Communications & Networking

This product survey covers various communications, networking, and terminal-control software products for large, medium, and small computers. The survey section is divided into 3 uniquely identifiable subsections: TP MONITORS & ENHANCEMENTS, NETWORK DESIGN & MANAGEMENT, and OTHER TERMINAL CONTROL SOFTWARE. Each of these subsections is fully self-contained, and preceded by a dot chart that reflects all the profiles that can be found with the subsection.

The body of each subsection consists of condensed product descriptions arranged alphabetically by manufacturer/vendor name. Multiple package descriptions under one manufacturer/vendor listing are sequenced alphabetically by package name.

The dot chart preceding the body of the survey is based on vendor/product name compared to the operating system/hardware configuration that supports the product. All major mainframe, minicomputer, and some popular microcomputer systems are represented in the dot chart.

In the various communications and networking subsections represented in this survey section, you will find packages from the following software suppliers:

The ADESSE Corp

Allinson-Ross

Altergo Products

Analysts International

Applied Data Research

Applied Information Systems

Applied Realtime Systems

AST Research

B.I. Moyle

Boole & Babbage

Burroughs Corp

Candle Corp

CE Corp

Cincom Systems

CGA Software

Clyde Digital

Communications Diagnostic Systems

Communications Research

Comm-Pro Associates

Comp Act Data Systems

Computer Associates Int'l

Computer Automation

Computer Projects

Computer Software Unlimited

Consolidated Software

Contel Information Systems

COSMIC

Cross Information

Cytrol

Data General

Datanex

Decision Point

Digital Equipment Corp (DEC)

Digital Management Group

Digital Research

Ergonomic Software

ESI Corp

Evans, Griffiths & Hart

Ferox Microsystems

Firesign Computer Co

Four-Phase Systems

Gamma Technology

George W. Hallahan & Co

Gould S.E.L.

GT Software

GTE Telenet Communications

H&M Systems

H&W Computer Systems

Hewlett-Packard

Highlander Systems

Honeywell Information Systems

Horizon Data Systems

IBM Corporation

Informatics General

Information Intelligence

Interactive Systems

Joiner Assoc

Kolinar Corp

Communications & Networking

Labyrinth Systems

Lexico Enterprises

Masstor Systems

Mathematica Products Group

MDS Qantel

Mechanical Technology

Micro Tempus

National Information Systems

NCR/Comten

NCR Corp

Nixdorf Computer

On-Line Software Int'l

Oxford Software

P.M. Sulcs & Assoc

Pacific Software

Pennington Systems

Perkin-Elmer

Polygon Assoc

Polygon Software

Prime Computer

SIS Sundata

Softron Inc

Softsystems

Software AG of North America

Software Dynamics

Softworks, Inc

Sperry Corp

Standard Software

Sterling Software

Stonehouse & Co

Supersoft, Inc

Systar Corp

Tandem Computer

Technalysis Corp

Texas Instruments

Tone Software

Transaction Data

TRAX Softworks

Triangle Software

Unique Automation Products

Unique Information Systems

VisiCorp

VM Personal Computing

Wang Laboratories

Westinghouse Electric

XI Systems Technology

Communications & Networking
TP Monitors & Enhancements

This subsection contains profiles of various full-function teleprocessing monitors, communications control programs, and associated enhancements to the aforementioned product types that can be implemented either on a standalone basis or integrated with database or data management systems. Where the package can be used as an adjunct to a larger system environment, references are made to the other elements that make up that environment.

This subsection addresses specific communications capabilities utilized with mainframe and minicomputer operations primarily, with some microcomputer representation therein. For particular packages not found in this section, check the Indexes for possible location in a companion survey section.

Communications & Networking
TP Monitors & Enhancements

#	COMPANY • PRODUCT	TYPE	IBM DOS/VS-Based	IBM OS/VS1 & SVS	IBM MVS-Based & VM	IBM Small Systems	Burroughs MCP Systems	DEC PDP-11 Systems	DEC VAX/VMS	Data General Systems	Hewlett-Packard MPE/RTE	Honeywell GCOS 6/7/8	Honeywell MOD 200/400/600	Sperry Corp 1100 OS	Wang VS/DOS	OTHER COMPUTERS	#
1	Allinson-Ross • TIP/30	TP monitor	—	—	—	—								●			1
2	Altergo Products • SHADOW II	TP monitor	●	●	●	—											2
3	Analysts Int • LUCI	CICS perf anal	●	●	●	—											3
4	Applied Data Research • ADR DATACOM/DC	TP monitor	●	●	●	—											4
5	Applied Data Research • ADR/ROSCOE	term oriented monitor	—	●	●	—											5
6	Applied Realtime • TFC	terminal mgr	—	—	—	●											6
7	B I Moyle • BIM-ODIS	CICS/DOS/VSE sys stat	●	—	—	—											7
8	B I Moyle • BIMSUBMT	job stream enhancement	●	—	—	—											8
9	Boole & Babbage • CONTROL/CICS	CICS perf anal	—	●	●	—											9
10	Boole & Babbage • SECURE/CICS	CICS security	●	●	●	—											10
11	Candle Corp • OMEGAMON/CICS	real-time monitor	●	—	●	—											11
12	Cincom Systems • ENVIRON/1	TP monitor	●	●	●	—											12
13	Comp Act Data Systems • ACES	CICS prog dvlpmt	●	—	●	—											13
14	Computer Associates Int • CA-CICS-UMAX	utilization mon	●	●	●	—											14
15	Computer Associates Int • CA-RAPS	power support	●	—	—	—											15
16	Computer Software Unlimited • Harold	basic comm monitor	●	—	●	—											16
17	Cytrol • CYX	trans proc sys	—	—	—	—	●	●									17
18	Cytrol • CYX-DC	TP monitor	—	—	—	—	●	●									18
19	Cytrol • CYX-DD	disk driver	—	—	—	—	●	●									19
20	Cytrol • CYX-DV	mux driver	—	—	—	—	●	●									20
21	Decision Point • PRO II	CICS/VS map	●	●	●	—											21
22	GT Software • BMS/GT	online map gen	●	●	●	—											22
23	H&M Systems Software • CFAST	CICS display mgmt	●	●	●	—											23
24	H&M Systems Software • MFAST	prog dvlp CICS/VS	●	●	●	—											24
25	H&W Computer Systems • CPMS	direct CICS/VS spool	—	●	●	—											25
26	H&W Computer Systems • CTOP	term optimizer	●	●	●	—											26
27	H&W Computer Systems • SYSA	CICS alloc/verif	—	—	●	—											27
28	Highlander Sys • CICS/COMMON	CICS/VS remote supp	●	●	●	—											28
29	Honeywell Info Sys • Multicopy Timeshare	timesharing	—	—	—	—						●					29
30	Honeywell Info Sys • TPS 6-DPF	transact process pgm	—	—	—	—						●					30
31	Honeywell Info Sys • TSS Time Sharing	timeshare network man	—	—	—	—						●					31
32	Honeywell Info Sys • TSS Admins Option	comm mgmt	—	—	—	—						●					32
33	Honeywell Info Sys • TSS Advanced App	timeshare applic	—	—	—	—						●					33
34	Honeywell Info Sys • TSS COBOL-74 Option	timeshare prog	—	—	—	—						●					34
35	Honeywell Info Sys • TSS Data BASIC	timesharing BASIC	—	—	—	—						●					35
36	Honeywell Info Sys • TSS Docu Formatting	file formatter	—	—	—	—						●					36
37	Honeywell Info Sys • TSS DM IV Option	timesharing database	—	—	—	—						●					37
38	Honeywell Info Sys • TSS Editing Option	text editor	—	—	—	—						●					38
39	Honeywell Info Sys • TSS Electronic Mail	electronic message	—	—	—	—						●					39
40	Honeywell Info Sys • TSS File Mgmt	conversational/interface	—	—	—	—						●					40
41	Honeywell Info Sys • TSS FORTRAN	FORTRAN timeshare sys	—	—	—	—						●					41
42	Honeywell Info Sys • TSS Media Input	paper tape controller	—	—	—	—						●					42
43	Honeywell Info Sys • TSS Sort Interface	interactive sort	—	—	—	—						●					43
44	Honeywell Info Sys • TSS TEXLIB	text processed lib	—	—	—	—						●					44
45	Honeywell Info Sys • TSS Text Processing	file editing	—	—	—	—						●					45
46	IBM S/370 • CICS/DOS/VS/EXTM V.3/R.1	pre-SNA support	●	—	—	—											46
47	IBM S/370 • CICS/VS (OS/VS & DOS/VS)	TP monitor	●	●	●	—											47
48	IBM S/370 • CORMES	message exchanges	●	—	—	—											48
49	IBM S/370 • DMS/CICS/VS—DOS & OS R.3	app dvlpment aid	●	●	●	—											49
50	IBM S/370 • SDF/CICS/OS/VS & DOS/VS R.2	basic mapping	●	●	●	—											50

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TP Monitors & Enhancements

COMPANY ● PRODUCT	TYPE	IBM DOS/VS-Based	IBM OS/VS1 & SVS	IBM MVS-Based & VM	IBM Small Systems	Burroughs MCP Systems	DEC PDP-11 Systems	DEC VAX/VMS	Data General Systems	Hewlett-Packard MPE/RTE	Honeywell GCOS 6/7/8	Honeywell MOD 200/400/600	Sperry Corp MOD 1100 OS	Wang VS/DOS	OTHER COMPUTERS	
1 IBM S/370 ● VSE RSCS/SNA for VM	VM/SP SNA support	●	—	●	—	—	—	—	—	—	—	—	—	—		1
2 IBM S/1 ● RPS Comm Monitor, Ver. 2	TP monitor	—	—	—	●	—	—	—	—	—	—	—	—	—		2
3 Mathematica Products Group ● ATLAS	data comm monitor	●	—	—	—	—	—	—	—	—	—	—	—	—		3
4 Mathematica Products Group ● DES	data entry/veri sys	●	—	—	—	—	—	—	—	—	—	—	—	—		4
5 Mathematica Products Group ○ MPGSWIFT	TP monitor	○	—	—	—	—	—	—	—	—	—	—	—	—		5
6 Mathematica Products Group ● MPGSWIFT II	tele monitor	●	—	—	—	—	—	—	—	—	—	—	—	—		6
7 Mathematica Products Group ● TIPS/FSE	full-screen editor	●	—	—	—	—	—	—	—	—	—	—	—	—		7
8 Mechanical Technology ● CICS/DRAS	dynamic resource alloc	●	●	●	—	—	—	—	—	—	—	—	—	—		8
9 Nixdorf Computer ● TCP	local/remote comm	●	—	—	—	—	—	—	—	—	—	—	—	—	NIDOS/VSE	9
10 Nixdorf Computer ● Teleprocessing Utility	communications utility	●	—	—	—	—	—	—	—	—	—	—	—	—	NIDOS/VSE	10
11 On-Line Software ● GUARDIAN	security enhancement	●	●	●	—	—	—	—	—	—	—	—	—	—		11
12 On-Line Software ● InterTest	testing & debugging	●	●	●	—	—	—	—	—	—	—	—	—	—		12
13 On-Line Software ● OMNILINK	message mgmt	●	●	●	—	—	—	—	—	—	—	—	—	—		13
14 Oxford Software Corp ● COSS	interactive sec pkg	●	●	●	—	—	—	—	—	—	—	—	—	—		14
15 Perkin-Elmer ● Multi-Terminal Mon	extended term mgr	—	—	—	—	—	—	—	—	—	—	—	—	—	OS/32	15
16 Polygon Software ● INTERCOMM	multithread TP mon	—	●	●	—	—	—	—	—	—	—	—	—	—		16
17 Software AG of North Amer ● COM-PLETE	TP monitor	●	●	●	—	—	—	—	—	—	—	—	—	—		17
18 Sperry Corp ● CMS 1100 DCP	interactive timeshare	—	—	—	—	—	—	—	—	—	—	—	●	—		18
19 Sperry Corp ● CMS 1100 GCS	interactive timeshare	—	—	—	—	—	—	—	—	—	—	—	●	—		19
20 Sperry Corp ● CTS	interactive timeshare	—	—	—	—	—	—	—	—	—	—	—	●	—		20
21 Sperry Corp ● HVTS	timeshare	—	—	—	—	—	—	—	—	—	—	—	●	—		21
22 Sterling Software ● QUICK-TUBE	perf enhancement	—	●	●	—	—	—	—	—	—	—	—	—	—		22
23 Technalysis Corp ● T/MCS	comm/network controller	—	—	—	—	●	—	—	—	—	—	—	—	—		23
24 Tone Software ● TONE 3/TONE 4	enhanced TSO	—	●	●	—	—	—	—	—	—	—	—	—	—		24
25 Westinghouse Electric ● WESTI	TP monitor	●	—	—	—	—	—	—	—	—	—	—	—	—		25

■ **ALLINSON-ROSS CORP**

4291 Village Center Court, Mississauga, ON L4Z 1S2 ● 416-848-2030.

☐ **TIP/30**

Type ● TP monitor for Sperry OS/3 systems.

Host Software Environment ● Sperry OS/3 operating system with ICAM.

Host Hardware Environment ● Sperry 90/25, 90/30, 90/40, and System 80 computers with 320K bytes of memory.

Installation Data ● first installed 1976 ● 250 current users.

Description ● full-function TP monitor with multithreading facilities and interfacing provisions to all Sperry data management systems and to most commercial DBMSs that run on Sperry computers; executes IMS/90 action programs without modifications; basic package consists of 3 integrated components dedicated to program, message, and file control functions; purposes of package are to consolidate and focus OS/3 resources and to provide basic facilities for transaction processing, distributed processing, and interactive program development ● the program control function is the essential multiplexing facility that permits TIP/30 to distinguish among different jobs from many sources and then to execute portions of each job such that each job appears to be executed in a continuous mode; the ability to handle many jobs at the same time is called multithreading; TIP/30 multithreads through a program stack, which also permits in-line returns from external program calls; independent, pseudo-batch operations are handled through background programs that are given access to all online facilities but that are functionally severed from the online terminals ● the message control function is actually an interactive screen-formatting facility; formats can be developed, tested, and stored in a catalog for on-call access; a message utility permits formats to be downloaded from the host to a UTS 400 cluster and then called from the cluster memory to reduce line traffic during host-terminal interactions ● the file control function supports all OS/3 file and library access methods, DMS 90, DBS 90, and Cincom TOTAL DBMS; scratchpad files can be developed and maintained independently of the master files; a journal is maintained to provide roll forward/backward recovery capabilities for abends; facilities are provided to resolve deadlocks, and global synchronization is handled through user- and program-controlled software switches ● security is maintained by locks at the file and record levels; all log-on functions are controlled through a user catalog that defines a horizontal security level in the range of 1 to 255 and vertical access partitions within each level according to application department or corporate division ● various subordinate utilities are provided for interactive program development including: a program preparation facility with an RPG editor, an online librarian, a JCL stream developer, a spool file access program, an activity accounting listing, an online trace facility, and an interactive debugging aid.

Pricing & Support ● $28,500 license purchase price, plus $2,850 for installation and education; no maintenance fee first year; $3,300 annual maintenance beginning second year ● $950 monthly lease

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includes maintenance, but $2,850 installation and education charge is extra.

■ ALTERGO PRODUCTS INC

400 West Cummings Park, Woburn, MA 01801 ● 617-933-8811.

□ SHADOW II

Type ● multithreaded, multitasking teleprocessing monitor.

Host Software Environment ● IBM DOS/VS, DOS/VSE, OS/VS1, OS/VS2(SVS), OS/VS2(MVS).

Host Hardware Environment ● IBM System/370, 3000, 4300, and compatible computers; uses a minimum of 2K bytes of real memory, 60K bytes of virtual memory and disk storage for source statements and relocatable code that varies depending on operating system.

Installation Data ● first installed 1976 ● 660 installations worldwide ● worldwide distribution.

Description ● a fully multithreaded and multitasking TP monitor that includes its own reentrant terminal access method called STAM which handles most standard IBM terminals; also accommodates BTAM, TCAM, and VTAM/SDLC access methods; provides BSC 1/2 support for smaller system attachment, and is wholly compatible with SNA ● most of the major IBM and commercial DBMS products support interfaces to SHADOW II ● provides multithread operation through 3 memory tiers that provide basic buffer/spooling facilities through a simple traffic-volume-dependent queueing facility; tasks are queued in main memory or disk storage areas where they are monitored and logged; also supports event-driven task processing for asynchronous queueing ● supports switching messages of up to 72 characters among all terminals ● includes full facilities for transaction management where transactions are coordinated through a transaction control table that identifies the initiating key and the program targeted for control transfer; the type of transaction is then identified and the transaction is processed ● provides basic security through a named sign-on, with optional security facilities including passwords and single/multiple table-controlled security keys ● logging is provided automatically to support both recovery and backup procedures.

Special Features ● SHADOW II kernel is offered in 5 operating system-dependent versions that can be extended through an extensive range of related options including: CPG, an RPG-like TP monitor language; QUOTA II, a program development/maintenance aid; and GUTS, a timesharing package with conversational RJE facilities ● in addition, there are many add-on kernel options.

Pricing & Support ● SHADOW II Kernel: $22,500/$225-DOS local support; $29,500/$295-DOS local/remote support; $50,000/$500-OS/VS1, OS/VS2(SVS); $65,000/$650-OS/VS2(MVS) one-time fee for license purchase with first-year free maintenance/ongoing monthly service fee after first year ● $900-DOS local; $1,180-DOS local/remote; $2,000-OS/VS1, OS/VS2(SVS); $2,600-OS/VS2(MVS) monthly fee for 3-year lease rental plan ● Kernel options (license purchase/monthly fee for 3-year lease/ongoing monthly maintenance fee for licensed purchase, respectively): On-Line Screen Mapping (DOS)-$8,000/$320/$80, (OS)-$10,000/$400/$100; Automatic Logging & Recovery (DOS)-$7,000/$280/$70, (OS)-$9,000/$360/$90; Database Management System Use (all Systems)-$4,000/$160/$40; System Predictor (DOS)-$3,000/$120/$30, (OS)-$4,000/$160/$40; Friendly Query System (FQS) (DOS)-$8,000/$320/$80, (OS)-$10,000/$400/$100; FQS-Spoolout (DOS)-$3,000/$120/$30; Transaction Accounting, TCAM Interface (each)-$3,000/$120/$30; VTAM Interface (each)-$3,000/$120/$30; FQS-Textpower (DOS)-$4,000/$160/$40; FQS-System Programmer & Operator Transaction (SPOT)-$3,500/$140/$35 ● related products (license purchase/monthly fee for 3-year lease/ongoing monthly maintenance fee for licensed purchase respectively): CPG Basic-$14,500/$546/$145; Database Management System option for CPG-$3,000/$84/$30; QUOTA II (DOS)-$9,500/$238/$95, (OS)-$13,000/$322/$130; QUOTA II Full Screen Editor (DOS)-$10,000/not applicable/$100; Logging/Audit Trail extension to QUOTA II-$2,000/NA/$20; GUTS-$24,000/$672/$240; Timesharing Option to GUTS-$18,500/$518/$185; Batch and Online Utilities (GUTS)-$7,000/$196/$70; BASIC Compiler (GUTS)-$5,000/$140/$50.

■ ANALYSTS INTERNATIONAL CORP

295 Madison Avenue, Suite 930, New York, NY 10017 ● 212-684-0700.

□ LUCI

Type ● performance analyzer for IBM CICS users.

Host Software Environment ● all versions of IBM DOS/VS and OS/VS; requires IBM Basic Mapping Support (BMS) package.

Host Hardware Environment ● IBM System/370, 3000, 4300, and compatible computers; usable only with 3270-type terminals.

Installation Data ● first installed 1980 ● 4 current users.

Description ● performance is analyzed by assessing the number of bytes transmitted during a given interval on a selected line; results can be displayed online or batched for periodic printout.

Special Features ● can be combined with a Data Compression option that examines an application program stream and extracts redundant characters to improve line utilization.

Pricing & Support ● basic LUCI: $9,500 license purchase price; $1,000 monthly maintenance ● for LUCI with Data Compression option: $14,500 purchase price; $1,500 monthly maintenance ● basic LUCI also available on 12-month full payout lease-purchase plan for $1,500 per month; monthly lease includes maintenance ● source code included with all plans.

■ APPLIED DATA RESEARCH INC

Route 206 & Orchard Road, CN-8, Princeton, NJ 08540 ● 201-874-9000.

□ ADR/DATACOM/DC (No longer actively marketed)

Type ● TP monitor system for IBM users.

Host Software Environment ● IBM DOS/VS, DOS/VSE, OS/VS1, OS/VS2(SVS), OS/VS2(MVS), or VM 370 operating system.

Host Hardware Environment ● IBM System/370, 3000, 4300, and compatible computers.

Installation Data ● first installed 1970 ● over 300 installations ● worldwide distribution.

Description ● a macro-generated generalized telecommunications monitor that provides full multitasking and can multithread up to 128 tasks concurrently ● supports BSC and SDLC protocols, SNA networks, single- and multipoint lines, switched lines, leased lines, and most other IBM network structures; supports all standard IBM file access methods including sequential, indexed sequential, direct, and virtual storage; supports only ADR's DATACOM/DB DBMS ● supports application programs written in COBOL, FORTRAN, PL/1 or assembly language explicitly and handles most other high-level languages that can issue a CALL statement ● consists of 3 facilities: terminal/line management, task/program management, and file/resource management; terminal/line management supports over 30 different manufacturers and most major protocols and network configurations; handles all requests from a terminal and the returning messages from the application program; task control schedules application programs in the system, allocates space and I/O resources to the task, dispatches the task, and makes allowances for loop control; file control extends to the supported access methods and the security functions that protect the integrity of the files ● includes 2 preprocessor routines; PP1 is a memory resident routine invoked when a message is received from a terminal and identifies which Message Processing Program (MPP) is to process the message; PP2 moves the message to the task area assigned to the MMP ● includes a set of accounting functions for developing terminal and library usage statistics, an Online Masking Facility that provides an interactive tool for construction of screen masks to support a video display system, and Simulation and Test Facilities that provide for users to use a card reader and printer to simulate a terminal operation for network planning and system expansion ● please refer to the 900 section for a detailed analysis of this product.

Special Features ● an extra-cost option (available for standalone version also) is the DE-II facility; it provides free-form data collec-

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tion facilities and includes tutorial capabilities for inexperienced operators.

Pricing & Support ● product is no longer actively marketed.

☐ ADR/ROSCOE

Type ● terminal-oriented conversational monitor for IBM users.

Host Software Environment ● IBM OS/VS1, OS/VS2(SVS), or OS/VS2(MVS) operating system.

Host Hardware Environment ● IBM System/370 Model 145 and up, 3000, 4300, and compatible computers.

Installation Data ● first installed 1969 ● over 1,300 installations ● worldwide distribution.

Description ● system development tool for use by application programmers, system programmers, operational personnel, end-user personnel, and management; consists of a coordinated set of discrete tasks invoked asynchronously by a primary telecommunications task ● ROSCOE Programming Facility (RPF) is a structured programming language that can manipulate data, control operations, provide screen masks for data entry operations, and design prompting sessions for non-programmer end-user personnel; other components include: resource utilization, user accounting statistics gathering facility, session-to-session operational reports, and security routines; provides COBOL, FORTRAN, and PL/1 syntax checkers and a JCL verification facility ● supports all standard IBM files and almost any 80-column card image file ● Remote Job Entry/Timesharing Facility coordinates data transfer activities among user terminals, libraries, and work files; supports interactive operations with job submission and output scanning ● User Library Facility supports up to 99 user libraries from 240 bytes minimum up to a maximum of the track size of the device used to store the file ● Screen Facility consists of a command area that is reserved for entering ROSCOE commands and verifying usage, a system control area that contains response information and system performance information, and an execution area where data is created and modified ● Language Facility is an interactive structured programming language used to develop programs that control operator activities through prompting messages; generates JCL, schedules production jobs, and provides screen masks for data entry operations ● please refer to the 900 section for a detailed analysis of this product.

Special Features ● Extended Timesharing Facilities runs as a standard monitor routine that maintains its own library files and accounting records; permits the integration of COBOL, FORTRAN, and PL/1 programs into the ROSCOE environment ● Extended Text Compositor (ROSCOE/ETC) is a series of interactive procedures for document creation and composition.

Pricing & Support ● $52,200 (MVS systems), $17,000 (Extended Timesharing Facilities), one-time permanent license fee that includes first year of maintenance ● 2 rates are given in the following; first figure is monthly license rental rate, and second figure is monthly rate for a 3-year lease; both rates include maintenance: $2,900/$1,670 (MVS systems), $944/$544 (Extended Timesharing Facilities) ● annual maintenance fees are $8,350 (MVS system), $2,720 (Extended Timesharing Facility) ● no charge for installation planning and assistance; multiple-copy discounts are 20% for second through fifth copy and 30% for 6 or more copies.

■ APPLIED REALTIME SYSTEMS, INC

1908 Clearview Parkway, Suite 100, Metairie, LA 70001 ● 504-456-0660.

☐ TFC

Type ● terminal manager for IBM Series/1 users.

Host Software Environment ● IBM EDX; accommodates COBOL interface.

Host Hardware Environment ● any Series/1 computer; supports IBM 3101, 4978, and 4979 Terminals, IBM 4973/74 Printers, ADDS REGENT/100 Terminal, Lear Siegler ADM-3A Terminal, and any other commercial terminal with similar specifications.

Installation Data ● first installed 1979 ● 25 current users.

Description ● provides terminal format control and screen generation facilities; screen displays can be generated from storage or disk load; developed sequences can be used for input or output and can be merged optionally with the application code or retained on the user data set; sampling of format controls are floating decimal to binary translation, numeric data reformatting feature, and full access to variable terminal display features (blink, reverse background, etc).

Pricing & Support ● license available purchase only for $395 ● enhancements provided for $25 distribution fee.

