RC3803 Front End computer and permits extra flexibility as regards the number of host computers which can be connected to it.

Independently of the remaining devices, any display device can operate in session with one host computer at a time. When there are more host computers, selection is made via a menu.

Configurations

The basic configuration necessary in order to use the cluster control software consists of the RC3931 communication processor plus an F641 or F642 communication adaptor. The choice of adaptors depends on the desired combination of protocol and communication interface (see below).

Using this configuration, up to 16 terminals can be connected via RcCircuit, and it is possible to communicate with one host computer having a maximum transmission speed of 9600 bps.

Adding an F641 or F642 adaptor, the number of terminals can be increased to 32, and it is either possible to communicate with dual host computers, or increase the speed to 19,200 bps (V.24).

Adding an F620 RcMicronet adaptor either to the basic configuration or the extended configuration also permits the use of Rc Partner personal computers connected to the Micro network as 3270 devices.

Emulation specifications

IBM 3274 BSC, up to 64 devices.
IBM 3274 SNA/SDLC, PU type 2, LU sessions of the types 1, 2 and 3.
Up to 128 devices.

Communication protocol, modem/DCE interface

3274 BSC — V.24/X.21 bis/X.21 (F641).
3274 SNA/SDLC — V.24/X.21 bis (F641).
3274 SNA/SDLC — X.21 (F642).

Transmission speed, 3270 host computer connections

V.24:
Modem controlled up to 9600 bps.
With two F641 adaptors and one 3270 host computer connection, up to 19,200 bps (high performance).
X.21:
DCE-controlled up to 9600 bps.