■ B I MOYLE ASSOCIATES, INC

5788 Lincoln Drive, Minneapolis, MN 55436 ● 612-933-2885.

☐ BIM-ODIS

Type ● CICS/DOS/VSE system status display.

Host Software Environment ● IBM DOS/VSE operating system with CICS/VSE.

Host Hardware Environment ● IBM System/370, 4300, or compatible computer; requires a minimum of 60K bytes of user memory.

Installation Data ● first installed March 1982 ● 50 installations ● international distribution.

Description ● provides both detail and summary displays of the current status of a CICS/DOS/VSE system, as well as displaying status information of DOS/VSE, VTAM, and DL/1; also provides analytic displays which are used for problem determination ● some of the specific CICS/DOS/VSE and DOS/VSE tables and control blocks that are formatted are: Common System Area (CSA); destination control table; enqueued resources; File Control Table (FCT); processing program table; and task status, active and suspended; channel queue; communications region; Logical Unit Block (LUB); Partition Information Block (PIB); Physical Unit Block (PUB); Storage Management Control Block (SMCB), and System Communication Region (SYSCOM) ● also provides a hexadecimal and character format memory display facility by address or by name of storage area ● accommodates screens and fields oriented to determining operational or performance problems in the CICS system.

Pricing & Support ● $2,600 license purchase price includes first-year maintenance; annual maintenance fee after first year is $325 ● lease plan available: $1,300 per year or $130 per month; includes maintenance ● manual containing usage information, description of tables and fields accessed, and other information and advice is supplied.

☐ BIMSUBMT

Type ● job stream enhancement package for IBM DOS/VS POWER/VS users operating with CICS/VS.

Host Software Environment ● IBM DOS/VS or DOS/VSE operating system.

Host Hardware Environment ● IBM System/370, 3000, 4300, and compatible computers.

Installation Data ● first installed 1979 ● 20 current users ● international distribution.

Description ● retrieves, updates, and submits job streams to POWER/VS from 3270-type CRTs; benefits gained are elimination of RJE readers and direct job submission capability for users.

Pricing & Support ● one-time license fee is $1,000; monthly lease is $50; annual lease is $500; maintenance included in lease, otherwise $125 per year beginning second year.

■ BOOLE & BABBAGE

510 Oakmead Parkway, Sunnyvale, CA 94086 ● 408-735-9550.

☐ Boole & Babbage CONTROL/CICS

Type ● network performance monitor/analyzer for IBM CICS users.

Host Software Environment ● any IBM OS/VS operating system; supported under CICS/VS R1.3 and 1.4 and under CICS/OS R2.3.

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Host Hardware Environment ● IBM System/370, 3000, 4300, and all compatible computers; requires 8K bytes of main memory, primarily for the activity measurement module.

Installation Data ● first installed 1978 ● over 150 current users.

Description ● intercepts and analyzes calls to CICS Task, Storage, Program, and Terminal Control programs; analytical components consist of activity measurement, transaction accounting, and performance reporting facilities, which can be used in various combinations to produce up to 32 reports on CICS operations and to develop comprehensive chargeback billings.

Pricing & Support ● $10,000 purchase price ● no charge first-year maintenance; $2,000 annual maintenance fee after first year ● lease available; contact vendor for price.

☐ Boole & Babbage SECURE/CICS

Type ● security facilities replacement for IBM CICS.

Host Software Environment ● all variants of IBM OS/VS and DOS/VS with CICS/VS.

Host Hardware Environment ● IBM System/370, 3000, 4300, and all compatible computers; requires 8K to 16K bytes of main memory.

Installation Data ● first installed 1979 ● over 130 current users.

Description ● replaces the existing security facilities of IBM's CICS with significant security extensions; provides multilevel fine tuning security control over operators, terminals, transactions, and key CICS resources; all activity can be fully documented for developing audit trails and for analyzing security violations; permits terminal/operator activity to be selectively limited according to specific days, times within a day, and transaction volume; package can be installed without disrupting normal CICS operation.

Pricing & Support ● $18,000 (MVS), $11,500 (DOS) license purchase price; no charge first-year maintenance ● lease available; contact vendor for price.

■ CANDLE CORPORATION

10880 Wilshire Boulevard, Suite 2404, Los Angeles, CA 90024 ● 213-470-2277.

☐ OMEGAMON/CICS

Type ● real-time monitor for IBM CICS/VS users.

Host Software Environment ● IBM DOS/VSE, or MVS non-SE, SE2, SP1.1, SP1.3, XA with CICS 1.5 and above.

Host Hardware Environment ● IBM System/370, 3000, 4300, and compatible computers.

Installation Data ● first installed 1980 ● 750 installations ● worldwide distribution.

Description ● dynamic software monitor used to analyze potential bottlenecks, to observe performance effects from application program changes and/or access method conversions, and to measure aspects of hardware operations as they pertain to CICS/VS environment ● a command-driven system operates in transaction mode for system programmers to analyze specific areas of the system, and in dedicated mode for operational personnel to react to changing system profiles ● provides task system, task exception, and system exception displays with over 500 unique command elements ● Task Display Group provides instantaneous displays of task activity where users can display any task in any status, or on a selective basis by name, by transaction class, by terminal ID, or by task number; additional displays include DCA and TCA addresses, transaction class and dispatching priority, program address, language, length, residency indicator use count, and identification of current program ● System Display Group provides analyses of external system functions including page rates, DL/1 statistics, transaction rates, system initialization parameters, and VSAM string usage; displays storage management information and breaks down all the elements that make up the CICS storage environment ● Task Exception Group contains 3 basic command functions; one command controls display of current system conditions; another command supports split-screen dis-

plays of current system status and a status graph of the results of an average sampling cycle; the third command provides a graph of percentage of total degradation attributed to specified segments of the system ● System Exception Group operates with threshold criteria established by the user to evaluate performance in specific production/testing environments, and issues messages when a defined threshold is being approached; a series of videotapes are available that explain how to use OMEGAMON/CICS to optimize performance ● includes a Failure/Recovery facility, security facilities, and logging capabilities ● please refer to the 900 section for a detailed analysis of this product.

Special Features ● 2 separately priced add-on facilities are offered ● Response Time Analyzer for CICS (RTA/CICS) extends automatic analysis capabilities to include real-time displays of CICS response time and measures the intervals, time slots, and type of work ● ESRA/CICS is a performance monitor that is automatically invoked when user-specified thresholds are overrun; provides degradation analysis on CPU utilization, paging, I/O, CICS services, and queuing for resources; logs collected information to hard-copy log.

Pricing & Support ● price available upon request from vendor ● first-year maintenance is free; thereafter, available at a nondisclosed percentage of the then-current license fee ● maintenance service includes code correction, product updates, and manual updates; includes technical support and admission to User's Group.

■ CINCOM SYSTEMS INC

2300 Montana Avenue, Cincinnati, OH 45211 ● 513-662-2300.

☐ ENVIRON/1

Type ● multitasking, multithreaded, general-purpose TP monitor for IBM systems.

Host Software Environment ● IBM DOS/VS, DOS/VSE, OS/VS1, OS/VS2(SVS), or OS/VS2(MVS) operating system.

Host Hardware Environment ● any IBM System/370, 3000, 4300, or compatible computer.

Installation Data ● first installed 1970 ● approximately 450 users ● worldwide distribution.

Description ● a feature selectable multithreaded, general-purpose TP monitor that can be configured in large or small networks ● the Control Program kernel consists of supervisor and Root phases, which are the only 2 elements of the system that must be generated; the Control Program manages terminals, handles data integrity, and oversees all message and transaction processing; it contains several functional components; COBOL-XT is a proprietary high-level programming language that produces online, pageable (512 bytes), reentrant code, using verb structures similar to standard ANSI COBOL; COBOL-XT is exclusive to the ENVIRON/1 operating environment; programs are maintained on a PDS file that is a virtual shareable file; a Roll File is used to hold program segments that are in a wait condition, as well as ABEND and restart control block information ● terminal environment module holds all line groups and terminals assigned to each information group; operating characteristics, such as polling sequences and message broadcasting characteristics, are defined to the terminal environment module, and it also includes logging and task level recovery facilities; a comprehensive editing capability translates free form external input to fixed form construct for internal processing ● auxiliary utilities are a special linkage editor, maintenance utility, terminal simulator and log-tape dump utility; Community File Facility can be used as scratchpad or to pass data from one task to another ● please refer to the 920 section for a detailed analysis of this product.

Special Features ● many separately priced options can be appended to the kernel to meet specific network requirements ● a File Access Method Facility provides an interface module for files created with standard IBM, ISAM, BDAM, or VSAM access methods ● Screen Mapping/Development Aids support 3270-type terminals and provide support for creating screens; also provides a map edit generator and supports mapping service routines ● ENTIRE provides program productivity, security systems, and printer spooling to facilitate implementation of online systems ● Logging/

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Recovery Facilities provide recovery at task level without requiring the system to stop operating • Program Development: LMS-11 is an online programming development tool used to consolidate all JCL, test data, and documentation in a 3270-type workstation.

Pricing & Support • $44,000 (ENVIRON/1 DOS), $56,700 (ENVIRON/1 OS), $9,500 (File Access), $12,700 (Screen Mapping), $17,600 (Logging/Recovery), $22,500 (LMS-II DOS), $25,000 (LMS-II OS), $36,700 (T-ASK DOS), $39,600 (T-ASK OS), one-time single-use license that includes first year of maintenance • the following figures summarize the per-product installation fee (first figure), the monthly rate for a 1-year lease (second figure), and the monthly rate for a 3-year lease (third figure); all lease plans include maintenance: $5,500/$1,830/$1,563 (ENVIRON/1 DOS), $6,000/$2,360/$2,014 (ENVIRON/1 OS), $1,000/$395/$337 (File Access), $2,000/$530/$451 (Screen Mapping), $2,000/$730/$625 (Task Level Recovery), $2,000/$940/$799 (LMS-II DOS), $2,000/$1,040/$888 (LMS-II OS), $2,000/$1,530/$1,303 (T-ASK DOS), $2,000/$1,650/$1,406 (T-ASK OS) • annual maintenance charge is 10% of the then-current single-use license fee; multisite/multi-Cincom packages discounts are available • installation charge includes delivery of product tape, documentation, and a set number of days for on-site delivery of product tape, documentation, and a set number of days for on-site support; additional on-site support is available on a man-day basis.

■ COMP ACT DATA SYSTEMS INC

14849 Magnolia Boulevard, Sherman Oaks, CA 91403 • 213-783-8245.

☐ ACES (Application CICS Environment System)

Type • online source program development tool for CICS users.

Host Software Environment • IBM DOS/VS, DOS/VSE, OS/VS2(MVS), or VM/370 and CICS/VS Command Level with CMS, ICCF, TSO, VOLLIE, ROSCOE, or O-W-L.

Host Hardware Environment • IBM System/370, 3000, 4300, or compatible computer.

Installation Data • first installed 1981 • 15 installations • international distribution.

Description • source program development tool designed to utilize features and functions of CICS • system features standardize online system code; use of CICS storage allocation algorithms; provides code for predefined COBOL statements for support of CICS file and terminal I/O functions; provides pretranslated CICS calls; and supports program linkage, temporary storage, journaling, and interprets file and terminal I/O errors • works from a skeleton COBOL source program that is tailored to meet user needs • system facilities include: logic to read VSAM files to update/not update; logic to perform deletes from VSAM files; logic to start/read next/read previous/reset/end a file browse session; logic to finish all file I/O; logic to unlock a record after a read-for-update without updating; and logic to write a record to a file • other functions include logic to obtain storage for a file write; use of CICS command work area for interprogram communications; performs deletes to a temporary storage queue; reads the transient data queue; dynamically reads temporary storage queue by record number; writes records to temporary storage/transient data queue/temporary storage queue • program coding functions support CICS and application error handling; all program exit routines; writing of application-requested journal records; linkage to another program; transfer of control to another program and support for both conversational or pseudo-conversational source programs • screen/terminal processing functions support screen/terminal storage acquisition; automatically sends MAP to terminal; refreshes screen and clears all fields; and automatically clears all unprotected fields on a screen.

Pricing & Support • $6,500 one-time charge for license purchase that includes source code, product tape and JCL, installation guide, users' guide, technical summary, one day of orientation/training, and first year of maintenance; 25% discount for additional copies • $1,000 annual charge for maintenance after first year; 15-day free trial period is also available • maintenance includes write-in program problem service.

■ COMPUTER ASSOCIATES INTERNATIONAL, INC

Computer Associates Building, 125 Jericho Turnpike, Jericho, NY 11753 • 516-333-6700.

☐ CA-CICS/VS UMAX

Type • utilization monitor and chargeback system for IBM CICS/VS users.

Host Software Environment • all variants of IBM OS/VS and DOS/VS operating systems.

Host Hardware Environment • IBM System/370, 3000, 4300, and compatible computers.

Installation Data • first installed 1977 • 1,400 current OS users; 400 current DOS users.

Description • statistical information can be gathered by transaction or by interval and consists of CPU time, interval response time, DL/1 operations, selected event statistics for programs and files, and temporary storage/transient data operations; gathered data can be distilled into resource utilization graphs and into up to 15 detailed user reports; the chargeback subsystem accepts up to 100 different billing algorithms and includes a charge versus expense report for adjusting rates; minimum resource supports assembly language; supports CICS/VS, DL/1, IMS, and Cincom TOTAL.

Special Features • optional online extension to CA-UMAX, called CA-GOLD (Graphic On-Line Display System), is available to format and display performance and utilization data generated by CA-UMAX.

Pricing & Support • purchase price is $6,000 for OS version and $4,000 for DOS version; no charge for first-year maintenance; 15% of current purchase license fee for each succeeding-year maintenance fees • lease-purchase available for monthly fee of 10% of purchase price with 15-month payout; lease only (no payout) monthly fee is 6% of purchase price; no charge for maintenance with either plan • purchase price for CA-GOLD option is $4,000 (OS version) or $2,000 (DOS version) if ordered at same time as CA-UMAX.

☐ CA-RAPS (Remote Access POWER Support)

Type • 3270 interface to IBM POWER/VS and VM/CMS.

Host Software Environment • IBM DOS/VS, DOS/VSE with CICS, or VM/CMS.

Host Hardware Environment • IBM System/370, 3000, 4300, and all compatible computers; requires 3270-type terminals.

Installation Data • first installed 1980 • 1,200 current users.

Description • permits operators and programmers running under IBM CICS or VM/CMS with 3270-type terminals to communicate directly with IBM POWER/VS(E) or VM/SPOOL; basic enhancements consist of improved reader/list/punch queue and data file displays and the ability to retrieve spooled output from POWER/VS(E) or VM reader/list/punch spool queues and to print it locally or remotely at any CICS or RSCS mode.

Pricing & Support • license available lease only; $2,475 annual lease; $290 monthly lease; lease fee includes maintenance.

■ COMPUTER SOFTWARE UNLIMITED

2129 Germantown Road South, Suite 226, Memphis, TN 38138 • 901-754-8332.

☐ Harold TP Monitor

Type • basic communication monitor for IBM 3270-type terminals.

Host Software Environment • IBM DOS/VS(E), OS/VS2(MVS).

Host Hardware Environment • IBM System/370, 3000, 4300, and compatible computers.

Installation Data • first installed 1978 • 40 current users • international distribution.

Description • entry-level BTAM TP monitor capable of supporting Computer Software's online librarian (MARIAN) as well as user

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application programs; handles any number of IBM 3270-type terminals utilizing a disk work area for each CRT defined; work areas are rolled in and out for each transaction; unpacks 3270 screen input and presents it to the user in screen image format with all the characters converted to uppercase • other features include the ability to run in overlay mode under DOS; an assembler front end to each application program designed to contain user screen formats; and the ability to write applications in any high-level language using standard linkage conventions.

Pricing & Support • one-time license purchase price is $3,000; 1- to 5-year lease plans are available and range downward from $297 per month to $98 per month; may also be rented for $120 per month • annual maintenance for purchased systems is $720; lease and rental plans include maintenance • source code is available.

■ CYTROL, INC

4620 West 77th Street, Edina, MN 55435 • 612-835-4884.

□ CYX

Type • integrated transaction processing system for DEC PDP-11 or VAX users.

Host Software Environment • DEC RSX-11M or VMS operating system; supports ANSI COBOL, FORTRAN IV, BASIC PLUS-II, MACRO-11, and PL/1.

Host Hardware Environment • DEC PDP-11/24 through 11/70 and VAX-11; requires the DEC DV-11 Communications Multiplexer.

Installation Data • first installed 1975 • 15 current users.

Description • provides communications management, data management, and other resource control services to online application programs running on PDP-11 or VAX computers under RSX-11M or VMS; terminal control module provides network control and protocol and message handling for multidrop line configurations of IBM 3270 terminals (or compatible equivalents); transaction control module performs message routing, activation and deactivation of CYX controlled application tasks, and supports direct and spooled remote printer output and paged screen output; database management system performs symbolic retrieval, addition, modification, and deletion of records and record relationships; file control module allocates record space and provides record I/O for up to 64,000 files (VAX) each with a capacity of 15 million records, controls access to files through shared and exclusive record, file, and symbolic locks; screen management provides automatic editing and validation of input fields; physical I/O is improved by the Overlap Seek Disk Driver (PDP-11 only) for parallel positioning and data transfer and by the buffered DV-11 Multiplexer Driver; restart control is provided by duplicate recording of vital files, journaling of database updates, and checkpoint and recovery; major component modules are also available as standalone packages.

Special Features • optional features include CYX-RT/IBM Reach Through, CYX-RT/DEC DECnet Reach Through, CYX-ER error reporting, CYX-SC security control, CYX-MB mailbox, CYX-TF text filing, CYX-FM file maintenance, CYX-RW report writer.

Pricing & Support • license purchase available only on supported or unsupported basis; supported license includes installation, 5 days of on-site assistance, and first-year maintenance • supported-license price is $22,000 to $45,000; annual maintenance fee after first year is 10% of prevailing purchase price • extra-cost options range from $1,000 to $9,000 each.

□ CYX-DC

Type • data communications management system for DEC PDP-11 or VAX users.

Host Software Environment • DEC RSX-11M or VMS; supports COBOL, FORTRAN IV, BASIC PLUS-II, MACRO-11, and PL/1.

Host Hardware Environment • DEC PDP-11/24 through -11/70 or VAX systems; requires the DEC DV-11 Communications Multiplexer.

Installation Data • first installed 1975 • 50 current users.

Description • derivative standalone TP monitor module of parent CYX system intended for PDP-11 or VAX computers operating under RSX-11M or VMS; directly compatible with and most practically combined with Cytrol's CYX-DB (database), CYX-DD (overlap seek disk driver), and CYX-DV (DV-11 multiplexer driver); all of these basic products are bundled into CYX, which is defined as an integrated transaction processing system • primary terminal support configurations are dedicated point-to-point or multipoint lines at speeds of 1200 to 9600 bps operating half-duplex 3270 BSC protocol with ASCII or EBCDIC; accommodates IBM 3270-type terminals, and Teletype character printers; line, station, and terminal transmission errors are detected automatically and are handled through simple retransmissions; abends and other fault conditions within an application stream are handled through a checkpoint restart facility.

Special Features • significant CYX-DC options include point-to-point BSC, which permits direct CYX-IBM system communications in contention mode, and IBM 3270 Reachthrough, which permits any CYX terminal or terminal cluster to emulate 3270 protocol.

Pricing & Support • license is offered purchase only on supported or unsupported basis; supported license includes installation, 5 days of on-site assistance, and first-year maintenance • supported license prices range from $15,000 to $30,000.

□ CYX-DD

Type • Overlap Seek Disk Driver for DEC PDP-11 systems.

Host Software Environment • DEC RSX-11M operating system.

Host Hardware Environment • DEC PDP-11/24 through 11/70 systems; requires DEC DV-11 Communications Multiplexer.

Installation Data • first installed 1978 • 65 current users.

Description • replaces standard disk driver on a multidrive system in RSX-11M; also available as part of Cytrol's CYX integrated TP system (please see CYX profile); increases disk throughput by processing concurrent requests in parallel; overlaps positioning operations with data transmission and with other positioning operations; includes all options and all normally supported features of the standard DEC drivers; supports sharing of a dual-ported drive, allowing 2 CPUs to access the same drive; available for use with RK06/07, RM02/03, and RP04/05/06 disk subsystems from DEC or from compatible subsystem suppliers.

Pricing & Support • license purchase price is $1,500 to $2,000 for first copy • purchase price includes first-year maintenance; annual maintenance fee after first year is 10% of prevailing purchase price.

□ CYX-DV

Type • multiplexer driver.

Host Software Environment • DEC RSX-11M, VMS.

Host Hardware Environment • DEC PDP-11/24 to 11/70, VAX.

Installation Data • first installed 1976 • 30 current users • international distribution.

Description • a software driver that allows the use of DV11 communication multiplexers in a DEC PDP-11 or VAX environment; driver is incorporated into the RSX-11M or VMS executive and conforms to standard driver conventions; each communication line is considered to be a logical unit and is controlled internally as a half-duplex line; data is transferred to and from a physically contiguous portion of main memory (up to 48K bytes for the PDP-11 version, unlimited for VAX); buffer is defined when system is initialized; CYX-DV takes full advantage of the buffering of the DV11 multiplexer on input as well as output to reduce the CPU overhead normally associated with message processing.

Pricing & Support • one-time fee for license purchase of PDP-11 version is $3,000; $4,000 for VAX version.

■ DECISION POINT, INC

2995 North Cole Road, Suite 260, Boise, ID 83711 • 208-322-4900.

□ PRO II

Type • CICS/VS map and program development tool.

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Host Software Environment ● IBM DOS/VS, DOS/VSE, OS/VS1, OS/VS2(SVS), OS/VS2(MVS) operating systems with CICS/VS COBOL.

Host Hardware Environment ● IBM System/370, 3000, 4300, or compatible computers.

Installation Data ● first installed 1980 ● 12 installations ● international distribution.

Description ● a CICS/VS map and program development tool ● parameter-driven to generate BMS maps and supporting COBOL-based CICS/VS applications program; places maps and programs in the users normal source and object libraries ● generated COBOL programs use standard VSAM access techniques and automatically generate add, update, delete, and inquiry functions; generates fully executable CICS/VS programs and maps from program and map specification forms ● generated COBOL programs are modular in design, which aid in enforcing standard coding and development techniques for ease of maintenance ● includes online file access and debugging tools.

Pricing & Support ● $24,500 (OS), $17,500 (DOS) one-time fee for purchase license; monthly fee for 30-month lease purchase is available; contact vendor for fee ● maintenance is available for an annual charge of 12% of the then-current purchase price ● source code is not available.

■ GT SOFTWARE INC
1965 North Park Place, Atlanta, GA 30339 ● 404-955-8866.

□ BMS/GT

Type ● online screen map generator for CICS/VS.

Host Software Environment ● IBM DOS/VSE, OS/VS1, OS/VS2(SVS), OS/VS2(MVS) with CICS/VS.

Host Hardware Environment ● IBM System/370, 3000, 4300, or compatible computer with 3270-type terminals.

Installation Data ● first installed 1982 ● international distribution.

Description ● an online screen map generator for CICS/VS that is designed around a library of resident subroutines ● the physical and symbolic maps created are identical with those created by CICS/BMS, and application program design, setup, and definition are the same as CICS/VS ● provides the ability to see what screens will look like immediately following the screen definition; CICS/VS tables are not modified until screen is correct ● supports applications written in PL/1, COBOL, and assembler ● features include: support for all screen sizes in the 3270 family of terminals; supports both header/trailer map creation; automatic line replication during field definition; page-built checkout without the need of a check-out program; an online Directory Listing can be printed from a batch partition; hard-copy printouts of maps shown in a row/column format for ease of use; and extensive HELP facilities, as well as the ability to create additional user HELP facilities.

Pricing & Support ● $5,500 (DOS/VSE), $6,900 (OS/VS) one-time fee for license purchase that includes user's manual.

■ H & M SYSTEMS SOFTWARE INC
351 Evelyn Street, Paramus, NJ 07652 ● 201-599-9111.

□ CFAST

Type ● CICS display management system.

Host Software Environment ● IBM DOS/VS, DOS/VSE, OS/VS1, OS/VS2(SVS), OS/VS2(MVS) with CICS/VS.

Host Hardware Environment ● IBM System/370, 3000, 4300, or compatible computers.

Installation Data ● first installed 1979 ● over 100 installations ● international distribution.

Description ● provides a means for creating an executable file or a database inquiry without a compilation; also provides the ability to execute a transaction without making entries in the CICS transaction table ● supports chaining up to 4 files and multilevel password protection for every transaction ● provides job accounting

and online display of all CICS tables to aid in controlling disk usage, CPU time, etc.

Pricing & Support ● $10,000 (DOS), $12,000 (OS) one-time charge for license purchase includes first year of maintenance; $500 (36-month, DOS), $400 (60-month, DOS), $600 (36-month, OS), $500 (60-month, OS) monthly charge for 3- and 5-year leases, respectively; maintenance support is available after first year for an annual charge of 15% of the then-current license purchase price ● 14-day free trial is available.

□ MFAST

Type ● program development, maintenance, and testing tool for CICS/VS applications.

Host Software Environment ● IBM DOS/VS, DOS/VSE, OS/VS1, OS/VS2(SVS), OS/VS2(MVS), with CICS/VS.

Host Hardware Environment ● IBM System/370, 3000, 4300, or compatible computers.

Installation Data ● first installed 1980 ● over 300 installations ● international distribution.

Description ● a tool for the development, maintenance, testing, and presentation of maps and map sets for CICS/VS application programs ● map and map sets are stored in an MFAST Map Library (MML) ● program supports creation of maps online in full-screen mode; provides 2-level password protection and audit trail reports that show map designer and number of modifications ● supports copying text from an MFAST Text Library to a map that is being designed ● provides for testing maps without having to create a program ● system provides utilities for saving, restoring, extending, and creating both MFAST Map Library and the MFAST Text Library, as well as conversion utilities that convert BMS maps to MFAST maps and MFAST maps to BMS macro code maps.

Pricing & Support ● $6,500 (DOS/VS(E)), $8,000 (OS/VS) one-time charge for license purchase includes first year of maintenance; $250 (36-month—DOS), $225 (60-month—DOS), $300 (36-month—OS), $250 (60-month—OS) monthly charge for 3- and 5-year leases, respectively; maintenance support is available after first year at an annual charge of 15% of the then-current purchase price ● 14-day free trial is available.

■ H & W COMPUTER SYSTEMS INC
P.O. Box 4785, Boise, ID 83704 ● 208-377-0336.

□ CPMS

Type ● direct CICS/VS spool interface.

Host Software Environment ● IBM OS/VS1, OS/VS2(SVS), OS/VS2(MVS), with CICS/VS and JES or JES 2.

Host Hardware Environment ● IBM System/370, 3000, 4300, and compatible computers.

Installation Data ● first installed 1980 ● 450 installations ● international distribution.

Description ● a direct CICS/VS interface that provides spool retrieval with formatted displays, job and queue status displays, JES console commands, and remote spool printing ● enables local and remote end users and programming staffs to review batch output from CICS terminals; whole job or selected outputs can be routed to CICS printers if they are available; provides the ability to purge outputs ● commands can be entered from any authorized CICS terminal or can be imbedded in standard JCL; automatically translates ANSI and machine print control characters to control characters for use with CICS 32XX hard-copy devices; simulates nonstandard carriage control for special forms ● tracks jobs with display active commands, and displays input and output queues; there are commands to view JCL and diagnostic messages, and resubmit jobs; users can schedule their own jobs and printed outputs ● interface requires no additional files or program modifications and supports any printer defined to CICS/VS as an IBM 3286; also supports all 3270-type CRTs, including full-screen 132-character models ● maintains its own recovery facility and includes command authorization and security for limiting spool access.

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Pricing & Support ● $7,900 one-time fee for license purchase includes documentation and first year of maintenance; maintenance after first year is available for an annual fee of 15% of the then-current license purchase price ● purchase price also includes source libraries, telephone consulting during installation ● 30-day free trial is available.

☐ CTOP

Type ● a CICS/VS terminal optimizer.

Host Software Environment ● IBM DOS/VS, DOS/VSE, OS/VS1, OS/VS2(SVS), OS/VS2(MVS), with CICS/VS.

Host Hardware Environment ● IBM System/370, 3000, 4300, or compatible computers.

Installation Data ● first installed 1980 ● 600 installations ● international distribution.

Description ● a teleprocessing data stream compression package for remote and local terminals running under CICS/VS; removes unnecessary characters from CICS/VS data streams for IBM 3270 and 3280 terminal transmission ● operates as a standard CICS/VS application program and requires no assemblies or modifications to any existing system software ● supports several user-defined variables to control compression algorithms; supports BTAM, TCAM, and VTAM, including ACF/NCP versions with SCS printers; contains built-in trace facilities for monitoring new devices and nonstandard protocols.

Pricing & Support ● $3,000 one-time fee for license purchase includes documentation and first year of maintenance; maintenance after first year is available for an annual fee of 15% of the then-current purchase price ● source code is available ● 30-day free trial provided.

☐ SYSA

Type ● CICS allocation/verification system.

Host Software Environment ● IBM OS/VS2(MVS); CICS/VS.

Host Hardware Environment ● IBM System/370, 3000, 4300, or compatible computers.

Installation Data ● first installed 1982 ● unknown number of users ● international distribution.

Description ● SYSA guarantees CICS initialization by flagging, bypassing, and reporting on missing files or bad VSAM files; when problems are resolved, the system permits dynamic allocation of the corrected file(s) to CICS; dynamic deallocation can also be performed if necessary.

Pricing & Support ● one-time fee for license purchase: $4,500 (U.S.); $5,175 (Canada); $6,300 (elsewhere) ● includes documentation and first-year maintenance; maintenance after first year is available for an annual fee of 15% of the prevailing purchase price ● source code is available.

■ HIGHLANDER SYSTEMS INC
335 South 1000 East, Orem, UT 84058 ● 801-225-0396.

☐ CICS/COMMON

Type ● CICS/VS remote user support system.

Host Software Environment ● IBM DOS/VS, DOS/VSE, OS/VS1, OS/VS2(SVS), or OS/VS2(MVS) operating systems with CICS/VS Release 1.5 or later.

Host Hardware Environment ● IBM System/370, 3000, 4300, and compatible computers.

Installation Data ● first installed 1982 ● 50 installations ● international distribution.

Description ● a CICS/VS end-user support system that aids in solving the problems associated with end-user locations by allowing central site technical staff to simultaneously and remotely view screen images; also provides for the selective recording of input and output screen images for future analysis ● a CICS/VS system performance monitor that provides visibility of transactions executing on CICS, including response time, system loading, and

transaction statistics ● consists of 2 major subsystems: Terminal Monitoring, which allows central site to activate a monitoring module that can record input/output user screen images; images can be displayed on a video terminal or recorded on a logging file simultaneously ● Inquiry Module is used to display logged screen images that have been collected by the Monitor Module ● System Monitoring allows users to report CICS statistics, dynamically view response time, and compress messages sent to the screen ● requires no CICS modification.

Pricing & Support ● Terminal Monitoring $6,000 (OS/VS version); $5,000 (DOS/VS(E) version) ● System Monitoring $5,000 (OS), $4,000 (DOS) one-time license fee ● all include reference manual; training available for additional fee ● source code is not available.

■ HONEYWELL INFORMATION SYSTEMS INC
200 Smith Street, MS 486, Waltham, MA 02154 ● 617-890-8400.

☐ Multicopy Timesharing Support Option

Type ● timesharing facility expansion package.

Host Software Environment ● Honeywell GCOS or GCOS 8 (multiuser, multiprogramming virtual storage operating system) and Time Sharing System software.

Host Hardware Environment ● Honeywell DPS 88 packaged system.

Installation Data ● first installed 1980 ● unknown number of users ● worldwide distribution through direct company sales and service offices.

Description ● provides for the copy of Time Sharing System software resident on the system files to be copied up to 4 times; copies can be loaded and executed simultaneously under 4 different job identifiers to provide increased connection and performance capabilities ● 2 versions available depending on operating system.

Special Features ● this package is a separately priced add-on feature to the Honeywell Time Sharing System software.

Pricing & Support ● $624 (GCOS 8), $557 (GCOS) monthly license fee including software maintenance ● basic monthly software maintenance entitles customer to assistance by telephone and mail; includes release bulletins and updates; expanded software support is an extra-cost option providing remote analysis tools and additional assistance in correcting problems.

☐ TPS 6 Distributed Processing Facility

Type ● transaction processing program supervisor with host communications facility.

Host Software Environment ● Honeywell GCOS 6 Mod 400 operating system and Basic Network Services.

Host Hardware Environment ● Honeywell DPS 6 or Series 60 Level 6 packaged system.

Installation Data ● first installed 1981 ● unknown number of users ● worldwide distribution through direct company sales and service offices.

Description ● supervises fundamental transaction processing capabilities; additional functions include handling of interactive question and answer dialog; interfaces with programs written in Advanced COBOL or assembly language; provides memory management for both transaction and program memory pool sizes; controls concurrent reading and writing of files from different terminals and has restart capabilities.

Pricing & Support ● $1,290 (primary), $965 (secondary) annual license fee that includes software support ● software support entitles customer to assistance by telephone or mail; includes software release bulletins and updates.

☐ TSS (Time Sharing System)

Type ● timesharing network manager.

Host Software Environment ● Honeywell GCOS or GCOS 8 (multiuser, multiprogramming, virtual storage operating systems).

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Host Hardware Environment ● Honeywell DPS 8 or DPS 88 packaged system.

Installation Data ● first installed 1980 ● unknown number of users ● worldwide distribution through direct company sales and service offices.

Description ● permits several terminals to use a system concurrently; supports the compilation and execution of programs written in BASIC, FORTRAN, APL, Pascal, and COBOL-74; supports text processing functions ● features include CONVERT to print or punch ASCII files, JOUT to manipulate batch processing output, HELP to explain system error messages, ABACUS (an algebraic-expression evaluator), AST for listing a file on a terminal, OLD, NEW, and SAVE files, and SEQUENCE to renumber files ● 2 versions available depending on operating system.

Special Features ● supports a variety of optional features for functional expansion, options include Document Formatting Option, languages mentioned in description, text editors, text processing library, file management option, and Electronic Mail Option ● please refer to Index for survey locations of reference products.

Pricing & Support ● $84 (GCOS 8 version), $887 (GCOS version) monthly license fee includes basic software maintenance ● basic software support entitles customer to assistance by telephone or mail; includes release bulletin and updates.

☐ TSS Administration Option

Type ● user communications environment definition/management aid for system administrators.

Host Software Environment ● Honeywell GCOS 8 (multiprogramming, multiuser, virtual storage operating system) and Time Sharing System software.

Host Hardware Environment ● Honeywell DPS 8 or DPS 88 packaged system.

Installation Data ● first installed 1980 ● unknown number of users ● worldwide distribution through direct company sales and service offices.

Description ● gives system administrators the ability to define and manage user identification, system privileges, security, and file space in a timesharing environment; includes Time Sharing Activity Report, which displays timesharing system allocation, accumulated status, and resource utilization statistics for an authorized user.

Special Features ● this package is a separately priced add-on feature to the Time Sharing System software.

Pricing & Support ● $118 monthly license fee; includes basic software maintenance service ● basic software maintenance entitles customer to assistance by telephone and mail; includes release bulletins and updates; optional expanded software provide remote analysis tools and additional assistance in correcting problems.

☐ TSS Advanced Application Support Option

Type ● development aid ● timesharing applications and subsystems.

Host Software Environment ● Honeywell GCOS 8 (multiuser, multiprogramming, virtual storage operating system) and Time Sharing System software.

Host Hardware Environment ● Honeywell DPS 8 or DPS 88 packaged system.

Installation Data ● first installed 1980 ● unknown number of users ● worldwide distribution through direct company sales and service offices.

Description ● provides various facilities for Time Sharing System users; deferred processing permits a timesharing session to be scheduled for a later time and date; LODX permits users to load and execute experimental subsystems; LODS provides a debugging environment for a timesharing subsystem; TRACE is conversational debugging tool that can execute in a controlled

environment; SABT retrieves abort file memory storage area for printing.

Special Features ● this package is a separately priced add-on feature to the Time Sharing System software.

Pricing & Support ● $167 monthly license fee; includes basic software maintenance service ● basic software maintenance service entitles customer to assistance by telephone or mail; includes release bulletins and updates ● optional expanded software provides remote analysis tools and additional assistance in correcting problems.

☐ TSS COBOL-74 Option

Type ● COBOL-74 compile/execute programs for timeshared systems.

Host Software Environment ● Honeywell GCOS 8 (multiuser, multiprogramming, virtual storage operating system), Time Sharing System software, and COBOL-74 Compiler and Runtime Facility.

Host Hardware Environment ● Honeywell DPS 8 or DPS 88 packaged system.

Installation Data ● first installed 1980 ● unknown number of users ● worldwide distribution through direct company sales and service offices.

Description ● supports the ability to compile and execute COBOL-74 programs in a timesharing environment.

Special Features ● this package is a separately priced add-on feature to the Time Sharing System software.

Pricing & Support ● $55 monthly software license fee; includes basic software maintenance service ● basic software maintenance entitles customer to assistance by telephone and mail; includes release bulletins and updates ● optional expanded software support provides remote analysis tools and additional support in correcting problems.

☐ TSS Data BASIC Option

Type ● terminal-oriented language that combines database capabilities with BASIC-like procedure statements.

Host Software Environment ● Honeywell GCOS 8 (multiuser, multiprogramming, virtual storage operating system).

Host Hardware Environment ● Honeywell DPS 8 or DPS 88 packaged system.

Installation Data ● first installed 1980 ● unknown number of users ● worldwide distribution through direct company sales and service offices.

Description ● supports terminal-oriented language combining database capabilities with BASIC-like procedure statements in a timesharing environment.

Special Features ● this package is a separately priced add-on option to the Time Sharing System software.

Pricing & Support ● $139 monthly software license fee; includes basic software maintenance service ● basic monthly software maintenance entitles customer to assistance by telephone and mail; includes release bulletins and updates ● optional expanded software support provides remote analysis tools and additional support in correcting problems.

☐ TSS Document Formatting Option

Type ● preloaded file formatter.

Host Software Environment ● Honeywell GCOS 8 (multiuser, multiprogramming, virtual storage operating system) and Time Sharing System.

Host Hardware Environment ● Honeywell DPS 8 or DPS 88 packaged system.

Installation Data ● first installed 1980 ● unknown number of users ● worldwide distribution through direct company sales and service offices.

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Description ● provides the ability for timesharing terminals to format documents through predetermined control information.

Special Features ● this package is a separately priced add-on feature to the Time Sharing System software.

Pricing & Support ● $51 monthly license fee; includes basic software maintenance service ● basic software maintenance service entitles customer to assistance by telephone and mail; includes release bulletins and updates ● optional expanded software support provides remote analysis tools and additional assistance in problem corrections.

☐ TSS DM IV Option

Type ● DM IV database access package for Time Sharing Systems.

Host Software Environment ● Honeywell GCOS 8 (multiuser, multiprogramming, virtual storage operating system) and DM IV Standard Facility.

Host Hardware Environment ● Honeywell DPS 8 or DPS 88 packaged system.

Installation Data ● first installed 1980 ● unknown number of users ● worldwide distribution through direct sales and service offices.

Description ● supports the ability to access DM IV databases in a timesharing environment.

Special Features ● this package is a separately priced add-on option to the Time Sharing System software.

Pricing & Support ● $82 monthly software license fee; includes basic monthly software maintenance service ● basic software maintenance entitles customer to assistance by telephone and mail; includes release bulletins and updates ● optional expanded software support provides remote analysis tools and additional assistance in problem corrections.

☐ TSS Editing Option

Type ● line-oriented text editor for Time Sharing System.

Host Software Environment ● Honeywell GCOS 8 (multiuser, multiprogramming, virtual storage operating system) and Time Sharing System software.

Host Hardware Environment ● Honeywell DPS 8 or DPS 88 packaged system.

Installation Data ● first installed 1980 ● unknown number of users ● worldwide distribution through direct company sales and service offices.

Description ● supports line-oriented text editing; consists of a text editor that builds a body of text, edits it, saves it, and retrieves it from a remote terminal; RUNOFF function prints a file in a previously defined format ● ASCII capabilities include uppercase and lowercase alphabetics ● editing verbs include print, find, insert, replace, delete copy, cut, and paste.

Special Features ● this package is a separately priced add-on to the Time Sharing System software.

Pricing & Support ● $101 monthly license fee; includes basic software maintenance service ● basic software maintenance service entitles customer to assistance by telephone and mail; includes release bulletins and updates ● optional expanded software support provides remote analysis tools and additional assistance in problem corrections.

☐ TSS Electronic Mail Option

Type ● electronic message management package for timesharing users.

Host Software Environment ● Honeywell GCOS or GCOS 8 (multiuser, multiprogramming, virtual storage operating systems) and Time Sharing System software.

Host Hardware Environment ● Honeywell DPS 8 or DPS 88 packaged system.

Installation Data ● first installed 1980 ● unknown number of users ● worldwide distribution through direct company sales and service offices.

Description ● provides electronic mail capabilities to timesharing users; allows terminal users to send and receive messages to and from each other; messages sent to an absent user are saved until user logs on the system; can be used to communicate regularly with a group of users through a technique that lists names of all recipients on a file ● 2 versions available depending on operating system.

Special Features ● this package is a separately priced add-on feature to the Time Sharing System software.

Pricing & Support ● $187 (GCOS), $167 (GCOS 8) monthly license fee; includes basic software maintenance ● basic monthly software maintenance entitles customer to assistance by telephone or mail; includes release bulletins and updates ● optional expanded software support provides remote analysis tools, and additional assistance in problem correction.

☐ TSS File Management Option

Type ● conversational interface to File Management System (FMS) resources.

Host Software Environment ● Honeywell GCOS 8 (multiuser, multiprogramming, virtual storage operating system) and Time Sharing System software.

Host Hardware Environment ● Honeywell DPS 8 or DPS 88 packaged system.

Installation Data ● first installed 1980 ● unknown number of users ● worldwide distribution through direct company sales and service offices.

Description ● provides a conversational subsystem for creating, maintaining, and deleting catalogs and files in a timesharing environment; permits permissions and passwords to be assigned.

Special Features ● this package is a separately priced add-on option to the Time Sharing System software.

Pricing & Support ● $112 monthly software license fee; includes basic monthly software maintenance service ● basic software maintenance entitles customer to assistance by telephone and mail; includes release bulletins and updates ● optional expanded software support provides remote analysis tools and additional assistance in problem correction.

☐ TSS FORTRAN Option

Type ● FORTRAN compile/execute programs for timesharing systems.

Host Software Environment ● Honeywell GCOS 8 (multiuser, multiprogramming, virtual storage operating system), Time Sharing System software, and FORTRAN Compiler and Runtime Facility.

Host Hardware Environment ● Honeywell DPS 8 or DPS 88 packaged system.

Installation Data ● first installed 1980 ● unknown number of users ● worldwide distribution through direct company sales and service offices.

Description ● supports the ability to compile and execute FORTRAN programs in a timesharing environment.

Special Features ● this package is a separately priced add-on option to the Time Sharing System software.

Pricing & Support ● $51 monthly software license fee; includes basic software maintenance service ● basic software maintenance entitles customer to assistance by telephone and mail; includes release bulletins and updates ● optional expanded software support provides remote analysis tools and additional assistance in correcting problems.

☐ TSS Media Input Option

Type ● paper tape input controller.

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Host Software Environment ● Honeywell GCOS 8 (multiuser, multiprogramming virtual storage operating system) and Time Sharing System software.

Host Hardware Environment ● Honeywell DPS 8 or DPS 88 packaged system.

Installation Data ● first installed 1980 ● unknown number of users ● worldwide distribution through direct company sales and service offices.

Description ● provides support for inputs from paper tape or from cassette tapes emulating paper tape in a timesharing environment.

Special Features ● this package is a separately priced add-on option to the Time Sharing System software.

Pricing & Support ● $55 monthly software license fee; includes basic software monthly maintenance service ● basic software maintenance entitles customer to assistance by telephone and mail; includes release bulletins and updates ● optional expanded software support provides remote analysis tools and additional assistance in problem correction.

☐ TSS Sort Interface Option

Type ● interactive sort facility for timesharing users.

Host Software Environment ● Honeywell GCOS or GCOS 8 (multiuser, multiprogramming, virtual storage operating system), Time Sharing System software, and Sort/Merge Facility (GCOS 8) or Utility/Maintenance Option (GCOS).

Host Hardware Environment ● Honeywell DPS 8 or DPS 88 packaged system.

Installation Data ● first installed 1980 ● unknown number of users ● worldwide distribution through direct company sales and service.

Description ● this option extends the sort capability to the Time Sharing System user by providing an easy-to-use interactive command interface ● 2 versions available depending on operating system.

Special Features ● this package is a separately priced add-on feature to the Time Sharing System software.

Pricing & Support ● $78 (GCOS), $70 (GCOS 8) monthly license fee; includes basic software maintenance service ● basic software maintenance service entitles customer to assistance by telephone and mail; includes release bulletin and updates ● optional expanded software support provides remote analysis tools and additional assistance in problem correction.

☐ TSS Text Processing Library (TEXLIB)

Type ● text processor for timesharing users.

Host Software Environment ● Honeywell GCOS or GCOS 8 (multiuser, multiprogramming, virtual storage operating system), Time Sharing System software, and TSS Text Processing Option.

Host Hardware Environment ● Honeywell DPS 8 or DPS 88 packaged system.

Installation Data ● first installed 1980 ● unknown number of users ● worldwide distribution through direct company sales and service offices.

Description ● a program library consisting of procedures, functions, and stored processes, such as menus, that can be used in a timesharing environment ● 3 of the programs included are a learning program to explain the features of the Text Editor, a program to generate connected ruled boxes to user-specified number up to a user-specified exponential value ● 2 versions available depending on operating system.

Special Features ● this package is a separately priced add-on feature to the Time Sharing System software.

Pricing & Support ● $40 (GCOS), $36 (GCOS 8) monthly software license fee; includes basic software maintenance service ● basic software maintenance entitles customer to assistance by telephone and mail; includes release bulletins and updates ● optional ex-

panded software support provides remote analysis tools and additional assistance in problem correction.

☐ TSS Text Processing Option (TEX)

Type ● a superset of the file editing capabilities provided by the Time Sharing System Editing Option.

Host Software Environment ● Honeywell GCOS or GCOS 8 (multiuser, multiprogramming, virtual storage operating system) and Time Sharing System software.

Host Hardware Environment ● Honeywell DPS 8 or DPS 88 packaged system.

Installation Data ● first installed 1980 ● unknown number of users ● worldwide distribution through direct company sales and service offices.

Description ● provides file editing capabilities in an interactive system environment with capabilities suited to both nontechnical end users and to applications developers; includes a text processor, a unique programming language, a simplified job control language with easy commands for calling user's application into execution, and software development aids to simplify and speed up a number of programming tasks ● 2 versions available depending on operating system.

Special Features ● this package is a separately priced add-on feature to the Time Sharing System software.

Pricing & Support ● $358 (GCOS), $320 (GCOS 8) monthly license fee; includes basic software maintenance ● basic software maintenance entitles customer to assistance by telephone or mail; includes release bulletins and updates ● optional expanded software support provides remote analysis tools and additional assistance in problem correction.

■ IBM CORPORATION/Information Systems Group

National Accounts Division; 1133 Westchester Avenue, White Plains, NY 10604; 914-696-1900 ● National Marketing Division; 4111 Northside Parkway, Atlanta, GA 30327; 404-238-2000.

☐ IBM (S/370) CICS/DOS/VS/Extended Telecommunications Module (EXTM V.3/R.1)

Type ● IBM communications package for pre-SNA terminals in an SNA environment.

Host Software Environment ● requires DOS/VS R.34, NCP/VS V.5 or later, and CICS/DOS/VS V.1/R.5.

Host Hardware Environment ● any IBM computer that supports DOS/VS R.34; requires 3704/3705 or 3790 with LCA ● supports most standard IBM SS, BSC, and SDLC terminals; supports locally attached 3740; supports multiple 3704/3705s under NCP/VS; supports remote facilities available under NCP/VS.

Installation Data ● first installed 1979 for 4331-1 and 4341-1; 1980 for 4331-2; 1981 for 4341-2 ● unknown number of users ● distributed through a worldwide network of sales/distribution/maintenance offices.

Description ● supports CICS/DOS/VS-terminal applications communications for pre-SNA terminals into an SNA environment; contains all facilities for data flow support; uses functional capabilities of 3704/3705 NCP/VS for terminal support; can coexist in same partition with BTAM ● program product number is 5746-XXB.

Pricing & Support ● available on a lease-only basis for a perpetual monthly fee of $250; separate DSLO license fee is not available ● support has been withdrawn for this program.

☐ IBM (S/370) CICS/VS (OS/VS & DOS/VS)

Type ● full-function TP monitor and transaction handler.

Host Software Environment ● IBM DOS/VS, DOS/VS(E), or OS/VS operating system.

Host Hardware Environment ● any IBM System/370, 3000, 4300, or compatible computer with 125K bytes of memory; most SDLC terminals are supported.

Installation Data ● current version of both systems is Version 1, Release 5; CICS/DOS/VS V.1/R.5 was released in June 1980; CICS/

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OS/VS V.1/R.5 was released in October 1980 • estimated 4,000 users of CICS worldwide.

Description • full-function TP monitor with embedded file handling capabilities; provides transaction interface between terminal-originated application programs, the host operating system, and a DBMS, if present; supports IMS/VS for OS/VS systems and DL/1 DOS/VS for DOS/VS(E) systems; supports multithread and multipartition/region operations • multicomponent structure provides system management, system services, and applications support modules • System Management module supplies all task and space management facilities; System Services module controls all terminal-oriented operations and maintenance; System Monitoring module provides trace and dump facilities; System Reliability module augments the operating system recovery and restart facilities; System Support functions are instrumental in sysgen, initialization, and termination operations; Applications Services provide the mapping, editing, and formatting capabilities of the system • Intersystem Communications facilities provide direct DB/DC communications.

Special Features • ISC (Intersystem Communications Facilities); IMS/VS Fast Path Feature support; High Performance Option (HPO); Asynchronous Transaction Processing (ATP); FASTER Transaction Processing Descriptions (TPDs); Development Management System (DMS) application development program product; Multi-Region Operations (MRO).

Pricing & Support • monthly license for single copy: CICS/OS/VS (5740-XX1) is $1,785 per month, or $1,250 per month for DSLO (multiple-copy distributed service license option); for CICS/DOS/VS (5746-XX3) single-copy monthly fee is $583 and DSLO is $525 • monthly support for single license (MLPS) is $145 per month, for multiple-copy support (MMLPS) it is $232 per month; provided with Category A support contract.

☐ **IBM (S/370) CORMES (Communications Oriented Message System) R.1**

Type • message exchange system for IBM systems.

Host Software Environment • DOS/VS (R.33 min), CICS/DOS/VS (V.1 min), and requires DL/1 DOS/VS (V.1 min).

Host Hardware Environment • IBM System/370, 3000, 4300, and compatible computers.

Installation Data • first installed 1979 for 4331-1 and 4341-1; 1980 for 4331-2; 1981 for 4341-2 • unknown number of users • distributed through a worldwide network of sales/distribution/maintenance offices.

Description • implemented primarily for System/370 but usable on any other IBM computer operating with DOS/VS; supports action and trigger message exchanges among operators and among programs; provides routing facilities, message linking facilities, and a monitoring facility for message queueing based on priority and due date; uses communications facilities of CICS/DOS/VS • program product number is 5746-XXM.

Pricing & Support • available on a lease-only basis for a perpetual monthly fee of $446; there is no separate DSLO license fee • central service support is included in the monthly lease fee and consists of a graded hierarchy of progressively specialized telephone assistance • technical on-site assistance (charged hourly) is offered to handle problems that cannot be solved through the telephone assistance route.

☐ **IBM (S/370) Development Management System/CICS/VS (DMS/ CICS/VS-DOS & DMS/CICS/VS-OS) R.3**

Type • application development aid for IBM OS/VS and DOS/VS system users.

Host Software Environment • requires CICS/DOS/VS under DOS/ VS or DOS/VSE; requires CICS/OS/VS under OS/VS1, SVS, or MVS group; DMS-DOS requires VSAM; DMS-OS requires VSAM, ISAM, or DAM; compatible with IMS/VS and with DL/1 DOS/VS.

Host Hardware Environment • IBM System/370, 3000, 4300, and compatible computers with at least 1 3275/3277 or 3276/3278 display station.

Installation Data • first installed 1979 for 4331-1 and 4341-1; 1980 for 4331-2; 1981 for 4341-2 • unknown number of users • distributed through a worldwide network of sales/distribution/maintenance offices.

Description • a significant application program development aid for use under all SCPs; designed to use the facilities of the 3270; user interaction is supported through panel description forms (screen builder), file description forms, and data transfer forms; interactive application generation feature supports development from forms base to finished program; provides calculation, edit, and comparison facilities; captures data from up to 16 logically connected panels of displays and consolidates data into a single logical file record or a database path for entry into up to 4 distinct files or databases; supports up to 24 function keys; permits intersystem communications for connecting CICS/VS systems; supports key-sequenced VSAM, SAM, and ISAM files plus special DMS indexed and grouped files; all files supported in fixed-length format; supports CICS implementation of IMS/VS and DL/1 DOS/ VS for inquiry, insertion, update, and deletion • DMS/CICS for DOS/VS; program number is 5746-XC4 • DMS/CICS for OS/VS; program number is 5740-XC5.

Special Features • DMS Application Generation Feature for DOS; program number is 5746-XC4; option numbers are 6082-6086 • DMS Application Generation Feature for OS; program number is 5740-XC5; option numbers are 6082-6086.

Pricing & Support • DMS/CICS for DOS/VS perpetual monthly lease fee is $179; DSLO license fee per month is $134; service per month is $51, and service for multiple systems per month is $82 • DMS Application Generation Feature for DOS/VS perpetual monthly lease fee is $268; DSLO license fee per month is $200; service per month is $51; service on multiple systems per month is $82 • DMS/ CICS for OS/VS perpetual monthly lease fee is $319; DSLO license fee per month is $238; service per month is $51; service on multiple systems per month is $82 • DMS Application Generation Feature for OS perpetual monthly lease fee is $434; DSLO license fee per month is $324; service per month is $51; service on multiple systems per month is $82 • central service support consists of a graded hierarchy of progressively specialized telephone assistance • technical on-site assistance (charged hourly) is offered to handle problems that cannot be solved through the telephone assistance route.

☐ **IBM (S/370) Screen Definition Facility CICS (SDF/CICS/OS/VS & SDF/CICS/DOS/VS) R.2**

Type • basic mapping support enhancement for IBM OS/VS or DOS/VSE users with IBM CICS.

Host Software Environment • OS version operates under OS/VS1 or MVS with CICS/OS/VS V.1/R.5; DOS version operates under DOS/VSE with CICS/DOS/VS V.1/R.5.

Host Hardware Environment • any IBM computer that supports OS/VS1, MVS, or DOS/VSE operating systems.

Installation Data • first installed 1979 for 4331-1 and 4341-1; 1980 for 4331-2; 1981 for 4341-2 • unknown number of users • distributed through a worldwide network of sales/distribution/maintenance offices.

Description • augments the basic mapping support (BMS) facility integrated into CICS to provide a full-screen editing capability for maps and map sets with a maintenance library; supports all extended attributes (color, highlighting, etc) on 8775 terminals; supports online definition and editing of new maps and map sets for multiple devices; multiple maps can be organized into pages through full page definition/editing facilities; maps expressed in CICS-BMS can be converted to SDF/CICS formats through a batch utility; another utility supports SDF/CICS conversion from online to batch; all build operations are supported by online error-help-tutorial interactive dialog • SDF/CICS R.2 • for OS/VS group • program product number is 5740-XYF • SDF/CICS R.2 • for DOS/ VSE • program product number is 5746-XXT.

Pricing & Support • available on a lease-only basis for a perpetual monthly fee of $297 for OS/VS and $221 per month for DOS/ VSE systems; the DSLO license fee is $165 per month for DOS/VSE systems • service is charged separately at $47 per month for all

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operating systems; service on multiple processors costs $75 per month for all operating systems ● central service support consists of a graded hierarchy of progressively specialized telephone assistance ● technical on-site assistance (charged hourly) is offered to handle problems that cannot be solved through the telephone assistance route.

☐ IBM (S/370) VSE Remote Spooling Communication Subsystem/ SNA for VM

Type ● provides SNA support for VM/SP and DOS/VSE environment.

Host Software Environment ● IBM DOS/VSE, VM/SP.

Host Hardware Environment ● any IBM System/370-class mainframe or compatible computer.

Installation Data ● first installed 1984 ● unknown number of users ● distributed through a worldwide network of sales/distribution/ maintenance offices.

Description ● VSE Remote Spooling Communication Subsystem (RSCS/SNA) for VM is designed to provide SNA support for VM/ SP and DOS/VSE environments; as an extension of RSCS and an ACF/VTAM application, it allows VM to use SNA printers to print color files and to transfer files to other SNA systems; combined with VM/VTAM Communication Network Applications (VM/VCNA), CMS users can now take full advantage of SNA hardware and benefits; users can access CMS with VM/VCNA and spool the output to either a 328X printer or to another computer in a multi-system network running VSE RSCS/SNA or JES 2 Release 3.

Pricing & Support ● $3,500 one-time charge includes central service support.

☐ IBM (S/1) RPS Communications Monitor, Version 2

Type ● TP monitor for IBM Series/1 users.

Host Software Environment ● IBM RPS operating system, Version 4.

Host Hardware Environment ● IBM Series/1 4955 Processor Model B or D (Storage Address Relocation Translator required) or Model E, all with at least 192K bytes of main memory; I/O device complement is application dependent; supports all Series/1 I/O and terminal devices; supports 2074, 2025, 2094, and 2093 BSC lines.

Installation Data ● first installed 1977 ● unknown number of users ● distributed through worldwide network of sales/distribution/ maintenance offices.

Description ● licensed program ● provides the basic facilities of a TP monitor for multiterminal control and message switching within a network; manages message flow among terminals and applications programs with single-or multiple-connected complexes; emulates 3271 BSC line protocol for host communications and can also use BSC point-to-point transparency protocol; can operate in standalone, host-connected, and communications concentrator environments; links with other communications monitors through 56K-bps BSC line in subordinated storage, distributional, or other relationships in a concentration environment; offers a self-contained command language accessible to operators and programmers and many other facilities for priority control, error logging, and special programming aids for handling nonsupported devices ● provides all of the features of Version 1 with enhancements to support 1400 Local Communications Controller ● program number is 5719-CM1.

Pricing & Support ● can be acquired for $5,515 one-time license fee for a $174 perpetual monthly lease; $125 one-time distribution fee ● central service support is bundled into the price of all licensed software; consists of a graded hierarchy of progressively specialized telephone assistance ● technical on-site assistance (charged hourly) is offered to handle problems that cannot be solved through the telephone assistance route.

■ MATHEMATICA PRODUCTS GROUP INC
P.O. Box 2392, Princeton, NJ 08540 ● 609-799-2600.

☐ ATLAS

Type ● data communications monitor.

Host Software Environment ● IBM DOS/VSE Release 2.0 and above.

Host Hardware Environment ● IBM System/370, 3000, 4300, and compatible computers.

Installation Data ● first installed 1982 ● 70 installations ● international distribution.

Description ● a multitasking communication monitor ● network management facilities support both screen (IBM 3270) and line (Teletype) devices and provide 3270 dial-up capability; allow application programmers to use CALL-level interfaces to communicate with terminals, as well as write interactive conversations; provide high-level mapping support to assist programmers in handling complex screen formats ● major system features include: support for subroutine nesting; provides dynamic memory allocation/deallocation; provides warm restart capabilities for system work areas, system transaction log, user log files, hardcopy output queues, and accounting file; provides DBMS interfaces for RAMIS II, and IDMS; provides a message switching facility on individual terminal level; supports user-specified priorities for terminals, programs, and transactions; and handles timer-initiated transactions ● interrupt control facilities automatically save data at interrupt; provide multiple save areas in memory or on disk; and provide program-controlled interrupt options, including interrupt only when higher priority transactions are ready to run, reinvoke after optional time delay, and reinvoke after specified condition is posted ● system control features include: communication from system console at any time; online enabling/disabling of lines, terminals, tasks, programs, and files; online status displays; dynamic system configuration at startup time; shutdown options designated as immediate, after draining active tasks, and after draining output queues; generates reports/records usage and system performance statistics ● application control features provide access to system information including: application ID, terminal type, screen size, and lines/columns per screen; interrupt key pressed and last read size in bytes; date and time; and termination limits; provides source language interfaces for COBOL, assembler, and PL/1; provides full ECB (Event Control Block) services; and includes monitor-supplied functions of converting 3270 graphic addresses to line-column or displacement, editing numeric display fields, and converting internal data to hexadecimal display format.

Pricing & Support ● $18,000 to $36,000 one-time fee for license purchase that includes first year of maintenance service; monthly fee for 60-month time payment is equal to 2.4% of single-payment fees; month-to-month rental fees equal 4% of single-payment fees ● maintenance service is available after the first year for an annual charge of 12% of the then-current license purchase fee.

☐ DES

Type ● data entry and verification system.

Host Software Environment ● IBM DOS/VS(E).

Host Hardware Environment ● any IBM System/370-class mainframe or compatible computer.

Installation Data ● first installed 1978 ● over 75 current users.

Description ● data entry and verification system that can be installed standalone or integrated with MPG's ATLAS or MPGSWIFT II; provides online creation of entry screens and formats; each file or batch of entered data can contain 5 record types; data batches reside on disk in a proprietary library called TDAM; once entered and verified, data batches can be extracted, printed, or read directly from the TDAM file by application programs using a read-only subroutine supplied with the system; data may be retained indefinitely in the TDAM file and reviewed online ● features automatic range checking, field duplication and batch totals, field editing, optional user exit, screen format and output record up to 995 characters, multiple record types per batch, and interfaces for access to data through MPG's RAMIS II.

Pricing & Support ● one-time license purchase price ranges from $5,000 to $7,000 (as an attached option) or $8,000 to $12,000 (standalone), depending on IDC level rating of CPU.

☐ MPGSWIFT

Type ● TP monitor for IBM systems.

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Host Software Environment ● IBM DOS/VOS or DOS/VSE operating system.

Host Hardware Environment ● any IBM System/370, 3000, 4300, or compatible computer with hardware Storage Protect feature.

Installation Data ● first installed 1973 ● 100 installations ● worldwide distribution.

Description ● multithread, general-purpose telecommunications monitor ● standard version supports BSC and start-stop protocol only, from both direct and dial-up lines; accepts applications programs written in ANSI and non-standard COBOL, FORTRAN, and IBM assembly language; supports all standard IBM file access methods including ISAM, VSAM, and DAM; supports IBM 2260, 3270, 2740, 3741, 3767, and compatible terminals and all TTY-type devices ● includes several operational enhancements; Save/Restore provides a unique save area for each terminal; Auto-Return automatically partitions lengthy programs that could monopolize the system; Polling is offered with either generalized or specific polling options; fully supports message switching, spool printing, input mapping, transaction logging, an accounting file, and editing capabilities; handles all code conversions, intrasystem communication, polling broadcasting, and other terminal-oriented operations ● please refer to 900 section for a detailed analysis of this product.

Special Features ● the following separately priced, add-on options are available for this product, including: single-thread kernel; Remote Terminal Support; Teletype Support; 3741 Support; Printer Spooling Option; DBMS interfaces, including: Mathematica RAMIS II, Cincom TOTAL, Cullinane IDMS, ADR DATACOM/DB, and IBM DBOMP; PL/1 or RPG Language Interfaces; MPGDITTO that provides terminal users with an online print program and test and debugging facilities; CPU-to-CPU communications that supports transmission to another CPU, to remote batch terminals, to an IBM System/3, or to HASP workstations; Data Entry System (DES) that can be installed as a standalone or as an option and supports IBM 3270-type terminals for data entry and verification; and Transaction Interactive Programming System (TIPS) that can also be implemented either as a standalone product or as an integrated option and that provides support to create, review, debug, modify, and execute application programs from a CRT terminal.

Pricing & Support ● $10,500 (multithread kernel), $7,500 (single-thread kernel), $2,500 (Remote Terminal), $3,000 (Teletype or 3741 Support), $1,500 (Print Spooling), $1,200 (each DBMS or PL/1 and RPG interface), $1,500 (MPGDITTO), $3,000 (CPU-CPU Communications), $5,000 (DES-standalone), $3,000 (DES-option), $6,500 (TIPS-standalone), $4,000 (TIPS-option) one-time fee for 25-year lease that includes first year of maintenance; $494/$386/$262.50 (kernel), $353/$278/$187.50 (single-threaded kernel), $353/$93/$62.50 (Remote Terminal), $141/$111/$75 (Teletype or 3741 Support), $71/$56/$37.50 (Print Spooling), $56/$44/$30 (each DBMS or PL/1 and RPG interface), $71/$56/$37.50 (MPGDITTO), $141/$111/$75 (CPU-CPU Communications), $235/$185/$125 (DES-standalone), $141/$111/$75 (DES-option), $306/$241/$162.50 (TIPS-standalone), $188/$148/$100 (TIPS-option) monthly charges for month-to-month rental/3-year paid-up lease/5-year paid-up lease that includes maintenance for the life of plan; annual maintenance cost is 10% of the then-current 25-year lease price; installation fee of $750 is charged for initial implementation; includes all expenses ● source code is available ● additional documentation, training, and consulting services are available for additional fees.

☐ MPGSWIFT II

Type ● teleprocessing monitor.

Host Software Environment ● IBM DOS/VS(E).

Host Hardware Environment ● any IBM System/370-class mainframe or compatible computer.

Installation Data ● first installed 1973 ● over 100 current users.

Description ● designed for installations with smaller CPUs or smaller partitions available for teleprocessing; supports screen (IBM 3270) and line (TTY) terminals; provides dial-up facility for ASCII devices ● programs written in assembler, COBOL, and

RPG II use standard call statements to request monitor services to terminals, and against ISAM, VSAM, and DAM files; sequential files can be accessed through the DA call statements ● security safeguards protect online data from unauthorized use, and can be tailored to the individual needs of the installation.

Pricing & Support ● one-time license purchase price ranges from $11,000 to $22,000, depending on IDC level rating of CPU.

☐ TIPS/FSE

Type ● full-screen editor.

Host Software Environment ● IBM DOS/VS(E).

Host Hardware Environment ● any IBM System/370-class mainframe or compatible computer.

Installation Data ● first installed 1973 ● unknown number of users.

Description ● full-screen editor that can be installed standalone or integrated with MPG's ATLAS or MPGSWIFT II; allows programmers to create and modify application programs, submit them for compilation or execution, and review the output at a video terminal ● the system consists of only a few easy-to-understand commands that perform all associated programming tasks.

Pricing & Support ● one-time license purchase price ranges from $4,000 to $6,000 (MPGSWIFT or ATLAS option) or $6,000 to $10,000 (standalone), depending on IDC level rating of CPU.

■ MECHANICAL TECHNOLOGY INC
968 Albany-Shaker Road, Latham, NY 12110 ● 518-785-2211.

☐ CICS/DRAS

Type ● Dynamic Resource Allocation System.

Host Software Environment ● IBM DOS/VS, DOS/VSE, OS/VS1, OS/VS2(SVS), OS/VS2(MVS) operating systems with CICS/VS.

Host Hardware Environment ● IBM System/370, 3000, 4300, and compatible computers.

Installation Data ● first installed 1982 ● 7 installations.

Description ● a dynamic resource allocation system that provides capabilities to allocate CICS resources such as DL/1 databases, VSAM files, and tables external from an application program ● system control is established through the use of a user-specified table that indicates which users are to have resources allocated and which resources are to be allocated to them ● there are 5 operator/terminal entry types used to identify users who have resources allocated: operator-ID algorithm method, which allows users to specify generalized routines which can be numeric, alpha, or any combination; operator-ID Include list method, which allows a range of operator IDs to be included in allocations; operator-ID Exclude list method, which allows a range of operator IDs to be excluded in any allocations; terminal-ID Include list method, which allows a range of terminal numbers to be included in allocations; and terminal-ID Exclude list method, which allows a range of terminal IDs to be excluded from allocation ● there are 8 types of resources that can be dynamically allocated: PSB (program specification block) name, which is used by DL/1 to identify which database and what processing options are to be used; file name allocation, which CICS uses to identify the files and processing options of each; transient data queue allocation, which are areas in memory or on disk that CICS stores transactions to be executed when a preset limit is reached; temporary storage data query allocation, which is an area in memory or disk that application programs store data to be used at a later time; program name allocation, which refers to any table or program accessed by an application; DBD (database definition) name allocation, which is used by DL/1 to identify fields and actual file names to be used; transaction-ID allocation, which is used by CICS to identify programs to be executed; and BMS Map allocation, which modifies the map to be used ● an added level of system security will not allow an operator to access a database or any resource of another user since each user will have a unique sign-on name and operator number pointing them to different resources; also includes a query function to assist in debugging new applications.

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Pricing & Support ● one-time fee for license purchase which includes maintenance: $7,500 (DOS) and $9,500 (OS) ● $290 monthly fee for 36-month lease/purchase that includes maintenance; both plans include program reference and installation/operation guide ● maintenance available for an annual fee of 10% of the then-current license purchase fee ● source code is not available.

■ NIXDORF COMPUTER CORPORATION
168 Middlesex Turnpike, Burlington, MA 01803 ● 617-273-0480.

□ TCP (Teleprocessing Control Program)

Type ● local/remote communications.

Host Software Environment ● Nixdorf NIDOS/VSE multiprogramming, virtual/real memory operating system; IBM DOS/VS; DOS/VSE operating systems.

Host Hardware Environment ● Nixforf 8890 Series plug-compatible mainframe system; IBM System/370-class system.

Installation Data ● first installed 1981 ● unknown number of users ● worldwide distribution.

Description ● provides overall control of online applications, including data entry and real-time processing, and both local and remote communications ● automatically multitasks multiple online programs; supports a logically unlimited number of terminals, lines, users, and non-terminal tasks; multithreading allows multiple terminals to use the same copy of the program ● line control access methods support IBM VTAM and BTAM, along with Nixdorf's high-performance STAM access method; also supports Nixdorf's USAM file access method and NDB (Nixdorf Data Base System) ● supports program written in COBOL, PL/1, and assembler.

Special Features ● TPS, the TCP printing spooler option, enables the TCP user to spool terminal printer output.

Pricing & Support ● $370 monthly license fee; $150 monthly service fee; monthly fees for TPS are $65 and $20, respectively.

□ Teleprocessing Utilities

Type ● communication utilities.

Host Software Environment ● Nixdorf NIDOS/VSE (multiprogramming virtual/real memory operating systems; IBM DOS/VS, DOS/VSE operating systems.

Host Hardware Environment ● Nixdorf 8890 Series plug-compatible mainframe system; IBM System/370-class systems.

Installation Data ● first installed 1981 ● unknown number of users ● worldwide distribution.

Description ● a complete set of communications utilities ● Communication Program Generator is a conversational program generator employing a TP-oriented language for the development of programs to run under Nixdorf's Teleprocessing Control Program ● ERJE (Extended Remote Job Entry) is an extension of Nixdorf's NIDOS/VSE Extended Spooling Facility (ESF); it provides control for IBM 2780/3780/3741-compatible terminals; supports up to 61 concurrent local/remote terminals ● MHF Multi-Host Facility supports transfers between the 8890 and multiple hosts in a distributed network ● JTP (Job Transfer Program) supports transfers of jobs to/from another host in a peer-to-peer or host-to-subhost distributed processing network ● FTP (File Transfer Program) supports transfer of files to/from another host in a peer-to-peer or host-to-subhost distributed processing network.

Pricing & Support ● $185/$80 (Communications Program Generator), $95/$25 (ERJE), $130/$40 (MHF), $145/$20 (JTP), $50/$10 (FTP) charges for monthly license/monthly service, respectively.

■ ON-LINE SOFTWARE INTERNATIONAL
Ft. Lee Executive Park, Two Executive Drive, Fort Lee, NJ 07024 ● 201-592-0009.

□ GUARDIAN

Type ● security enhancement package for IBM CICS/VS users.

Host Software Environment ● IBM DOS/VSE, OS/VS1, OS/VS2(MVS) with CICS/VS; accommodates COBOL, PL/1, and assembler.

Host Hardware Environment ● IBM System/370, 3000, 4300, and compatible computers; requires 60K bytes of memory.

Installation Data ● first installed 1979 ● 350 current users.

Description ● access control security system used to protect any CICS environment; secures all CICS resources, including users, files, databases, transactions, programs, and terminals from unauthorized use; times of day, and specific days can be the basis for authorization; resources can be grouped and protected in any combination ● security policy is defined in English language rules; system may be centrally controlled or decentralized among an unlimited number of security administrators; customized log reports are presented in English to enable nontechnical personnel to implement, maintain, monitor, and audit the security policy ● features include DL/1 and IMS support, field level security for files and databases, protection based on the contents of fields entered on a screen, and online maintenance capabilities that allow authorized administrators to modify security interactively on either a temporary or permanent basis.

Pricing & Support ● $21,000 (DOS/VSE), $28,875 (OS/VS1, MVS) one-time license fee includes first-year maintenance; lease and rental plans available upon request ● ongoing annual maintenance based on 15% of the then-current license purchase price.

□ InterTest

Type ● testing and debugging tool for IBM CICS users.

Host Software Environment ● IBM DOS/VS(E), OS/VS1, OS/VS2(SVS), or OS/VS2(MVS) operating system with CICS.

Host Hardware Environment ● IBM System/370, 3000, 4300, and compatible computers.

Installation Data ● first installed 1977 ● over 1,400 users ● worldwide distribution.

Description ● completely interactive tool that helps CICS programmers test and debug programs faster and more effectively without dumps ● monitors CICS programs, analyzing instructions before they execute and thereby automatically detecting and preventing CICS application errors before they can cause damage to the program or CICS; menu screens or commands available to set monitoring options dynamically; breakpoint displays are provided when an error is detected, at specific locations, or when user-controlled conditions are met; interactive HELP facility; all debugging can be controlled by actual COBOL and assembler names and labels; breakpoint displays include: reason for breakpoint, current statement, branch table, last affected storage, table addresses, English-language description of each event, actual COBOL or assembler source code with current statement or instruction highlighted ● full source code and compiler output can be viewed online; there are options to set, remove, or override monitoring characteristics for programs, transactions, or terminals; CORE utility allows main storage to be inspected or modified, subject to security constraints; allows program variables to be accessed or changed during testing ● FILE facility supports all data sets defined or modified online, subject to security ● CICS table entries can be inspected or paths and conditions may be tested ● please refer to the 900 section for a detailed analysis of the product.

Pricing & Support ● single CPU perpetual license $24,000 OS; $20,000 DOS; 1-, 2-, and 3-year leases available; annual maintenance fee after first year is 15% of license fee; multiproduct and multicopy discounts; full documentation (10 copies) included.

□ OMNILINK

Type ● message management enhancement package for IBM CICS/VS users.

Host Software Environment ● any IBM operating system that supports CICS/VS; accommodates COBOL, PL/1, and assembler.

Host Hardware Environment ● IBM System/370, 3000, 4300, and compatible computers; requires 50K bytes of memory; requires 3270/3280 or equivalent terminals.

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Installation Data ● first installed 1980 ● over 100 current users.

Description ● provides CICS users with electronic mail and office automation capabilities ● provides abilities for users to create, display, send, file, edit, receive, and cancel messages electronically ● supports both selective and broadcast message modes; messages can be displayed on request or automatically as they arrive at a destination, includes a provision for hardcopy message printout at recipient site(s) ● addressee information is stored in an online directory; all users can be given an electronic file drawer for document editing and storage.

Special Features ● optional components are: OMNIMICRO, an integrated set of microcomputer software tools; OMNIQUERY, an English language command processor; OMNIGUARD, an online security package.

Pricing & Support ● $35,000 (OS), $28,000 (DOS) one-time license purchase price; no charge first-year maintenance; 15% of prevailing purchase price charged annually after first year ● 1-, 12-, 24-month and 3-year leases available; no charge for maintenance ● quantity and OEM discounts available.

■ OXFORD SOFTWARE CORP
174 Boulevard, Hasbrouck Heights, NJ 07604 ● 201-288-1515.

□ COSS (CICS Online Security System)

Type ● interactive CICS security package.

Host Software Environment ● IBM DOS/VS, DOS/VSE, OS/VS1, OS/VS2(MVS) with CICS/VS Release 1.5 and later.

Host Hardware Environment ● IBM System/370, 3000, 4300, and compatible computers.

Installation Data ● first installed 1982 ● 50 installations ● international distribution.

Description ● an interactive, nonprocedural software security package that provides protection for and prevents unauthorized access to CICS/VS resources, Oxford's UFO (User Files Online) resources, and other user-defined resources ● a series of fill-in-the-blanks screens are used by security personnel to define resources and implement security requirements on an online basis ● security can be set up for items such as: resources known and managed by CICS, such as terminals, transactions, files, programs, and systems; UFO displays, data structures and fields, and user-defined resources; and to grant/restrict access to sensitive resources by operator, day/time constraints, and other user-defined criteria ● other functions are: enforcement of security requirements and monitoring the usage of all defined resources; reports security violations immediately and logs them for immediate viewing or later printing.

Pricing & Support ● one-time fee for license purchase: $14,000 (DOS), $20,000 (OS); includes first year of maintenance ● annual fee for yearly lease: $5,900 (DOS), $8,500 (OS) ● monthly fee for month-to-month rental: $630 (DOS), $900 (OS); lease and rental plans include maintenance ● maintenance is available for license purchases after first year for an annual fee based on 12% (DOS) or 15% (OS) of the then-current license purchase fee ● multicopy discounts are available.

■ PERKIN-ELMER
Computer Systems Division; 2 Crescent Place, Oceanport, NJ 07759 ● 201-870-4500.

□ Perkin-Elmer OS/32 Multi-Terminal Monitor

Type ● extended terminal control feature for Perkin-Elmer OS/32 Operating System.

Host Software Environment ● Perkin-Elmer OS/32 (multiprogramming, multiuser operating system).

Host Hardware Environment ● Perkin-Elmer 32-bit processor with 256K bytes of memory, relocation and protection hardware, operator console, interval clock, line frequency clock, and power fail/auto-restart.

Installation Data ● first installed 1979 ● unknown number of users ● worldwide distribution through company sales and service offices.

Description ● provides programming environment for up to 64 interactive terminals; simultaneously supports online terminal users (remote and local) and background batch tasks ● supports program development in COBOL, RPG II, FORTRAN, BASIC, CORAL 66, and CAL assembler.

Pricing & Support ● one-time license fee (includes one-year maintenance) ranges from $1,000 to $3,000 depending on configuration; $200 annual maintenance fee (covers all services) ● maintenance service provides a regular software bulletin describing software defects and patches or alternatives to resolve the defects; includes Software Change Revision Service and automatic update service ● other assistance available on a time-and-material basis.

■ POLYGON SOFTWARE CORP
363 Seventh Avenue, 4th Floor, New York, NY 10001 ● 212-563-5858.

□ INTERCOMM

Type ● multithread TP monitor for IBM OS/VS systems.

Host Software Environment ● OS/VS1, OS/VS2(SVS), OS/VS2(MVS), and VM/370; supports COBOL, FORTRAN, and assembler.

Host Hardware Environment ● IBM System/370, 3000, 4300, or compatible computer.

Installation Data ● first installed June 1969 ● 275 current installations ● international distribution.

Description ● INTERCOMM is a large-scale telecommunications monitor designed to support the OS/VS environment; it consists of 4 distinct components: subsystem control, file handling, dispatching, and a teleprocessing interface ● communications are provided for device and line control operations; full resource management, job management, and task/program management capabilities are available; a variety of utilities are provided as options to tailor the system to meet user configuration needs ● can be configured to interface with general-purpose data structures, including most popular DBMSs; supports temporary storage and paging facilities through table-oriented structure; the subsystem controller and the dispatcher routines handle all message switching functions; control includes acquiring the message from the queue, formatting it, obtaining required data from the online files, executing the application program, formatting the response, and directing the output to the proper terminal ● user interfaces include a host operating system interface through macro-generated tables; batch processing, which is handled through calls to the monitor's file handler; transaction processing, which controls the communications processing between the host computer and the connected terminals; a program development capability which supports screen mapping, an automatic conversational facility, multiscreen CRT output browsing, a facility for subtasking applications with embedded WAITs, and automatic release of program resources in a failure situation ● security is provided at the sign-on/sign-off level using station, transaction, or station/transaction control; extended facilities support system resources in a multiregion or single region INTERCOMM system; the security environment can be defined dynamically via a command language ● the monitor maintains the INTERLOG system log, which contains a historical record of all traffic within the monitor; there is a chargeback accounting facility (System Accounting and Measurement); and statistics can be gathered to assist in fine-tuning the environment ● checkpoint/restart uses the system log with the Message Restart function; there is a Backout-on-the-Fly (BOF) function that can be executed immediately after a program check, a program time-out, or a special request by a subsystem; BOF requires the implementation of the Dynamic Data Queuing special feature.

Pricing & Support ● $100,000 one-time license purchase fee includes first year of maintenance and support; ongoing annual maintenance costs $9,000 ● multiple-site discounts are available.

Communications & Networking
TP Monitors & Enhancements

■ SOFTWARE AG OF NORTH AMERICA

International Center, 11800 Sunrise Valley Drive, Suite 1517, Reston, VA 22091 • 703-860-5050.

□ COM-PLETE

Type • TP monitor system for IBM mainframes.

Host Software Environment • IBM DOS/VS, DOS/VSE, OS/VS1, OS/VS2(SVS), OS/VS2(MVS).

Host Hardware Environment • IBM System/370, 3000, 4300, and compatible computers with a minimum 512K-byte user partition.

Installation Data • first installed 1976 • over 150 installations • worldwide distribution.

Description • a multithreaded teleprocessing monitoring system consisting of 3 extractable components: kernel, interactive program development, and conversational transaction processing • supports all IBM protocols including SDLC and networking facilities of SNA; includes CTAM (Com-Plete Terminal Access Method) as a substitute for BTAM and TCAM, as well as fully supporting VTAM • supports standard file access methods through CALL except for VSAM and Software AG's ADABAS DBMS, which are handled directly • supports multiple job/program streams (threads) with thread sizes ranging from 10K bytes to 252K bytes; message switching facility allows messages to be switched from any originating point in the system, to a terminal, online program, or batch program; messages can be discretely routed or broadcast to the network • accommodates programs written in COBOL, FORTRAN, PL/1, and IBM assembler • contains an interface to the host operating system through a set of embedded utilities which can be password-controlled for restricted access; privileged display functions can be related to active task, queue and spool status, tape/disk device status, current operator message/replies, and queue control blocks • conversational transaction processing provides for the development of online data entry and inquiry programs and the updating of application programs; contains a terminal mapping technique that permits data fields to be referenced symbolically, and includes terminal-independent I/O facilities for any supported terminal • interactive user facilities support program development and RJE functions with capabilities that include: create/edit source code, create/modify JCL, character string scan/replace, and add/change/delete library members • the COM-PASS feature of COM-PLETE enhances flexibility and ease of use by supporting multiple levels of parallel program execution at each terminal; this provides users with the ability to be in conversation with several online programs simultaneously—starting, stopping, and switching between programs in any sequence, and resuming each conversation exactly where it was left off.

Pricing & Support • prices for COM-PLETE start at $50,000 for the DOS/VSE version, with leases from $985 per month; maintenance, including system enhancements and 24-hour hot-line service, is provided at an annual fee of 10% of the then-current purchase price.

■ SPERRY CORPORATION

P.O. Box 500, Blue Bell, PA 19422 • 215-542-4011.

□ CMS 1100 DCP

Type • interactive timesharing plus batch program for Sperry Series 1100 users.

Host Software Environment • Series 1100 Operating System.

Host Hardware Environment • any Sperry Series 1100 system.

Installation Data • the 1100/60 first installed in 1979, the 1100/80 in 1976 • over 200 systems delivered worldwide as of 1981 • distributed through a nationwide network of sales/distribution/maintenance offices.

Description • CMS 1100 plus remote batch independent of terminal type, and dynamic configuration capability • program number is 6169-00.

Pricing & Support • available on a rental basis only for a perpetual monthly fee of $550 (1100/60-70), $650 (1100/80-90) • central service is included in the monthly software rental charge • many Series 1100 customer education courses are offered; they can be held at either a Sperry site or the customer site; there is a range of fees.

□ CMS 1100 GCS

Type • interactive timesharing program for Sperry Series 1100 users.

Host Software Environment • Series 1100 Operating System.

Host Hardware Environment • any Sperry Series 1100 system.

Installation Data • the 1100/60 first installed in 1979, the 1100/80 in 1976 • over 200 systems delivered worldwide as of 1981 • distributed through a nationwide network of sales/distribution/maintenance offices.

Description • replaces CMS and Executive Interactive control routine; supports UDLC link to DCP when interfaced through the GCS • program number is 6169-01.

Pricing & Support • available on a rental basis only for a perpetual monthly fee of $550 (1100/60-70), $650 (1100/80-90) • central service is included in the monthly software rental charge • many Series 1100 customer education courses are offered; they can be held at either a Sperry site or the customer site; there is a range of fees.

□ CTS (Conversational Time-Sharing)

Type • interactive timesharing program for Sperry Series 1100 users.

Host Software Environment • Series 1100 Operating System.

Host Hardware Environment • any Sperry Series 1100 system.

Installation Data • the 1100/60 first installed in 1979, the 1100/80 in 1976 • over 200 systems delivered worldwide as of 1981 • distributed through a nationwide network of sales/distribution/maintenance offices.

Description • included with hardware system • an interactive timesharing software package that provides syntax analysis, file editing, compilation, program execution; supports programs written in any 1100-supported language and has line-by-line syntax analysis for BASIC, FORTRAN, COBOL, and APL; HELP processor provides user prompting; desk calculator function • program number is 6170-00.

Pricing & Support • available on a rental basis only for a perpetual monthly fee of $275 • central service is included in the monthly software rental charge • many Series 1100 customer education courses are offered; they can be held at either a Sperry site or the customer site; there is a range of fees.

□ HVTS (High Volume Time-Sharing System)

Type • timesharing system for Sperry Series 1100 users.

Host Software Environment • Series 1100 Operating System plus Communications Management System (CMS) and Quota Input Processor (QUIP) • FTN mode requires ASCII FORTAN plus Processor Common Input/Output System (PCIOS).

Host Hardware Environment • any Sperry Series 1100 system.

Installation Data • the 1100/60 first installed in 1979, the 1100/80 in 1976 • over 200 systems delivered worldwide as of 1981 • distributed through a nationwide network of sales/distribution/maintenance offices.

Description • supports medium and high range of terminal usage in DATA/CONSULT/BASIC/FORTRAN/APL modes; each user has private program/data library files; security procedures include full file privacy, partial privacy, list of authorized users, total connect time allowed per program, program sizes allowed; data entry/editing commands include RESEQUENCE/MERGE/GO/LOCATE/CHANGE/DELETE/BRIEF/LIST; HELP command to assist users; runs HVTS BASIC compiler with matrix support, intrinsic functions, subprograms, chaining; FORTRAN prescanner provided as well as HVTS FORTRAN and APL • program number is 6147.

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TP Monitors & Enhancements

Pricing & Support ● available on a rental basis only for a perpetual monthly fee of $635 ● central service is included in the monthly software rental charge ● customer education for this program product is offered at either a Sperry site or the customer site; there is a fee for the course work.

■ STERLING SOFTWARE MARKETING

Crocker Bank Building/Penthouse, 1007 7th Street, Sacramento, CA 94814 ● 916-441-7234.

□ QUICK-TUBE

Type ● performance enhancement for IBM TSO.

Host Software Environment ● any IBM OS/VS operating system.

Host Hardware Environment ● IBM System/370, 3000, 4300, and compatible computers.

Installation Data ● first installed 1978 ● over 125 current users.

Description ● performance enhancement package for IBM TSO/TCAM/3270 operations; compensates for the inability of TSO to use the TCAM Autopoll Channel Program for remote BSC 3270 terminals by implementing logic between TSO and the TCAM autopoll facility; installed as a TCAM adjunct; does not affect any existing TSO/TCAM capabilities; vendor claims QUICK-TUBE releases 10 to 25% of CPU time.

Pricing & Support ● license available on a rental basis only; $7,200 annual rental or $650 monthly rental ● no charge for maintenance.

■ TECHNALYSIS CORPORATION

6700 France Avenue South, Minneapolis, MN 55435 ● 612-925-5900.

□ T/MCS (Technalysis Message Control System)

Type ● communication and network controller.

Host Software Environment ● Burroughs MCP.

Host Hardware Environment ● Burroughs B 1000 Series with a minimum of 50K bytes of memory.

Installation Data ● first installed 1979 ● 30 current users ● international distribution.

Description ● a message control system that manages communications between terminals and online application programs; provides transaction-based routing and also accommodates non-participating programs such as CANDE and DMS INQUIRY; allows each terminal to run any number of online programs simultaneously; programs may be shared by more than 1 terminal; also has the ability to add new online programs, change security, or reconfigure the entire terminal network without recompiling or disturbing the online environment ● multilevel security features with dynamic online modification include password protection with automatic notification of illegal logon attempts; restricted updates and inquiries; the ability to assign or restrict T/MCS and MCP functions, or programs and passwords to selected stations; or limit access to online programs by individual ● console operations allow the operator to display current program information, send messages to any terminal, reset programs at any terminal, automatically delete low volume programs from the mix, and solve problems "on-the-fly" without impacting system efficiency.

Pricing & Support ● one-time license purchase cost is $7,000; annual maintenance is available for 12% of the then-current purchase price.

■ TONE SOFTWARE CORPORATION

1735 South Brockhurst, Anaheim, CA 92804 ● 714-991-9460.

□ TONE 3/TONE 4

Type ● TONE 3 is an enhanced TSO package OS/VS1 for IBM systems; TONE 4 is extended TSO package for IBM MVS systems.

Host Software Environment ● TONE 3 runs under IBM OS/VS1; TONE 4 runs under IBM OS/VS2(MVS).

Host Hardware Environment ● IBM System/370, 3000, 4300, and compatible computers.

Installation Data ● TONE 3 installed 1976; TONE 4 installed 1979 ● TONE 3: 300 installations; TONE 4: 50 installations ● worldwide distribution.

Description ● command compatible with IBM TSO; utilizes BTAM and VTAM modules instead of TSO TACAM modules ● supports multiple users in a single address space or partition; utilizes VS paging in place of swapping to minimize overhead; supports BSC, SNA, and ASCII devices ● FSM (Full Screen Mode) is an integrated full-screen editor that allows users to edit an entire screen of data in 1 transmission; other functions include: logical tab support, hexadecimal editing, data copying and moving; FSM subcommands are similar to those of IBM's SPF product ● TLIB (Interactive ADR LIBRARIAN Command Processor) and TPAN (Interactive Pansophic PANVALET Command Processor) provides capabilities for users to add, replace, or delete library members through TONE ● provides dynamic dataset allocation and foreground program execution as standard features ● supports most command processors designed for IBM TSO, including SPF and ISPF products ● IBM 3270 support performs full-screen reads and writes to all 3270 models including Models 2, 3, 4, and 5; supports 27 programmable function keys ● provides the ability for users to submit jobs for batch processing and to review the output from these jobs; after reviewing the output users can requeue the output for subsequent review, delete the output, or place it into a dataset ● package also includes CLIST compiler, PROCMAN, and Tone's attached printer support package, TSPRINT.

Special Features ● ISP (Intersystem Spool Processor) supports multiple (2 to 36) OS/VS1 and/or OS/MVS systems and provides routing of job-created output between any processors sharing ISP environment; PHASOR (VS1 Dynamic Allocation of SYSOUT) provides dynamic allocation and release of SYSOUT data sets for early printing under VS1; FSO (Full Screen Output) provides for reviewing spooled input and output directly from the JES queue; also includes many utility subcommands.

Pricing & Support ● $29,900 (TONE), $8,000 (ISP), $6,500 (PHASOR), $6,000 (FSO) one-time license purchase fee that includes first year of maintenance; $825 (TONE), $225 (PHASOR), $162 (FSO) monthly fee for 3-year lease that includes first year maintenance; ongoing maintenance is available for an annual rate of 12.4% of the then-current license purchase price ● documentation is provided on the system tape in machine-reproducible format.

■ WESTINGHOUSE ELECTRIC CORPORATION

2040 Ardmore Boulevard, Pittsburgh, PA 15221 ● 412-636-3100.

□ WESTI

Type ● TP monitor for DOS/VS(E) systems.

Host Software Environment ● IBM DOS/VS, DOS/VSE, and most independent replacement operating systems.

Host Hardware Environment ● IBM System/370, 3000, 4300, and compatible computers.

Installation Data ● first installed 1971 ● 550 installations ● international distribution.

Description ● a multithread, multitask, medium-scale TP monitor ● nucleus contains a dispatcher task, which schedules all activities; a network management facility; terminal-to-application device assignment logic; resource allocation facility; application program scheduling capabilities; supports applications written in COBOL, PL/1, assembly language, or RPG II ● supports various modes of operation including: multientry, where several terminals are handled asynchronously by a single program; single entry mode, where an application program handles one terminal at a time; or in single-entry/multicopy mode, where the monitor provides each terminal with its own dynamically created copy of an application ● Auto-start Facility allows predefined responses to WESTI initialization messages to be constructed, and also sets up the initial application program to assume direct control of the system after initialization ● provides standard DBMS interfaces for: Cullinane IDMS, Software AG ADABAS, and Nixdorf DBMS; the Access Method Controller allows read/write operations for all

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TP Monitors & Enhancements

standard access methods ● Roll-In-Out Facility aids in reducing storage requirements and paging activity by allowing multiple application programs to share common execution area; uses direct disk addressing and full track blocking; roll-in/roll-out of actual program length is performed; breaks RIO process into single track operations to enhance time required to complete roll-in/roll-out cycle ● Screen Management Facility supports the creation of screen display formats and stores resulting data streams; provides ability to retrieve requested display formats by relative record number identification ● DISKWORK facility provides data management capabilities in support of data entry applications or as a temporary data storage media; dynamically allocates and deallocates space to each task as required ● Remote Support feature handles 3270-type terminals, system-supported printers on leased multipoint lines, and TTY 33 and 35 terminals on switched lines ● Enqueuing Facility allows application programs to schedule serial resources to prevent multiple terminals from attempting to use the same resource, or to simultaneously access the same data file or record for a write operation ● Printer Control facility provides options that permit printers to be acquired for exclusive or shared use, allow printer output to be serialized by hardware features or format control characters, and the ability to assign a group printer to a terminal ● System Control functions are selectable and are designed to support the tailored environment of each installation ● supports programs written in IBM COBOL, PL/1, RPG II and assembler language ● also offers 3270 interterminal message routing.

Special Features ● SCEPTER is an add-on extra cost option that is available; it is a display-oriented, command-driven source program development tool that provides job entry facilities and queue management control ● WESTI/CICS Interface is an optional component available at additional cost allowing command-level COBOL CICS programs to run as WESTI applications ● MEMORY MANAGER (optional feature) queues all remote terminal I/Os to a memory queue, not to the DISKQ file; provides response time improvements.

Pricing & Support ● $15,500 (WESTI-local version); $19,500 (WESTI remote version) one-time fee for perpetual license that includes first-year maintenance ● $1,700 (local), $1,950 (remote) annual maintenance fee after the first year ● no lease or rental plans available ● $5,000 (SCEPTER) one-time fee for license purchase includes first year of maintenance; $600 annual charge for maintenance after first year ● WESTI/CICS Interface one-time fee is $10,000, including first-year maintenance.

Communications & Networking
Network Design & Management

This subsection contains profiles of various network design, line control, and network management programs that can be implemented in mainframe, minicomputer, and mainframe/minicomputer-microcomputer environments. Where a package can be installed on a standalone basis, this is noted. In those cases where the program requires the existance of a supportive program, a Special Features section in the profile points this out.

Most of the profiles in this section deal with design and control of host computer system networks, but there are also profiles that address telephone and teletype networks as well.

Communications & Networking
Network Design & Management

#	COMPANY • PRODUCT	TYPE	IBM DOS/VS-Based	IBM OS/VS1 & SVS	IBM MVS-Based & VM	IBM Small Systems	Burroughs MCP Systems	DEC PDP-11 Systems	DEC VAX/VMS	Data General Systems	Hewlett-Packard MPE/RTE	Honeywell GCOS 6/7/8	Honeywell MOD 200/400/600	Sperry Corp 1100 OS	Wang VS/DOS	OTHER COMPUTERS
1	Applied Information • BURCOM	comm interface					●									
2	Burroughs • BNS (Burr Network Serv)	BNA interface					●									
3	Burroughs • CP 3600 (DCS)	online network gen					●									
4	Burroughs • DCP (NDL)	comm network custom					●									
5	Burroughs • DCP (NDL II)	comm network custom					●									
6	Burroughs • GEMCOS	para driven mess ctrl					●									
7	Burroughs • GEMCOS Format Generator	gen GEMCOS TCL format					●									
8	Burroughs • NDL (Net Def Lang)	comm network custom					●									NCR VRX
9	CECORP • CELINK	online file transfer														
10	Cincom Sys • NET/MASTER	network mgmt sys		●	●											
11	Cincom Sys • PC CONTACT	micro-to-mainframe link	●	●	●											PC-DOS
12	Clyde Digital • CALOUT	loc/rem comm inter						●								
13	Communications Diagnostic • Line Act Rec	diag tuning aid	●	●	●											
14	Communications Research • BLAST	file transfer utility	●	●	●		●	●	●	●	●	●	●	●	●	
15	Computer Automation • Async Comm	asynchronous comm														SyCLOPS
16	Consolidated Software • V/OLTDS	online network control														NCR VRX
17	CONTEL Info • GRINDER	network planning						●								
18	CONTEL Info • MIND	network planning	●	●	●			●								
19	CONTEL Info • MIND-VOICE	phone traffic analyzer						●								
20	CONTEL Info • NET-TRAK	network mgr						●								
21	COSMIC • STACOM	network evaluator									●					
22	Data General • CAM 1	loc/rem com mgr								●						
23	Data General • DG/SDLC	comm protocol								●						
24	Data General • DG/SNA	comm support								●						
25	DEC • DECnet	DNA net builder						●								
26	DEC • DECnet-VAX	DNA net builder							●							
27	DEC • DECnet-10 Network Software	comm interface							●							
28	DEC • DECnet-20 Network Software	comm interface							●							
29	DEC • MCS-10	message controller						●								
30	DEC • VAX-11 PSI	packetnet sys interface							●							
31	Digital Management Grp • DMG/NET	interactive network						●	●							
32	Digital Research • CP/NET	network mgr														CP/M & MP/M
33	ESI • MICROPULSE	micro-to-mainframe link						●								
34	Evans, Griffiths & Hart • BSC/DV	BSC driver							●							
35	Evans, Griffiths & Hart • COLINK	comm interface							●							
36	Evans, Griffiths & Hart • DIALUP	remote interface						●								
37	Gould S.E.L. • ACX-32	networking/minicomp														S.E.L. MPX-32
38	Gould S.E.L. • ICS-32	networking/minicomp														S.E.L. MPX-32
39	Gould S.E.L. • SELNET/32	distributed environ														S.E.L. MPX-32
40	Hewlett-Packard • Distrib Sys/1000-IV	network facilities									●					
41	Hewlett-Packard • DS/3000	network contrl mgr									●					
42	Hewlett-Packard • MTS/3000	multipoint term									●					
43	Honeywell • Application Intfce Fac	program development										●				
44	Honeywell • Basic Network Serv	basic comm mgr										●				
45	Honeywell • Dist Net Supervisor	network mgr										●				
46	Honeywell • IBM SNA Support	sw fac oper IBM/SNA											●			
47	Honeywell • LHDLC	comm mgr											●			
48	Honeywell • Network Control	mgs/ctls complex net										●				
49	Honeywell • Network Operator (NOI)	operator to node										●				
50	Honeywell • Network Process Supervisor	gen interfacing										●				

Communications & Networking
Network Design & Management

#	COMPANY ● PRODUCT	TYPE	IBM DOS/VS-Based	IBM OS/VS1 & SVS	IBM MVS-Based & VM	IBM Small Systems	Burroughs MCP Systems	DEC PDP-11 Systems	DEC VAX/VMS	Data General Systems	Hewlett-Packard MPE/RTE	Honeywell GCOS 6/7/8	Sperry Corp 1100 OS	MOD 200/400/600	Wang VS/DOS	OTHER COMPUTERS	#
1	Honeywell ● Node Administrator	network mgr	—	—	—	—	—	—	—	—	—	●	—	—	—		1
2	Honeywell ● Remote Batch Fac	term operator control	—	—	—	—	—	—	—	—	—	●	—	—	—		2
3	Honeywell ● Remote Batch Fac II	remote con	—	—	—	—	—	—	—	—	—	●	—	—	—		3
4	Honeywell ● Remote Concen Fac	term concentration	—	—	—	—	—	—	—	—	—	●	—	—	—		4
5	Honeywell ● Remote File Fac	file trans manager	—	—	—	—	—	—	—	—	—	●	—	—	—		5
6	Honeywell ● RNP/6	remote job entry	—	—	—	—	—	—	—	—	—	●	—	—	—		6
7	Honeywell ● Remote Term Super II	gen interface	—	—	—	—	—	—	—	—	—	●	—	—	—		7
8	IBM S/370 ● MVS Info Dist	6670 interface	—	—	●	—	—	—	—	—	—	—	—	—	—		8
9	IBM S/370 ● Network Comm Control Fac	comm support fac	●	●	●	—	—	—	—	—	—	—	—	—	—		9
10	IBM S/370 ● Network Control Prog	network control	●	●	●	—	—	—	—	—	—	—	—	—	—		10
11	IBM S/370 ● Network Job Entry	network job entry	—	—	●	—	—	—	—	—	—	—	—	—	—		11
12	IBM S/370 ● NOSP DOS/VS OS/VS	network support	●	●	●	—	—	—	—	—	—	—	—	—	—		12
13	IBM S/370 ● NPDA R1 & R2	comm network	●	●	●	—	—	—	—	—	—	—	—	—	—		13
14	IBM S/370 ● NTO R2	SNA interface	●	●	●	—	—	—	—	—	—	—	—	—	—		14
15	IBM S/370 ● SSP/ACF/NCP VS R.2.1	network comm	●	●	●	—	—	—	—	—	—	—	—	—	—		15
16	IBM S/370 ● VTAM Entry (ACF/VTAME)	network comm	●	—	—	—	—	—	—	—	—	—	—	—	—		16
17	IBM S/1 ● CPS Auto-Call	phone support	—	—	—	●	—	—	—	—	—	—	—	—	—		17
18	IBM S/1 ● HUDACS	support S/1 distrib sys	—	—	—	●	—	—	—	—	—	—	—	—	—		18
19	IBM S/1 ● RPS Mult Term Mgr V.3	loc net mgr	—	—	—	●	—	—	—	—	—	—	—	—	—		19
20	IBM S/1 ● RPS S/370 Channel Attach	communications mgr	—	—	—	●	—	—	—	—	—	—	—	—	—		20
21	IBM S/1 ● RPS Prog Comm Sub-Prep	comm macro library	—	—	—	●	—	—	—	—	—	—	—	—	—		21
22	IBM S/1 ● RPS SNA Extended Support	SNA utility	—	—	—	●	—	—	—	—	—	—	—	—	—		22
23	IBM S/1 ● SNA Extended Supp	SNA utility	—	—	—	●	—	—	—	—	—	—	—	—	—		23
24	Information Intelligence ● A-C-C-E-S-S	network/comm/bultn-brd	—	—	—	—	—	—	—	—	—	—	—	—	—	Apple ROM	24
25	Interactive Systems ● INNET	interactive network	—	—	—	—	—	—	●	—	—	—	—	—	—		25
26	Interactive Systems ● INtelex	interactive TELEX	—	—	—	—	—	—	●	—	—	—	—	—	—		26
27	Joiner Associates ● jnet	networking sw	—	—	—	●	—	—	●	—	—	—	—	—	—		27
28	Masstor Systems ● MASSNET	gen network sw/hw	—	—	●	—	—	●	—	—	—	—	●	—	—		28
29	Mathematics Prod Group ● RAMLink	mainframe/micro link	●	●	●	—	—	—	—	—	—	—	—	—	—	req RAMIS II	29
30	Micro Tempus ● TEMPUS-LINK	micro-to-mainfrm link	●	●	●	—	—	—	—	—	—	—	—	—	—		30
31	National Info Sys ● TELEPORT	micro/mainfrm connect	—	—	—	—	●	—	—	—	—	—	—	—	—		31
32	NCR/Comten ● Advanced Comm Func	network control	●	●	●	—	—	—	—	—	—	—	—	—	—		32
33	NCR/Comten ● AMS (Auto Message Switch)	message/trans switch	—	●	●	—	—	—	—	—	—	—	—	—	—		33
34	NCR/Comten ● Link Eval Model	BSC & SDLC link perf	●	●	—	—	—	—	—	—	—	—	—	—	—		34
35	NCR/Comten ● MAF/RHO	communications ext	●	●	●	—	—	—	—	—	—	—	—	—	—	327X BSC-type	35
36	NCR/Comten ● Measurement Tech	IBM 3705-II comm cont	●	●	●	—	—	—	—	—	—	—	—	—	—		36
37	NCR/Comten ● Multiple Access Fac 3	host access enhance	●	●	●	—	—	—	—	—	—	—	—	—	—		37
38	NCR/Comten ● Network Cntrl Prog	control Comten/IBM	●	—	—	—	—	—	—	—	—	—	—	—	—	NCR 3600	38
39	NCR/Comten ● 3600 System Control	comm/network control	●	●	●	—	—	—	—	—	—	—	—	—	—	NCR CODEL	39
40	NCR/Comten ● Telecomm Software	online support	—	—	—	—	—	—	—	—	—	—	—	—	—	NCR VRX	40
41	On-Line Software Int'l ● OMNILINK	message manag enhance	●	●	●	—	—	—	—	—	—	—	—	—	—		41
42	Oxford Software ● pcMAINFRAME	micro-to-mainframe link	●	●	●	—	—	—	—	—	—	—	—	—	—		42
43	P.M. SULCS & Assoc ● Telex Com Interface	Telex network connect	—	—	—	—	—	—	—	—	—	—	—	●	—		43
44	Perkin-Elmer ● PENNET PLUS	network support	—	—	—	—	—	—	—	—	—	—	—	—	—	PE OS/32	44
45	Perkin-Elmer ● ZDLC Chan Term	bit-oriented comm	—	—	—	—	—	—	—	—	—	—	—	—	—	PE OS/32	45
46	Prime ● DPTX	network const aid	—	—	—	—	—	—	—	—	—	—	—	—	—	Prime PRIMOS	46
47	Prime ● DPTX/DSC	Prime 3271 sharing	—	—	—	—	—	—	—	—	—	—	—	—	—	Prime PRIMOS	47
48	Prime ● DPTX/TCF	term network mgr	—	—	—	—	—	—	—	—	—	—	—	—	—	Prime PRIMOS	48
49	Prime ● DPTX/TSF	Prime 3271 bridge	—	—	—	—	—	—	—	—	—	—	—	—	—	Prime PRIMOS	49
50	Prime ● File Transfer Service	network mgt sys	—	—	—	—	—	—	—	—	—	—	—	—	—	Prime PRIMOS	50

Communications & Networking
Network Design & Management

COMPANY • PRODUCT	TYPE	IBM DOS/VS-Based	IBM OS/VS1 & SVS	IBM MVS-Based & VM	IBM Small Systems	Burroughs MCP Systems	DEC PDP-11 Systems	DEC VAX/VMS	Data General Systems	Hewlett-Packard MPE/RTE	Honeywell GCOS 6/7/8	Sperry Corp MOD 200/400/600	Wang VS/DOS	OTHER COMPUTERS	
1 Prime • Packet Network Interface	X.25 comm supp	—	—	—	—									Prime PRIMOS	1
2 Prime • Primenet	network comm mgr	—	—	—	—									Prime PRIMOS	2
3 Prime • Primenet with Packet Network Int	X.25 comm supp DNF	—	—	—	—									Prime PRIMOS	3
4 Software AG of Nrth Am • NATURAL/CONN	micro-to-mainframe link	•	•	•	—									IBM PC-DOS, MS-DOS	4
5 Sperry Corp • CMS	comm interface	—	—	—	—							•			5
6 Sperry Corp • OPTIMA 1100	network planning	—	—	—	—							•			6
7 Sperry Corp • TELCON	comm network	—	—	—	—							•			7
8 Sterling Software Mktg • TRACS	teleprocess appl pkg	•	•	•	—									req BTAM	8
9 Stonehouse & Company • MONIES	online telecomm mgmt	•	•	•	—										9
10 SYSTAR Corp • GATEWAY 34/38	front-end term net con	—	—	—	—									SYSTAR CMX	10
11 SYSTAR Corp • GATEWAY/370	front-end comm pkg	—	—	—	—									SYSTAR CMX	11
12 SYSTAR Corp • LODESTAR 34/36/38	comm front-end fac	—	—	—	—									SYSTAR CMX	12
13 Tandem Computer • ENVOY	trans proc interface	—	—	—	—									Tandem GUARDIAN	13
14 Tandem Computer • Expand TI6/90X7	oper sys networking	—	—	—	—									Tandem GUARDIAN	14
15 Texas Instruments • DNCS	network comm mgr	—	—	—	—									TI 990; DNOS	15
16 Transaction Data • PNF packet	task-task interface	—	—	—	—									PE OS/32	16
17 Triangle Software • NetCheck	CICS network mgr	•	•	•	—										17
18 Unique Automation Products • UAP-LINK	file transfer	—	•	•	—	•	•							UNIX	18
19 XI Systems Technology • DSNM	main-mini-micro link	•	—	•	—									PC-DOS	19

■ APPLIED INFORMATION SYSTEMS, INC

500 Eastowne Drive, Suite 207, Chapel Hill, NC 27514 • 919-942-7801.

☐ BURCOM

Type • DEC-Burroughs communications interface.

Host Software Environment • DEC RSX-11M/11S (mapped or unmapped), IAS, RSTS/E, VMS, Micro-RSX, or POS operating system.

Host Hardware Environment • Burroughs mainframe with DEC PDP-11 computers or several DEC PDP-11 computers; can be used with dial-up or leased lines; supports DEC DU11, DP11, and DUP11 synchronous interface and the DN11 auto-dial interface hardware; also supports DEC VAX, Micro-11, or Professional 300 Series computers.

Installation Data • first installed 1976 • 15 current users (60 installations) • international distribution.

Description • supports compatible asynchronous and synchronous communications among host computers; based on standard Burroughs communications techniques and correspondingly intact Burroughs software; identified as a device handler under RSTS/E and as a privileged communications task under RSX; does not require KG11 Arithmetic Unit; written in MACRO-11.

Pricing & Support • $695 to $5,000 license purchase price range includes source code; quantity discounts available • offered with 90-day warranty and hot-line maintenance service • contact vendor for leasing and maintenance rates.

■ BURROUGHS CORPORATION

Burroughs Place, Detroit, MI 48232 • 313-972-7000.

☐ **Burroughs Network Services (BNS)**

Type • BNA (Burroughs Network Architecture) interface software.

Host Software Environment • Burroughs MCP II, VI, or IX (Native Mode Master Control Program) or CMS-MCP (Computer Management System-Master Control Program).

Host Hardware Environment • Burroughs B 1900, B 2900, B 3900/4900, B 5900, B 6900, or B 7800/7900 systems.

Installation Data • first installed 1981 • unknown number of users • worldwide distribution through Burroughs sales/service offices.

Description • the basic software package for interfacing Burroughs communications hardware to BNA networks • provides support for network initialization, host validation, and system monitoring • supports intercommunications between link control programs and routing control programs; user-to-user interfacing is also supported.

Pricing & Support • available only on a monthly license basis that includes updates and new releases; monthly fees are $110 for B 1900; $220 for B 2900/B 3900/B 4900/B 5900; $330 for B 6900; and $550 for B 7900.

☐ **CP 3600 Data Communications Software (DCS)**

Type • online network generator.

Host Software Environment • Burroughs MCP VI or IX (Native Mode Master Control Program).

Host Hardware Environment • Burroughs B 2900, B 3900, and B 4900 system.

Installation Data • first installed 1980 • unknown number of users • worldwide distribution through Burroughs sales/service offices.

Description • online network design through formatted entry of parameters for line, station, and program identification; manages networks through online network control transactions; inquiry facility monitors specific network activities through capture of on-line/off-line network statistics • resident message control system provides functions for generating message control through formatted parameter data entry; system supports 5-level security,

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dynamic message routing, online forms generation, and handles up to 4 hosts ● a Remote Diagnostic Facility monitors and diagnoses system problems and can be run while system is running normal operations ● the Power Fail Recovery feature maintains system status and integrity during external power failure.

Special Features ● this package is a prerequisite for CP 3600 program development through the CP 3600 Standard Communication Software (SCS) system; CP 3600 SCS runs on a CP 3680-1 Standby System which supports duplicate CP 3600 DCS operations when a redundant system is being used.

Pricing & Support ● $9,500 (DCS) one-time unlimited license fee for B 2900 and B 3900, or $12,650 for B 4900; monthly license fee for the B 2900 and B 3900 is $317, or $422 for B 4900; also available on an unlimited annual license for $1,805 B 2900/B 3900 and $2,404 for B 4900.

☐ DCP Program Generator & Network Definition Language (NDL)

Type ● communications network customizer for medium-sized systems.

Host Software Environment ● Burroughs MCP VI or IX (Native Mode Master Control Program).

Host Hardware Environment ● Burroughs B 2900, B 3900, and B 4900 systems with a B 874 or CP 3680 Front End Processor.

Installation Data ● first installed 1980 ● unknown number of users ● worldwide distribution through Burroughs sales/service offices.

Description ● converts NDL source statements into generated tables and object code that then supports line discipline, buffer management, message queueing, and audit; supervises flow of messages between user programs and remote stations; used to specify rules and procedures that make up a data communications environment enabling a variety of remote terminals to function in a computer-to-terminal network ● supports programs written in COBOL or RPG; NDL statements can be incorporated in applications programs to handle communication devices just like conventional peripherals ● this package eliminates the need for application programs to be designed to fit specific types of communications lines or terminals, providing line and terminal independence ● portions of NDL reside in the CPU and portions reside in the B 874 or CP 3680 Front End Processors ● system automatically generates programs, alterations to parameter tables, and other supporting code.

Special Features ● this package is included in Burroughs System Software Facility (SSF).

Pricing & Support ● $9,500 one-time fee for perpetual license; $912 monthly fee for 12-month payout license; $317 monthly fee for rental license that includes service; $1,045 annual fee for maintenance service ● maintenance service includes updates and new releases.

☐ DCP Program Generator & Network Definition Language II (NDL II)

Type ● communications network customizer for large-scale systems.

Host Software Environment ● Burroughs MCP VI (Native Mode Master Control Program).

Host Hardware Environment ● Burroughs B 5900, B 6900, B 7900 systems with a NSP (Network Support Processor) or LSP (Line Support Processor).

Installation Data ● first installed 1980 ● unknown number of users ● worldwide distribution through Burroughs sales/service offices.

Description ● converts NDL II source statements into generated tables and object code which then supports line discipline, buffer management, message queueing, and audit functions; supervises flow of messages between user programs and remote stations; used to specify rules and procedures that make up data communications environment enabling a variety of remote terminals to function in a computer-to-terminal network ● supports programs written in COBOL or RPG; NDL statements can be incorporated in these programs and can handle communication devices just like conventional peripherals ● this package elimi-

nates the need for application programs to be designed to fit specific types of communication lines or terminals, allowing line and terminal independence ● operates with Burroughs front-end and communication processors and with foreign, as well as Burroughs, terminals; system resides in CPU or NSP; automatically generates programs, alterations to parameter tables and other NSP/LSP supporting code.

Pricing & Support ● this package is included as a standard feature in Burroughs System Software Facility (SSF).

☐ GEMCOS (Generalized Message Control System)

Type ● parameter-driven message control system.

Host Software Environment ● Burroughs MCP VI or IX (Native Mode Master Control Program); supports BPL (Burroughs Programming Language) or DCALGOL (for B 5900, B 6900, and B 7800), COBOL, and NDL (Network Definition Language).

Host Hardware Environment ● Burroughs B 1900 through B 7900 Series with a minimum of 24K bytes of memory for message control program generation and 7K bytes for message control program execution (memory requirements vary widely depending on processing environment); also requires minimum of 918K bytes of disk storage, and a B 874 Systems and Communications Processor, a CP 3680 High-Performance Data Communications System (for B 2900, B 3900, and B 4900), or a Network Support Processor (NSP) or Line Support Processor (LSP) (for B 5900, B 6900, B 7900).

Installation Data ● first installed 1981 ● unknown number of users ● worldwide distribution through Burroughs sales/service offices.

Description ● the Basic GEMCOS package is a parameter-driven system that uses the TCL transaction command language to generate tailored message control programs; provides link or interface between data communications network and user application programs ● message control program works with controllers to provide overall control of the data communications system, allowing application programs to be designed independent of the network environment ● handles dynamic restoration of network configuration to last running state; password security to limit network access; dynamic runtime network interaction and modification using network control commands; incorporates audit mechanism to log messages; a message flow monitor; system shutdown; and auxiliary programs to permit off-line simulation.

Special Features ● there are 2 additional versions of the GEMCOS package: Advanced and Total ● Advanced GEMCOS includes all of the capabilities of Basic GEMCOS as well as: message paging and administrative message switching; retransmission of output upon request; message output reformatting; and support for a format generator option; requires 32K bytes more of main memory storage and 180K bytes of disk storage ● Total GEMCOS includes all of the capabilities of Advanced GEMCOS plus dynamic volume control, multiple execution of the same code for separate transactions/multiple processors; and provides additional recovery techniques; requires 10K bytes more disk storage than the Advanced Version ● all versions for B 2900 and above can be included as part of Burroughs Software Facilities Package.

Pricing & Support ● all prices reflect cost applicable to basic, advanced, and total versions respectively; unlimited time plan for B 1900 is $8,012, $10,015, $12,018; annual unlimited time plan for B 1900 is $1,523, $1,903, $2,384; limited monthly license fee for B 1900 is $288, $359, $431; unlimited time plan for B 2900/3900/4900 is $8,091, $14,157, $18,202; annual unlimited time plan for B 2900/3900/4900 is $1,538, $2,691, $3,459; limited monthly license fee for B 2900/3900/4900 is $290, $506, $651; unlimited time plan for B 5900/6900/7900 is $13,687, $22,758, $27,307; annual unlimited time plan for B 5900/6900/7900 is $2,601, $4,325, $5,189; limited monthly license fee for B 5900/6900/7900 is $490, $813, $976.

☐ GEMCOS Format Generator

Type ● generates GEMCOS TCL format descriptions.

Host Software Environment ● Burroughs MCP II or VI (Native Mode Master Control Program) or CMS-MCP (Computer Management System-Master Control Program) and Advanced or Total GEMCOS Release 4.0 and above.

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Host Hardware Environment ● Burroughs B 1900 through B 7900 Series with 95K bytes of disk storage needed for the Format Generator object code, plus 50K bytes for each user.

Installation Data ● first installed 1981 ● unknown number of users ● worldwide distribution through Burroughs sales/service offices.

Description ● automatically generates TCL format description for GEMCOS (MCS or MCT) from screen layouts ● includes capabilities for compilation testing and multiple user sessions.

Pricing & Support ● $4,582 (B 1900); $3,249 (B 2900, B 3900, and B 4900); $5,236 (B 5900, B 6900, and B 7900); one-time fee for perpetual license ● $440 (B 1900); $312 (B 2900, B 3900, and B 4900); $503 (B 5900, B 6900, and B 7900) monthly fee on a 12-month payout purchase plan ● $164 (B 1900); $117 (B 2900, B 3900, and B 4900); $187 (B 5900, B 6900, and B 7900) monthly fee for 3-year term license that includes service ● $872 (B 1900), $358 (B 2900, B 3900, and B 4900), $996 (B 5900, B 6900, and B 7900) yearly fee for software which includes service and is in addition to perpetual license fee ● service includes updates and new releases.

☐ **Network Definition Language (NDL)**

Type ● communications network customization language for small systems.

Host Software Environment ● Burroughs MCP II (Native Mode Master Control Program) or CMS-MCP (Computer Management System-Master Control Program).

Host Hardware Environment ● Burroughs B 1900 and smaller systems.

Installation Data ● first installed 1980 ● unknown number of users ● worldwide distribution through Burroughs sales/service offices.

Description ● converts NDL source statements into generated tables and object code that then supports line discipline, buffer management, message queueing, and audit functions; supervises flow of messages between user programs and remote stations; used to specify rules and procedures that make up data communications environment enabling a variety of remote terminals to function in a computer-to-terminal network ● supports programs written in COBOL, RPG, or UPL (User Programming Language); NDL statements can be incorporated in these programs and can handle communication devices just like conventional peripherals ● this package eliminates the need for application programs to be designed to fit specific types of communications lines or terminals, allowing line and terminal independence ● NDL functions are incorporated in DCP Program Generator systems for larger computers (please see referenced profiles in this section).

Special Features ● this package is included with Burroughs TCS (Transaction Control Systems) under MCP.

Pricing & Support ● $52 monthly fee for 3-year limited term license that includes service ● maintenance service includes updates and new releases.

■ **CECORP**

3189-E Airway Avenue, Costa Mesa, CA 92626 ● 714-754-0521.

☐ **CELINK**

Type ● online mainframe/micro file transfer system.

Host Software Environment ● NCR VRX, B-Series.

Host Hardware Environment ● NCR V Series and B-Series systems.

Installation Data ● first installed 1983 ● over 15 currrent users ● international distribution.

Description ● a mainframe-to-microcomputer file transfer system; CELINK allows data files to be selectively transferred between NCR mainframes and the more popular microcomputers; transfer is bidirectional, and is capable of transferring ASCII data files or any combination of hexadecimal or object code files ● file transfer requests are initiated by the microcomputer user in response to prompts requesting type of transfer to be accomplished, file name to be transferred, and the name of the new file; once transfer is complete, the system will allow for transfer of additional files, or

for exiting back to the microcomputer operating system; CELINK contains transfer validation function for data integrity.

Special Features ● NCR 301 terminal emulation feature available for a purchase price of $495.·

Pricing & Support ● first-year license agreement fee is $2,500; includes maintenance, updates, and documentation; and $500 annually for subsequent years' renewals.

■ **CINCOM SYSTEMS, INC**

2300 Montana Avenue, Cincinnati, OH 45211 ● 513-662-2300.

☐ **NET/MASTER**

Type ● network management system.

Host Software Environment ● MVS, MVS/XA, OS/VS1; requires VTAM.

Host Hardware Environment ● any IBM System/370-class mainframe.

Installation Data ● new product in 1984.

Description ● designed for use with very large network configurations; sits atop the communications environment; all terminals in the network can be placed under control of NET/MASTER; operates independently of installed DBMSs and/or TP monitors, but can be in control of commands issued from them ● a separate copy of NET/MASTER is required for each computer in the network; compaction algorithms make it possible to transmit at least 16 files in both directions without any interference problem ● the Network Control Language is an interpretive language which can be executed in the "background" to monitor system functions and to develop screen panels; other user services include the Files Transmission Service (FTS) which is invoked to handle inter-NET/MASTER connections; EASINET, which provides access for all terminals to existing applications; a Multiple Application Interface (MAI) which allows the user to perform multiple application access, and also provides for multiple users to access a single application ● the Operator Command System (OCS) contains the network commands (which are similar to VTAM commands); it gives the operator the ability to log on to any subsystem in the network, including CICS/VS, IMS DB/DC, TSO, ROSCOE, etc; Remote Operations Facilities (ROF) tie into the inter-NET/MASTER connection capabilities to provide intercommunications facilities ● NET/MASTER comes with a network error warning system and a direct interface into SNA control units to gather statistics for analysis; the Network Partitioning Facility partitions the network into discreet operating units; a multiple path operations facility also exists.

Pricing & Support ● pricing is based on the size and configuration of the host IBM system; the single-use charge for a 30XX system (excluding the 3031) is $20,000 for the Network Management or Network Integration components, and $30,000 for the Distributed Processing System; the charges for the 4341/4381/3031 and System/370 Models 145 and larger are $15,000, $15,000, and $20,000, respectively; and the cost for the same components on the 4331 and 4361 is $10,000, $10,000, and $20,000, respectively ● there is a variable annual renewal rate that applies, a one-year license charge, and an installation charge of $3,000 for the Network Management component and $1,500 for the other modules; lease plans are available.

☐ **PC CONTACT**

Type ● micro-to-mainframe link.

Host Software Environment ● IBM MVS, DOS/VS(E), VS1, VM, and PC-DOS 2.0.

Host Hardware Environment ● any IBM System/370-class mainframe and compatible computers, as well as IBM PCs.

Installation Data ● new product in 1984.

Description ● a micro-to-mainframe link that allows communication between an IBM mainframe and an IBM PC; this link is an integrated package that provides the following features: does not require extract files, uses existing accounting and security systems on mainframe, supports DIF and ASCII formats, emulates 3270, and allows active mixing of mainframe and PC data.

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Pricing & Support ● license purchase price for the mainframe ranges from $10,000 to $30,000, and $500 for the PC version ● maintenance is provided at a charge of 15% of the then-current purchase price.

■ CLYDE DIGITAL SYSTEMS

3707 North Canyon Road, Building 3, Provo, UT 84604 ● 801-224-5306.

☐ CALOUT

Type ● local-remote communications interface for DEC systems.

Host Software Environment ● DEC RSTS/E or VMS-11 operating system; supports BASIC PLUS and BASIC PLUS-II.

Host Hardware Environment ● any DECsystem using TWX/TELEX; requires auto-dial modem at local site and 56K bytes of memory.

Installation Data ● first installed 1983 ● over 1,500 current users.

Description ● provides a simple communications link between local and remote DEC computers running under RSTS/E or VMS-11; supports local terminal-to-remote computer simplex connection and disk-to-disk linkage in half-duplex mode through TWX/TELEX facilities of Western Union.

Pricing & Support ● license available purchase only for $1,500 ● price includes documentation and telephone installation service.

■ COMMUNICATIONS DIAGNOSTIC SYSTEMS, INC

P.O. Box 706, Falls Church, VA 22046 ● 703-533-0483.

☐ Line Activity Recorder

Type ● diagnostic and performance tuning aid for IBM data communications links.

Host Software Environment ● IBM OS/VS operating system; interfaces with TSO/TCAM, CICS/BTAM, HASP, and JES.

Host Hardware Environment ● IBM System/370, 3000, 4300, and all compatible computers; handles 270X- and 3705-based communications links.

Installation Data ● first installed 1975 ● 25 current users.

Description ● offers user-friendly data and command interpretation, spooling to tape or disk, and selective format/print control of captured data; accommodates all standard BSC and asynchronous codes.

Pricing & Support ● contact vendor for price ● source code and training available.

■ COMMUNICATIONS RESEARCH GROUP, INC

8939 Jefferson Highway, Baton Rouge, LA 70898 ● 504-923-0888.

☐ BLAST (BLocked ASynchronous Transmission)

Type ● computer-to-computer file transfer utility.

Host Software Environment ● operating systems of most popular mainframes, minicomputers, and microcomputers.

Host Hardware Environment ● IBM System/370-class mainframes and compatible computers, as well as many other popular mainframes, minicomputers, and microcomputers.

Installation Data ● first installed 1980 ● over 1,000 licensees, many of whom have OEM and product distribution rights ● international distribution.

Description ● BLAST can be installed on almost any mainframe, minicomputer, or microcomputer with their associated operating systems to handle computer-to-computer communications; data transfers are made between asynchronous hardware devices using direct connect or standard dial-up telephones, satellite links, packet-switched networks, and other linkages ● BLAST's full-duplex asynchronous protocol provides for log-on confirmation via user-specified interfaces at rates up to 19,200 baud; any computer with BLAST can initiate the link and transfer binary data, text data, or commands to remote systems, even if unattended ● BLAST's continuous sliding window protocol uses a selective retransmission technique to resend just the blocks of data in error; the system

provides CRC checking of data and acknowledgement block with automatic retransmission and restart capabilities; text files will be converted to the format of the receiving computer for direct disk-to-disk transfers; an activity log is generated containing all error messages, console commands, and files transmitted; checkpoints, orderly halt, and restart provisions are included ● user-friendly menu selection of options are available to make the PC look like a terminal, dial the telephone number of the host, and/or commence file transfers.

Special Features ● BLASTBOX firmware for mainframes with half-duplex communications is used to convert messages to/from BLAST's full-duplex protocol; one BLASTBOX Line Adapter can be used for any asynchronous port ● parameters specified in a user configuration file can be used to replace the permanent BLAST default configuration upon each initialization of the program; full multitasking versions are available for mainframe users ● BLAST's design adheres to the OSI reference model requirements for distinct logical and structural software layers.

Pricing & Support ● single license fee per mainframe and per superminicomputer is $1,295 and upward; per minicomputer the fee ranges from $495 to $895; per microcomputer it is $250 ● all licenses include documentation and hot-line telephone support during normal business day ● quantity discount rates are available from vendor as well as information or source code availability.

■ COMPUTER AUTOMATION

2181 Dupont Drive, Irvine, CA 92713 ● 714-833-8830.

☐ Async Communications

Type ● Computer Automation RS-232C asynchronous communications link.

Host Software Environment ● Computer Automation SyCLOPS (SyFA Concurrent Logic Operating System).

Host Hardware Environment ● Computer Automation SyFA 200/300/1000/2000 packaged system.

Installation Data ● first installed 1975 ● unknown number of users ● worldwide distribution through direct company sales and service offices.

Description ● provides communications link that supports the transfer of programs and data files between a SyFA system and a wide range of terminals; also supports online communications between SyFA systems in the same network.

Pricing & Support ● price is bundled into cost of hardware system.

■ CONSOLIDATED SOFTWARE SYSTEMS, INC

780 East Congress Park Drive, Dayton, OH 45459 ● 513-433-1999.

☐ V/OLTDS (Virtual Online Transaction Distributor System)

Type ● online network control and message routing.

Host Software Environment ● NCR VRX (Virtual Resource Executive).

Host Hardware Environment ● NCR V8500 and V8600 family.

Installation Data ● first installed in 1981 ● 32 current users ● international distribution.

Description ● a VRX-based communication system that controls the online network; system includes message broadcasting and digital network control; V/OLTDS allows the mainframe to be used as a terminal message distribution system, permitting terminals to access multiple applications resident in the same mainframe or in a remote system; V/OLTDS system may be used as a front-end or for processor-to-processor communication.

Special Features ● optional modules available includes ATM (automatic teller machine), Status Module, and AMPS (Automated Monetary Processing System).

Pricing & Support ● license purchase price is $40,000 to $80,000, based on the number of terminals, and includes training and documentation ● lease and rental plans are available from vendor upon request.

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■ CONTEL INFORMATION SYSTEMS

130 Steamboat Road, Great Neck, NY 11024 ● 516-829-5900.

☐ GRINDER (GRaphical Interactive Network DesignER)

Type ● a graphics-based packet-switched network design tool.

Host Software Environment ● DEC TOPS-20 operating system.

Host Hardware Environment ● any DECsystem 20.

Installation Data ● first installed 1975 ● 5 current users.

Description ● full graphic features can be exploited on a Tektronix graphics terminal; package consists of 9 functional modules and a database for retention of all the user's network definitions; the total package provides exceptionally strong and very user-friendly facilities for network design and management, ranging from the capability to evaluate minimum paths for all node pairs to large-network satellite channel modeling.

Pricing & Support ● license available either purchase or annual lease; prices from vendor upon request.

☐ MIND (Modular Interactive Network Designer)

Type ● multipoint data network planning tool.

Host Software Environment ● any IBM System/370-class or TOPS-20 operating system that supports FORTRAN.

Host Hardware Environment ● IBM System/370, 3000, 4300, and compatible computers; DECsystem 20.

Installation Data ● first installed 1975 ● over 800 users.

Description ● a comprehensive program that supports both initial network design and downstream changes to an existing network; basic package consists of a database facility and an editor; the database is constructed interactively, with substantial prompting, by the user to form a network model; the components of the model can then be varied by the editor within the range of the available resources to develop a practicable network configuration; an auxiliary aid supports least-cost topological optimization relative to a host-resident tariff database, and another auxiliary module supports multipoint modeling with variable parametric controls to analyze system sensitivity.

Pricing & Support ● $50,000 license purchase price on client-machine basis; $25,000 purchase price on timeshare basis from another computer ● no charge first-year maintenance; $5,500 annual maintenance after first year on client machine ● annual lease also available for $9,000; includes maintenance.

☐ MIND-VOICE

Type ● telephone traffic analyzer/optimizer for single-site DEC operations.

Host Software Environment ● any DEC operating system; written in FORTRAN.

Host Hardware Environment ● any DEC computer.

Installation Data ● first installed 1976 ● 15 current users.

Description ● analyzes and optimizes configurations of WATS FX tie-line and OCC facilities according to cost and usage criteria; a subordinate design subsystem supports and analyzes new configuration models according to real cost/usage data and permits the user to derive improved working configurations.

Pricing & Support ● license available purchase only; prices from vendor upon request.

☐ NET-TRAK

Type ● network management system for DEC users.

Host Software Environment ● any DEC operating system; written in FORTRAN.

Host Hardware Environment ● any DEC computer.

Installation Data ● first installed 1975 ● 10 current users.

Description ● telecommunications management/accounting package built around an inventory of intra- and interstate tariffs

combined with customer-provided billing and network configuration data; the tariffs and data are manipulated to provide pricing, optimization, and statistical reports relative to real and modeled network usage; 15 standard reports are provided in immediate or deferred-batch modes, and additional report formats can be developed by the user.

Pricing & Support ● license available purchase only for $15,000 ● no charge first-year maintenance; $2,000 annual maintenance after first year.

■ COSMIC (COMPUTER SOFTWARE MANAGEMENT & INFORMATION CENTER) OF THE UNIVERSITY OF GEORGIA

Suite 112, Barrow Hall, Athens, GA 30602 ● 404-542-3265.

The University of Georgia's COSMIC facility is a clearing house for a current repertoire of over 1,350 NASA-developed programs that have been transferred into the public domain. The repertoire is steadily growing and contains a large number of inexpensive, general-purpose programs usable in industrial/business applications. The following example illustrates communications-oriented package selected to demonstrate the quality of COSMIC software. We recommend that you contact COSMIC directly for a complete listing of available software packages, many of which may provide substantial savings over comparable commercially developed packages.

☐ STACOM (STAte Criminal Justice COMmunication)

Type ● Sperry-based communications network evaluator.

Host Software Environment ● Sperry EXEC 8; accommodates FORTRAN IV; system must also support reentrant subroutines.

Host Hardware Environment ● any Sperry 1108 computer; requires a CALCOMP plotting system.

Installation Data ● first installed 1977 ● 8 current users.

Description ● provides support for designing an optimal network with the lowest operating cost ● utilizes a modified Easu-Williams technique to search for direct links between system terminations and a Regional Switching Center (RSC) that can be eliminated to reduce operating cost without impairing system performance; input data includes traffic data, terminal locations, and functional requirements; output includes data such as initial regional network and optimized network costs and assignments of system termination; optional plotted output shows the geographical connections of the optimized network detailing multipoint line connections to all system terminations.

Pricing & Support ● license available purchase only for $510; $23.50 additional charge for documentation ● COSMIC catalog number for STACOM is NPO-14486.

■ DATA GENERAL

4400 Computer Drive, Westboro, MA 01581 ● 617-366-8911.

☐ Data General CAM I (Communication Access Manager)

Type ● communication manager for local/remote, asynchronous/synchronous lines.

Host Software Environment ● Data General RDOS (Real-time Disk Operating System), DOS (Disk Operating System), or RTOS (Real-Time Operating System).

Host Hardware Environment ● Data General Eclipse (16-bit) processor with 64K bytes of memory, real-time clock, and multiplexer or Data Control Unit ● Data General Nova processor with 32K bytes of memory, real-time clock, and multiplexer ● Data General microNova with 24K bytes of memory, communication subsystem, and real-time clock.

Installation Data ● first installed 1976 ● unknown number of users ● worldwide distribution through direct sales and service offices.

Description ● supports local/remote asynchronous connections; supports synchronous lines with or without modems using IBM bisynchronous protocol and Data Control Unit-managed synchronous/asynchronous lines ● provides full modem support, including auto-answer/disconnect facility and multipoint lines ● tailored to user specifications using Communications System Generation

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program, which specifies line types, character size, control characters, buffer sizes, and line speeds ● 2 versions available.

Pricing & Support ● $600 one-time license fee for Nova and microNova version, no charge for Eclipse version; $300 Comprehensive Software Support (CSS) annual fee or $150 Documentation Software Support (DSS) annual fee (available for Eclipse only) ● CSS is in effect for 90 days following shipment of software; provides assistance with problem diagnosis, identification, and temporary corrections or bypasses if the software is inoperable; includes all DSS provisions; DSS provides updates, additions, corrections, software news, and documentation ● Software Trouble Reporting (STR) is free; STR provides for submitting software difficulties to Data General for resolution ● source listings available for $250 ● documentation available on tape or disk.

☐ Data General DG/SDLC (AOS/VS-AOS)

Type ● basic communications protocol that corresponds to IBM SNA link layer.

Host Software Environment ● Data General AOS/VS (Advanced Operating System/Virtual Storage) or AOS (Advanced Operating System).

Host Hardware Environment ● AOS/VS version: Data General Eclipse (32-bit) system with 1M bytes of memory, 96M bytes of disk storage, Dasher display, Model 4251 communications chassis, Bit Synchronous Interface, and a dedicated Data General Data Control Unit ● AOS version: Data General Eclipse (16-bit) system with 512K bytes of memory, 10M bytes of disk storage, a Dasher display, a Model 4251 communication chassis, a Bit Synchronous Multiplexer, and a dedicated Data General Data Control Unit.

Installation Data ● first installed 1981 ● unknown number of users ● worldwide distribution through direct sales and service offices.

Description ● provides basic communications protocol that corresponds to the IBM SNA link layer; supports multiple SNA processes simultaneously; supports up to 16 end-user-to-end-user sessions, where an end-user can be a person, a device, an application program, or a system software/subsystem ● can be run concurrently with X.25-based XODIAC network management software, providing the ability to connect an SNA network to an X.25 network ● 2 versions available.

Special Features ● this package is a prerequisite for DG/SNA-SNA and SNA/3270 communications software, which provides transmission/data flow/path control and IBM 3270 Display System emulation ● please refer to DG/SNA-SNA and DG SNA-3270 descriptions in this section.

Pricing & Support ● $2,000 (VS), $1,950 (AOS) one-time license fee (both versions); subsequent license fee is $1,500 for either operating system, and $300 Comprehensive Software Support (CSS) annual fee, or $180 Documentation Software Support (DSS) annual fee ● CSS is in effect for 90 days following shipment of software; provides assistance in problem diagnosis, identification, and temporary corrections or bypasses if the software is inoperable; includes all DSS provisions; DSS provides updates, additions, corrections, software news, and documentation ● Software Trouble Reporting (STR) is free; STR provides for submitting software difficulties to Data General for resolution.

☐ DG/SNA (AOS/VS-AOS)

Type ● corresponds to the transmission control, data flow control, and path control layers of IBM SNA.

Host Software Environment ● Data General AOS/VS (Advanced Operating System/Virtual Storage) or AOS (Advanced Operating System); requires DG/SNA-SDLC (basic SNA communications protocol software-link layer).

Host Hardware Environment ● AOS/VS version: Data General Eclipse (32-bit) system with 1M bytes of memory, 96M bytes of disk storage, Dasher display, Model 4251 communications chassis, Bit Synchronous Interface, and a dedicated Data General Data Control Unit ● AOS version: Data General Eclipse (16-bit) system, 512K bytes of memory, 10M bytes of disk storage, a Dasher display, a Model 4251 communications chassis, a Bit Synchronous Multiplexer, and a dedicated Data General Control Unit.

Installation Data ● first installed 1981 ● unknown number of users ● worldwide distribution through direct sales and service offices.

Description ● provides communications support that corresponds to the transmission control, data flow control, and path control layers of SNA; transmission control layer tracks responses to requests and provides session control facilities; it also paces data flow so that recipient is not flooded; data flow control layer controls the direction of data movement; path control layer routes messages to the proper end user ● 2 versions available.

Special Features ● DG/SNA-SDLC software is a prerequisite for this package, and both together are prerequisite for SNA/3270 software ● please refer to DG/SNA-SDLC and DG/SNA-3270 descriptions in this section.

Pricing & Support ● $8,000 one-time license fee (both versions); subsequent license fee is $5,200 for either system, and $900 Comprehensive Software Support (CSS) annual fee, or $180 Documentation Software Support (DSS) annual fee ● CSS is in effect for 90 days following shipment of software; provides assistance in problem diagnosis, identification, and temporary corrections or bypasses if the software is inoperable; includes all DSS provisions; DSS provides updates, additions, corrections, software news, and documentation ● Software Trouble Reporting (STR) is free; STR provides for submitting software difficulties to Data General for resolution.

●■ DIGITAL EQUIPMENT CORPORATION
146 Main Street, Maynard, MA 01754 ● 617-897-5111.

☐ DECnet

Type ● DNA network builder for DEC PDP-11 users.

Host Software Environment ● DEC RT-11 (disk-based single-user operating system); RSTE/E and CTS-500 (multiuser, multitasking operating systems); RSX-11M and RSX-11M-PLUS (multiuser, multiprogramming operating system).

Host Hardware Environment ● DECnet RT-11 version: any PDP-11 with 24K bytes of memory and appropriate communications peripherals ● DECnet/E version: any PDP-11 with 57K bytes of memory ● DECnet-11M version: any PDP-11 with 22K bytes of memory ● DECnet-11M-PLUS version: any PDP-11 with 22K bytes of memory.

Installation Data ● first installed 1976 ● unknown number of users ● distributed through direct company sales and service offices in all major cities.

Description ● provides for user to interconnect systems using serial asynchronous, serial synchronous, and parallel facilities ● Digital Network Architecture is made up of a set of layered network protocols; Digital Data Communications Message Protocol handles the physical link traffic control and physical link error recovery; Network Services Protocol handles network management functions; Data Access Protocol enables programs on one node of the network to use the I/O services available on other network nodes ● features supported include task-to-task communications, inter-system file transfer, command/batch file execution, remote file access, downline system loading, and downline task loading ● supports transmission between nodes using half-/full-duplex, asynchronous/synchronous, parallel/serial facilities ● 4 versions available.

Special Features ● RT-11 version does not support command batch file execution and downline system task loading ● /E version does not support remote file access and downline system/task loading.

Pricing & Support ● $2,000 (RT-11), $4,300 (/E), $6,000 (11M), $6,000 (11M-PLUS) one-time license fee; includes maintenance service ● 90-day warranty is provided, during which time defects are remedied on-site by temporary correction or emergency bypass; ongoing remedial work handled by normal service channels with updating provided for user implementation.

☐ DECnet-VAX

Type ● network builder for DEC VAX users.

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Host Software Environment ● DEC VAX/VMS (multiuser, multi-programming, virtual storage operating system).

Host Hardware Environment ● any DEC VAX-11 packaged system with 512K bytes of memory, synchronous interface, and 1 communication line.

Installation Data ● first installed 1978 ● unknown number of users ● distributed through direct company sales and service offices in all major cities.

Description ● operates as an Ancillary Control Process ● supports task-to-task communications, network file transfer, remote file access using DEC Record Management Services, and remote computer access from local terminal network resource sharing using Digital Network Architecture protocols ● networks can include multiple DECnet systems as well as DECnet nodes consisting of other DEC equipment ● Network Control Program utility displays statistics and controls/tests network components.

Pricing & Support ● $6,000 one-time license fee; includes maintenance service ● 90-day warranty is provided, during which time defects are remedied on-site by temporary corrections or emergency bypass ● ongoing remedial work is handled by normal service channels with updating provided for user implementation.

☐ DECnet-10 Network Software

Type ● DECsystem 10-to-PDP-11 interface.

Host Software Environment ● DEC TOPS-10 (multiuser, multiprogramming, virtual storage operating system).

Host Hardware Environment ● any DECsystem 10 packaged system with front-end processor.

Installation Data ● first installed 1977 ● unknown number of users ● distributed through direct sales and service offices in all major cities.

Description ● supports point-to-point communications over synchronous communications lines, using full-duplex facilities and Digital Data Communications Message Protocol ● provides access capabilities for COBOL, FORTRAN, and Macro Languages ● does not support communications between DECsystem 10 and other Phase II DECnet protocols.

Pricing & Support ● $17,300 one-time license fee and $220 monthly maintenance service charge ● 90-day warranty period is provided, during which time defects are remedied on-site by temporary corrections or emergency bypass; ongoing remedial work handled by normal service channels with updating provided for user implementation.

☐ DECnet-20 Network Software

Type ● network interface for DECsystem 20.

Host Software Environment ● DEC TOPS-20 (multiuser, multiprogramming, virtual storage operating system).

Host Hardware Environment ● DECsystem 2040 or 2060 packaged system with front-end processor; DECsystem 2020 packaged system with synchronous interface.

Installation Data ● first installed 1978 ● unknown number of users ● distributed through direct sales and service offices in all major cities.

Description ● supports point-to-point communications over synchronous communications lines using full-duplex facilities at data transfer rates up to 56K bps ● supports AT&T 208A and 303 modems and ICC COM LINK II modems ● access is through Macro-20 system calls ● 2 versions available.

Pricing & Support ● $5,800 (both versions) one-time license fee and $88 monthly maintenance service charge ● 90-day warranty period is provided, during which time defects are remedied on-site by temporary corrections or emergency bypass; ongoing remedial work handled by normal service channels with updating provided for user implementation.

☐ MCS-10 (Message Control System)

Type ● communication-oriented facility implementing CODASYL COBOL Journal of Development Communications Facility as defined in 1974 ANSI standard.

Host Software Environment ● DEC TOPS-10 (multiuser, multiprogramming, virtual storage operating system) with Virtual Memory Option and COBOL compiler.

Host Hardware Environment ● DECsystem 10 packaged system with a minimum of 512K bytes of memory, synchronous or asynchronous communications, and disk storage.

Installation Data ● first installed 1977 ● unknown number of users ● distributed through direct company sales and service offices in all major cities.

Description ● provides generalized method of queueing, routing, and journaling messages between network of communications stations or interactive processing programs ● provides centralized queueing, procedure-level language, operator control, message journaling, failsafe facilities, restart/recovery, and interactive message level processing ● major components include MCS Generation Program (network definition facility), MCS Message Control Program (controls network of terminals and processing programs), COBOL Communications Facility (COBOL extensions to interact with COBOL programs), and LIBOL Communications Module (extensions to COBOL runtime system).

Pricing & Support ● $63,300 one-time license fee and $483 monthly maintenance service charge ● 90-day warranty period is provided, during which time defects are remedied on-site by temporary corrections or emergency bypass; ongoing remedial work handled by normal service channels with updating provided for user implementation.

☐ VAX-11 PSI

Type ● packetnet system interface.

Host Software Environment ● DEC VAX/VMS (multiuser, multiprogramming, virtual memory operating system).

Host Hardware Environment ● DEC VAX-11/750 or VAX-11/780 and 512K bytes of physical memory, a minimum of 80K bytes of nonpaged memory, 2,000 blocks of system disk space and a DUP11 synchronous communications interface.

Installation Data ● unknown number of users ● distributed through direct company sales and service offices in all major cities.

Description ● a packetnet system interface that provides capabilities to connect a VAX system to a Public Packet Switching Network (PPSNS) conforming to the CCITT recommendation X.25 program using VAX-11 PSI can be written in MACRO and VAX native mode high-level languages ● package supports process-to-process and remote terminal communication on the network.

Pricing & Support ● $5,000 one-time license fee; includes maintenance service ● 90-day warranty is provided, during which time defects are remedied on-site by temporary correction or emergency bypass; ongoing remedial work handled by normal service channels with updating provided for user implementation.

■ DIGITAL MANAGEMENT GROUP LTD

4800 Yonge Street, Willowdale, ON M2N 6G5 ● 416-225-7788.

☐ DMG/NET

Type ● interactive network communications manager.

Host Software Environment ● DEC RSTS/E or VAX/VMS operating systems.

Host Hardware Environment ● DEC PDP-11 Series or VAX-11 Series systems with DH-11 or DZ-11 multiplexers or equivalent.

Installation Data ● first installed 1982 ● over 50 installations ● international distribution.

Description ● provides users with access to X.25 networks supporting interactive communications between any computers configured into the system; also interfaces with local lines, auto-dial units, and leased circuits ● operates through table-driven soft-

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ware, where characteristics of all communications units, connected networks, and remote computers are configured ● provides for each destination on the network to be individually password protected; also groups of destinations can be designated as PRIVILEGED or HIDDEN, providing better management control of network loading and costs ● can co-exist on the same host with DEC's DECNET networking software ● allows file transfers via an Indirect Command File.

Pricing & Support ● $2,000 and up one-time fee for license purchase; $30 and up monthly fee for maintenance support ● $150 and up monthly fee for rental lease that includes maintenance ● installation and training extra ● source code is not available.

■ DIGITAL RESEARCH

P.O. Box 579, 160 Central Avenue, Pacific Grove, CA 93590 ● 408-649-3896.

□ CP/NET

Type ● distributed network processing interface for Intel and Zilog 8-bit microprocessors.

Host Software Environment ● interfaces MP/M II or MP/M-86 host with CP/M or CP/M-86 slave systems.

Host Hardware Environment ● Intel 8080/8085, Zilog Z80, and comparable second-source microprocessors in an MP/M II/CP/M environment; 8086/8088 configuration for MP/M-86/CP/M-86 network structure; each master node requires at least 32K bytes of memory; each slave location requires at least 20K bytes; at least 1 512M-byte disk unit is required; up to 16 disks are supported at each master node and slave station; an ASCII CRT terminal is required at each node.

Installation Data ● first installed in October 1980 ● over 1,000 current users ● distributed worldwide.

Description ● CP/NET is a network operating environment that uses the CP/M family of operating systems for the host and slave operating system components; the MP/M system is always the master node; a comparable CP/M or MP/M environment can be installed at the slave node; CP/NET allows the master stations to control the resources of the network that can be accessed by the slaves; all hardware-dependent code is separated into a separate I/O module; CP/NET is also protocol independent; the Network I/O System (NIOS) is used to construct the corresponding protocol to meet the needs of the environment; it also handles the passing of messages to and from the slaves and the master ● network configurations can be designed to support tightly or loosely coupled processors; the network can be accessed for system I/O, and an electronic mail system is supported whereby slaves and masters can send each other mail.

Special Features ● an MP/NET configuration can be assembled with MP/M slaves as well as master.

Pricing & Support ● the master and slave nodes must have their own operating system in place; CP/NET itself is available at a one-time license price of $200; OEM dealers are entitled to multiple-copy discounts; if special support is required, it is negotiable; support is normally provided on a hot-line arrangement only ● original licensees receive source code versions; users who purchase from OEMs receive object code only; new releases can be subject to full license price unless the release is an error correction, which carries a nominal fee.

■ ESI

1801 South Gadsden Street, Tallahassee, FL 32314 ● 904-224-5182.

□ MICROPULSE

Type ● micro-to-mainframe link.

Host Software Environment ● Burroughs MCP.

Host Hardware Environment ● Burroughs B 1000 and medium and large systems.

Installation Data ● new product in 1984.

Description ● provides access to Burroughs mainframe data via a microcomputer; security of data is maintained on the main-

frame; MICROPULSE allows users to extract the selected data from host databases and download it, already formatted, for use by application software on the micro; data may also be uploaded to the host.

Pricing & Support ● prices are available upon request from vendor.

■ EVANS, GRIFFITHS & HART, INC

55 Waltham Street, Lexington, MA 02173 ● 617-861-0670.

□ BSC/DV

Type ● BSC driver for DEC DV-11 multiplexers.

Host Software Environment ● DEC RSTS/E, Version 7 and later; VMS.

Host Hardware Environment ● DEC PDP-11 or VAX.

Installation Data ● first installed 1978 ● 9 current users ● international distribution.

Description ● general driver for the DEC DV-11 synchronous communication 16-line multiplexer; can handle most BSC-based protocols; suitable for transparent and nontransparent transmissions, point-to-point and multidrop disciplines, 4-wire and 2-wire half-duplex lines, dial-up and hard-wired lines, CRC-16 and LRC block checks, ASCII transmission codes, and line speeds up to 9600 baud; user treats each line port as an independently programmable unit, OPENs and CLOSEs a line, and executes a GET or PUT for each block of data received or transmitted; user can selectively inhibit various protocol responses and handle each in own program.

Pricing & Support ● $5,000 purchase price includes first-year maintenance ● annual maintenance fee after first year $750 ● quantity discounts available ● installation and training available at extra cost.

□ COLINK

Type ● RSTS/E-to-RSTS/E interface for DEC PDP-11 users.

Host Software Environment ● DEC RSTS/E; supports BASIC.

Host Hardware Environment ● any DEC PDP-11 computer; requires a DEC DMC11 device driver.

Installation Data ● first installed 1979 ● 31 current users.

Description ● provides a high-speed point-to-point link between 2 DEC computers operating under RSTS/E; somewhat similar to IBM's channel-to-channel facility; operates independently of DECNET; supports file-to-file and job-to-job communications; provides virtual terminal support for up to 9 users and automatically accommodates user-directed switching between local and remote environments.

Pricing & Support ● license available purchase only for $1,200 each license (minimum of 2 CPUs); no charge first-year maintenance; $400 annual maintenance after first year ● quantity and OEM discounts available.

□ DIALUP

Type ● DEC PDP-11-to-remote host interface facility.

Host Software Environment ● DEC RSTS/E; supports BASIC and assembler.

Host Hardware Environment ● any DEC PDP-11 computer; requires DEC DH11, DJ11, or DZ11 interface.

Installation Data ● first installed 1979 ● 78 current users.

Description ● links a DEC PDP-11 computer running under RSTS/E to a remote computer through an async terminal line connected to a standard phone line; capabilities are limited to simple point-to-point connection service, but if the remote terminal can accommodate XON/XOFF characters, DIALUP supports automatic dialing, virtual connection, and bidirectional ASCII file transfers; DIALUP supports binary-file block-mode transmissions with full block check and retry if the remote system is also operating under RSTS/E; local point-to-point computer connections are handled directly at rates up to 9600 bps.

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Pricing & Support ● license available purchase only for $1,700; no charge first-year maintenance; $400 annual maintenance after first year ● quantity and OEM discounts available.

■ GOULD INC

6901 West Sunrise Boulevard, P.O. Box 9148, Fort Lauderdale, FL 33310-9148 ● 305-587-2900.

☐ ACX-32 (Advanced Communication Executive)

Type ● networking capabilities for S.E.L. minicomputers.

Host Software Environment ● Gould S.E.L. MPX-32 real-time operating system Revision 2.X or 3.X.

Host Hardware Environment ● Gould S.E.L. Systems Series 32.

Installation Data ● new product ● international distribution.

Description ● ACX-32 is a Gould S.E.L. implementation modeled after the International Standards Organization (ISO) Resume model for Open System Intercommunication (OSI) ● provides networking and distributed processing capabilities.

Pricing & Support ● vendor must be contacted for pricing and support.

☐ ICS-32 (Intercomputer Communication System)

Type ● provides networking capabilities for S.E.L. minicomputers.

Host Software Environment ● Gould S.E.L. MPX-32 real-time operating system.

Host Hardware Environment ● Gould S.E.L. SYSTEMS Series 32, VPS (Vector Processing Systems).

Installation Data ● first installed 1976 ● unknown number of users ● distributed through direct sales/service offices.

Description ● provides networking and distributed processing capabilities; supports file transfers to remote systems; requests file transfers from remote systems; supports task-to-remote task communications, remote file deletions, remote operator communications, console message relay, and memory-to-memory transfers.

Pricing & Support ● vendor must be contacted for pricing and support.

☐ SELNET/32

Type ● distributed environment for Gould S.E.L. minicomputers.

Host Software Environment ● Gould S.E.L. MPX-32 real-time operating system.

Host Hardware Environment ● Gould S.E.L. CONCEPT/32 Series 32/77.

Installation Data ● new product ● international distribution.

Description ● a test-level software package that provides intercomputer file transfer, remote resource sharing, remote interactive residence, task activation, and synchronization between Gould S.E.L. minicomputers ● utilizes standard Gould S.E.L. I/O communication devices to establish intercomputer links; installs without any operating system modifications; easy-to-use user command language.

Pricing & Support ● $7,500 single-usage license; multiple-copy OEM and user discounts available; includes first-year maintenance and software update service.

■ HEWLETT-PACKARD

Information Networks Division; 19420 Homestead Road, Cupertino, CA 95014 ● 408-725-8111.

☐ Distribution Systems/1000-IV

Type ● network facilities for HP 1000 users.

Host Software Environment ● Hewlett-Packard RTE (Real-Time Executive) operating systems.

Host Hardware Environment ● Hewlett-Packard HP 1000 Series with a minimum of 256K bytes of memory and a general-purpose communications interface.

Installation Data ● first installed 1975 ● unknown number of users ● international distribution through local sales and service offices.

Description ● provides integrated set of high-level network facilities and procedures ● supports network resource sharing, remote database access, distributed data file management, communications between applications programs, and the coordinated distribution of workloads among processors within the network.

Pricing & Support ● $1,700 (HP 1000L); $2,500 (HP 1000 A600); $4,200 (HP 1000 A700 or E/F Series); $6,000 (HP 1000 A900) one-time license fee ● $75 monthly charge for AMS/RCS (Account Management Service/Response Control Support), $30 monthly charge for SMS (Software Material Service) ● AMS/RCS includes account-responsible system engineer, phone-in consulting service, and manual update service; SMS includes software updates/enhancements, software problem reporting, software notification service, and manual update service.

☐ DS/3000

Type ● network control manager for HP 3000 users.

Host Software Environment ● Hewlett-Packard MPE multiprogramming, multiuser, virtual memory executive.

Host Hardware Environment ● Hewlett-Packard HP 3000.

Installation Data ● first installed 1978 ● 4,200 users ● international distribution through direct sales and service offices.

Description ● network control manager for distributed HP systems ● supports communications among all HP 3000 Series systems, and between HP 3000 and HP 1000 systems ● allows all network members full access to each other's facilities including database access and program-to-program communications; various hardware options support dial-up, leased, X.25, and direct satellite connections among HP systems, supportable in any combination ● supports a maximum data transfer rate of 5.6K bps ● small systems (HP 250, HP 9845A) connected to HP 3000 Series systems under DS/3000 have full network access including file transfer capability.

Pricing & Support ● $5,000 one-time license fee ● $60 monthly charge for CSS (Customer Support Service); $15 monthly charge for SSS (Software Subscription Service) ● CSS includes account-responsible system engineer, phone-in consulting service, and manual update service; SSS includes software update/enhancements, software problem reporting, software notification service and manual update service.

☐ MTS/3000

Type ● multipoint terminal software for HP 3000 users.

Host Software Environment ● Hewlett-Packard MPE multiprogramming, multiuser, virtual memory executive.

Host Hardware Environment ● Hewlett-Packard HP 3000 Series system.

Installation Data ● first installed 1978 ● over 700 users ● international distribution through direct sales and service offices.

Description ● provides for multipoint terminal communications ● supports 2-way, half-duplex, single-line transmission between a Series III and HP 264X terminals or HP 307X data capture terminals ● accommodates hardwired or modem connections; supports synchronous or asynchronous operations up to 9600 bps; protocol is similar to BSC ● handles up to 32 terminals on one line; supports up to 255 terminal ID numbers; functions in interactive or page operating modes; handles variable-length data transmissions; and provides full editing capability to member terminals.

Pricing & Support ● $2,500 one-time license fee for first copy, and $1,250 for each subsequent copy; includes documentation ● on-site and/or phone-in assistance is determined by level of support purchased on the operating system; the Data Comm B category is priced at $65 per month, and covers MTS/3000; updated software and documentation material for MTS is a separate $15 per month charge.

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☐ Multipoint Terminal Subsystem Software

Type ● multipoint terminal communications for HP 1000 users.

Host Software Environment ● Hewlett-Packard RTE-IVB or RTE-IVE (Real-Time Executive) operating system.

Host Hardware Environment ● Hewlett-Packard HP 1000 Series with a minimum of 128K bytes of memory.

Installation Data ● first installed 1975 ● unknown number of users ● international distribution through direct sales and service offices.

Description ● provides for multipoint terminal communications ● provides support for display, data capture, and time reporting terminals ● supports up to 8 multipoint interfaces with up to 32 terminals per single communications line, or up to 256 terminals total.

Pricing & Support ● $265 one-time license fee ● $45 monthly charge for CSS (Customer Support Service), $15 monthly charge for SSS (Software Subscription Service) ● CSS includes account-responsible system engineer, phone-in consulting service, and manual update service; SSS includes software update/enhancements, software problem reporting, software notification service, and manual update service.

■ HONEYWELL INFORMATION SYSTEMS INC

200 Smith Street, MS 461, Waltham, MA 02154 ● 617-890-8400.

☐ Application Interface Facility

Type ● program development within DSA network.

Host Software Environment ● Honeywell GCOS 6 Mod 400 operating system and Basic Network Service.

Host Hardware Environment ● Honeywell DPS-6 or Series 60 Level 6 packaged system.

Installation Data ● first installed 1983 ● unknown number of users ● worldwide distribution through direct company sales and service offices.

Description ● provides capabilities to write programs incorporating communications within a DSA network ● programs can communicate with a terminal connected to the same node, to a remote node, to other user-written programs on the same or another node, or to any DAC/DACQ program executing on Honeywell 66/DPS, DPS-8, or DPS-88 system within a DSA network ● uses standard COBOL communications verbs and complies with ANSI X3.23-1974 standard.

Pricing & Support ● $155 (primary), $115 (secondary) annual license fee that includes software support ● software support entitles customer to assistance by telephone and mail; includes software release bulletins and updates.

☐ Basic Network Services

Type ● basic communications manager.

Host Software Environment ● Honeywell GCOS 6 Mod 400 operating system.

Host Hardware Environment ● Honeywell DPS-6 or Series 60 Level 6 packaged system.

Installation Data ● first installed 1981 ● unknown number of users ● worldwide distribution through direct company sales and service offices.

Description ● basic components for DPS-6-DSA provide communications and interface functions with a Datanet 8 attached to a Level 64/DPS or DPS-8 host processor for the DPS-6 and Micro System 6/10 or 6/20 systems; provides transport control to handle end-to-end control during transmission; network control handles routing logic, including X.25 public data network interface; link control manages data transmission over a link between 2 entities; standard protocol for link control is High-Level Data Link Control (HDLC) as defined by International Standards Organization (ISO); manages physical control interface between terminals and processors.

Special Features ● this package is a prerequisite for all other software in Honeywell's DPS-6-DSA network ● Basic Network Service consists of the following elements: Primary Network Software, Node Administration, Remote File Facility, Unified File Transfer, Network Definition Facilities, Network Terminal Manager, Remote System Operation, and network maintenance and support facilities ● optional facilities are: Remote Batch Facility, Application Interface Facility, Terminal Presentation Facility, Electronic Mail Facility, Network Control Facility, and Local Message Facility.

Pricing & Support ● $790 (primary), $595 (secondary) annual license fee that includes software support ● software support entitles customer to assistance by telephone or mail; includes software release bulletins and updates.

☐ Distributed Network Supervisor

Type ● Distributed Systems Architecture (DSA) network control and management package.

Host Software Environment ● Honeywell GCOS or GCOS 8 (multiuser, multiprogramming, virtual storage operating system).

Host Hardware Environment ● Honeywell DPS-8 or DPS-88 packaged system with a Datanet 8 Front End Processor.

Installation Data ● first installed 1980 ● unknown number of users ● worldwide distribution through direct company sales and service offices.

Description ● works in conjunction with Honeywell GCOS 8 to provide Distributed Systems Architecture (DSA) support; support functions include network monitoring, software loading, remote job entry, file transfer, terminal concentration, online transaction processing, and timesharing; supports Public Data Networks, Value Added Networks, Private Networks, and X.25 Networks; provides data integrity and availability facilities.

Pricing & Support ● $490 monthly license fee that includes basic software support ● basic maintenance entitles customer to assistance by telephone and mail; includes release bulletins and updates ● optional expanded software support provides remote analysis tools and additional assistance in correcting problems.

☐ IBM SNA Support

Type ● software facilities for operating in IBM SNA environment.

Host Software Environment ● Honeywell GCOS 6 Mod 400 Release 2.1.

Host Hardware Environment ● Honeywell DPS-6 or Level 6 Systems.

Installation Data ● unknown number of users ● worldwide distribution through direct company sales and service offices.

Description ● a set of software products that emulate most operations of standard IBM devices which interface with IBM SNA networks ● consists of an SNA Transport Facility, an SNA Remote Job Entry Facility, an SNA Interactive Terminal Facility, and an SNA File Transmission Facility ● SNA Transport Facility provides the basic Physical Unit (PU) functions of SNA; provides the common SNA protocol services for the SNA Interactive Terminal Facility, the SNA Remote Job Entry Facility, and the SNA File Transmission Facility; also provides line protocol support for Synchronous Data Link Control (SDLC); provides support for multiple links to one or more hosts, multipoint links, coexistence with other SNA devices, and supports the usage of such IBM facilities as Network Communications Control Facility (NCCF) and Network Problem Determination Application (NPDA) for diagnosis of network problems ● SNA Remote Job Entry Facility enables the Honeywell system to emulate the majority of functions of an IBM 3777 Model 3 controller and attached devices in an SNA environment; supports up to 6 Logical Units, with multiple versions of the facility possible to extend the number of logical units on a system; coexists with other SNA RJE Facilities as well as with other SNA products and a wide range of GCOS 6 multifunction capabilities ● SNA Interactive Terminal Facility allows Honeywell terminals to appear as IBM 3277/3278 terminals attached to an IBM 3274 controller; Honeywell matrix and line printers also appear as IBM 3287 printers; supports any combination of up to 32 terminals and

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printers; user exits provide capabilities to support execution of COBOL programs before and after keyboard activity for each terminal ● SNA File Transmission Facility consists of the SNA File Transmission Facility-Host and the SNA File Transmission Facility-6 that allows the exchange of files between an IBM host and a DPS-6 or Level 6 system within the SNA network.

Pricing & Support ● prices reflect primary/secondary annual license fees for each of the individual components: $290/$220 (Transport Facility); $235/$175 (Interactive Terminal Facility); $355/$265 (Remote Job Entry Facility); $75/$55 (File Transmission-6); $2,435/no secondary fees (File Transmission-Host) ● license includes software support; software support entitles customer to assistance by telephone and mail; includes software release bulletins and updates.

☐ LHDLC (Logical High-Level Data Link Control) Basic Software

Type ● communications manager for full- or half-duplex, bit-oriented link protocol data transfers ● an integral part of Remote Network Processor/6 (RNP/6).

Host Software Environment ● Honeywell GCOS 6 Mod 400 operating system.

Host Hardware Environment ● Honeywell DPS-6 or Series 60 Level 6 packaged system.

Installation Data ● first installed 1976 ● unknown number of users ● worldwide distribution through direct company sales and service offices.

Description ● provides full- or half-duplex, bit-oriented link protocol and a multileaved, flow-controlled logical-level protocol between Honeywell DPS-6 or Level 6 satellites and Level 66 or 66/DPS host processors; connections can be dialed or dedicated but must be point-to-point.

Special Features ● this package is a prerequisite for Honeywell Remote Batch Facility II, Remote Concentration Facility, and Remote File Facility packages with the Application Transport Interface; please refer to the Index for survey locations.

Pricing & Support ● $300 (primary), $225 (secondary) annual license fee that includes software support ● software support entitles customer to assistance by telephone or mail; includes software release bulletins and updates.

☐ Network Control Facility

Type ● manages and controls complex networks.

Host Software Environment ● Honeywell GCOS 6 Mod 400 operating system, Basic Network Services, and Network Operator Interface (NOI).

Host Hardware Environment ● Honeywell DPS-6 or Series 60 Level 6 system.

Installation Data ● first installed 1983 ● unknown number of users ● worldwide distribution through direct company sales and service offices.

Description ● manages and controls complex networks by providing tools for problem determination ● designed to function on a DPS-6 in conjunction with the Basic Network Services; can coexist with other DPS-6 applications; aids in the administration of large networks that require redundant back capability; can also be run on additional systems within the network.

Pricing & Support ● $1,000 (primary), $750 (secondary) annual license fee that includes software support ● software support entitles customer to assistance by telephone and mail; includes release bulletins and updates.

☐ Network Operator Interface (NOI)

Type ● operator-to-Node Administrator interface package.

Host Software Environment ● Honeywell GCOS 6 Mod 400 operating system, and Basic Network Services.

Host Hardware Environment ● Honeywell DPS-6 or Series 60 Level 6 packaged system.

Installation Data ● first installed 1981 ● unknown number of users ● worldwide distribution through direct company sales and service offices.

Description ● provides operator interface with Node Administrator; converts network operation commands to standard network format before sending to Node Administrator; checks each terminal operator password to establish allowable span of control and makes connection with appropriate NAD or utility.

Special Features ● a minimum of 1 network operator interface is required within a network.

Pricing & Support ● $115 (primary), $85 (secondary) annual license fee that includes software support ● software support entitles customer to assistance by telephone or mail; includes software release bulletins and updates.

☐ Network Processing Supervisor (NPS)

Type ● general interface for connecting remote facilities to Honeywell DPS-8 host processors.

Host Software Environment ● Honeywell GCOS or GCOS 8 (multiuser, multiprogramming, virtual storage operating system).

Host Hardware Environment ● Honeywell DPS-8 or DPS-88 packaged system with 128K bytes of memory and a Datanet 6641, 6651, or 6661 Front-End Network Processor.

Installation Data ● first installed 1980 ● unknown number of users ● distributed through worldwide direct company sales and service offices.

Description ● remote facility interface that supports remote job entry devices, which include Honeywell Level 6 and 62, 716-based Remote Network processor, G-115, and IBM 2780; supports time-sharing for interactive program development as well as other processes; provides direct program access to communicate interactively with application programs; interfaces with Honeywell Data Management IV Transaction Processor; provides message switching for terminal-to-terminal communications; supports High-Level Data Link Control (HDLC), Honeywell's unifying link control protocol for networking; supports up to 4 links each remote device or to another Network Processing Supervisor system; each link can operate at up to 72K bps; links support host-to-host and terminal-to-alternate host connections; supports bisynchronous line protocols ● provides a number of integrity and control features for network monitoring and analysis ● Network Processing Supervisor is customized at each user site to keep supervisor size at a minimum; can coexist with Honeywell's Remote Terminal Supervisor ● 2 versions available depending on operating system; both versions are also available with or without an HDLC option.

Pricing & Support ● $1,091 (GCOS), $974 (GCOS 8) basic support; $144 (GCOS), $129 (GCOS 8) (HDLC) monthly software license fee ● software support monthly service charge entitles customer to assistance by telephone and mail; includes release bulletins and updates; expanded software support is an extra-cost option providing remote analysis tools and additional assistance in correcting problems.

☐ Node Administrator (NAD)

Type ● supervisor/controller for each intelligent network element.

Host Software Environment ● Honeywell GCOS 6 Mod 400 operating system and Basic Network Services.

Host Hardware Environment ● Honeywell DPS-6 or Series 60 Level 6 packaged system.

Installation Data ● first installed 1981 ● unknown number of users ● worldwide distribution through direct company sales and service offices.

Description ● provides a dedicated application in each intelligent element of the network to supply supervisory and control functions; accepts orders from the node operator or the network operator; primary functions include gathering and logging statistical and status information about the node, controlling network time and date, and loading/restart control; reload facility attempts to reload crashed nodes from various sources.

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Pricing & Support • included in Basic Network Services • software support entitles customer to assistance by telephone or mail; includes software release bulletins and updates.

☐ Remote Batch Facility

Type • terminal operator-oriented remote job upload control packages.

Host Software Environment • Honeywell GCOS 6 Mod 400 operating system and Basic Network Services or Honeywell Comm/FTF.

Host Hardware Environment • Honeywell DPS-6 or Series 60 Level 6 packaged system.

Installation Data • first installed 1981 • unknown number of users • worldwide distribution through direct company sales and service offices.

Description • provides the ability for a terminal operator on a Honeywell DPS-6 or Level 6 to enter a job or group of jobs for processing on a host Honeywell Level 6/DPS, DPS-8, or DPS-88 processor • uses a subset of the host processor's job control language and operator commands; functions provided include starting input, controlling job execution and displaying information about submitted jobs, scanning print outputs before delivery; and controlling delivery of printed outputs • 2 versions available depending on host processor.

Special Features • 2 versions available depending on host processor or network service.

Pricing & Support • $355 (primary), $265 (secondary) annual license fee that includes software support • software support charge entitles customer to assistance by telephone and mail; includes software release bulletins and updates.

☐ Remote Batch Facility II

Type • multileaving remote batch controller.

Host Software Environment • Honeywell GCOS 6 Mod 400 operating system and LHDLC (Logical High-Level Data Link Control) Basic Software.

Host Hardware Environment • Honeywell DPS-6 or Series 60 Level 6 packaged system.

Installation Data • first installed 1976 • unknown number of users • worldwide distribution through direct sales and service offices.

Description • uses Honeywell's LHDLC Basic Software to support multileaving of several data streams simultaneously; supports use of both sides of full-duplex communications link to provide concurrent multiple job input and output; can be multiplexed over half-duplex facilities.

Special Features • this is one of 4 modules that make up Honeywell's Remote Network Processor/6 (RNP/6).

Pricing & Support • $355 (primary), $265 (secondary) annual license fee that includes software support • software support entitles customer to assistance by telephone and mail; includes software release bulletins.

☐ Remote Concentration Facility (RCF)

Type • a terminal concentration.

Host Software Environment • Honeywell GCOS 6 Mod 400 operating system and Primary Network Software.

Host Hardware Environment • Honeywell DPS-6 or Series 60 Level 6 packaged system.

Installation Data • first installed 1981 • unknown number of users • worldwide distribution through direct company sales and service offices.

Description • enables DPS-6 or Level 6 system to function as a terminal concentrator allowing direct connection to a host processor making terminals appear to be directly connected, provides the ability for terminals connected to Honeywell DPS-6 or Level 6 processors to have direct conversation with another DPS-6 or Level 6 or with a Honeywell Level 64/DPS or DPS-8 processor; allows messages of several terminals to be multiplexed over a single High-Level Data Link Control (HDLC) link to provide increased reliability and to handle a larger number of terminals while reducing line costs and overhead • in addition to accessing large-scale functions, RCF can be used to access GCOS 6 functions or application software at remote RNP/6 sites.

Pricing & Support • $245 (primary), $185 (secondary) annual license fee that includes software support • software support entitles customer to assistance by telephone and mail, includes software release bulletins and updates.

☐ Remote File Facility (RFF)

Type • file transmission manager for Honeywell DPS-6 or Level 6 to Level 66, 66/DPS, DPS-8, DPS-88 hosts or to other DPS-6 or Level 6 systems.

Host Software Environment • Honeywell GCOS 6 Mod 400 operating system and Logical High-Level Data Link Control Basic Software.

Host Hardware Environment • Honeywell DPS-6 or Series 60 Level 6 packaged system.

Installation Data • first installed 1976 • unknown number of users • worldwide distribution through direct company sales and service.

Description • uses Honeywell's LHDLC Basic Software to support file transmissions; designed to transmit files between remote DPS-6 or Level 6 systems and host systems; supports full-duplex transmissions, multiple simultaneous file transfers, multileaving with batch/job entries, and concentration of communications traffic; operates in a multifunctional environment providing continuous terminal operations and concurrent execution of applications programs • one of the modules that is part of Honeywell's Remote Network Processor/6 (RNP/6).

Pricing & Support • $245 (primary), $185 (secondary) annual fee that includes software support • software support entitles customer to assistance by telephone and mail; includes software release bulletins and updates.

☐ Remote Network Processor/6 (RNP/6)

Type • integrated communications package with remote job entry, terminal concentration, and file transmission functions.

Host Software Environment • Honeywell GCOS 6 Mod 400 operating system.

Host Hardware Environment • Honeywell DPS-6 or Series 60 Level 6 packaged system.

Installation Data • first installed 1976 • unknown number of users • worldwide distribution through direct company sales and service offices.

Description • package includes Logical High-Level Data Link Control (LHDLC), Remote File Facility, Remote Batch Facility II, Application Transport Interface, and Remote Concentration Facility • LHDLC, provides full- or half-duplex, bit-oriented link protocol and a multileaved, flow-controlled logical-level protocol; connections can be dialed or dedicated but must be point-to-point • Remote File Facility supports full-duplex transmissions, multiple simultaneous file transfers, multileaving with batch/job entries, and concentration of communications traffic; operates in a multifunctional environment to provide continuous terminal operations and concurrent execution of application programs • Remote Batch Facility II supports use of both sides of full-duplex communications link to provide multiple concurrent job input and output; can be multiplexed over half-duplex facilities • Remote Concentration Facility provides prioritized access to processing and communications resources according to real-time requirements; serves to off-load host Front-End Processor • Application Transport Facility provides application-to-application communications between host and satellites or satellites and satellites.

Pricing & Support • $1,110 (primary), $835 (secondary) annual license fee that includes software support charge • software support entitles customer to assistance by telephone and mail; includes software release bulletins and updates.

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☐ Remote Terminal Supervisor-II

Type • general remote facilities interface package.

Host Software Environment • Honeywell GCOS or GCOS 8 (multiuser, multiprogramming virtual storage operating system).

Host Hardware Environment • Honeywell DPS-8 or DPS-88 packaged system with 64K bytes of memory and a Datanet 6641, 6651, or 6661 Front-End Network Processor.

Installation Data • first installed 1980 • unknown number of users • distributed through worldwide network of direct company sales and service offices.

Description • remote facility interface supports remote job entry • devices supported include Honeywell RJE systems, 702- and 707-based Remote Network Processors, and IBM 2780-compatible RJE devices; also supports all functions of Honeywell's Time Sharing System software; provides direct program access to communicate with an application program; supports High-Level Data Link Control (HDLC), Honeywell's unifying link control protocol for networking; supports BSC line protocol; can coexist with Network Processing Supervisor • 2 versions are available depending on the operating system in force.

Special Features • HDLC is available as an add-on option.

Pricing & Support • monthly software license is available for $306 (GCOS) or $273 (GCOS 8); license includes Basic Service; expanded software service costs $144 (GCOS) or $129 (GCOS 8) • Basic Software Support entitles customer to assistance by telephone and mail, and includes release bulletins and updates.

■ IBM CORPORATION/Information Systems Group

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☐ IBM (S/370) MVS Information Distribution Workstation Support V.1/R.1

Type • 6670 Information Distributor interface for IBM OS/VS2(MVS) users.

Host Software Environment • IBM MVS (MVS/SE or MVS/SP), R.3.8, ACF/NCP/VS R.1, ACF/TCAM V.2/R.2 or ACF/VTAM R.1, and JES2 R.4.1, JES2 NJE R.3, or JES3 R.3.

Host Hardware Environment • IBM System/370, 3000, 4300, and compatible computers with the IBM 3705 Communications Controller and at least 1 IBM 6670 Information Distributor with the SNA feature.

Installation Data • first installed 1979 for 4331-1 and 4341-1; 1980 for 4331-2; 1981 for 4341-2 • unknown number of users • distributed through a worldwide network of sales/distribution/maintenance offices.

Description • provides batch-oriented remote communications functions for the 6670 Information Distributor with the SNA feature; supports 6670-relevant routing, scheduling, command, and message operations in coordination with MVS; operates in JES2, JES3 NJE, or JES3 local/global mode; supports the use of the 6670 as a remote printer • program product number is 5740-AMA.

Pricing & Support • available on a lease-only basis for a perpetual monthly fee of $385; the DSLO license fee is $288 per month • service is charged separately at $24 per month; service on multiple systems costs $38 per month • central service support consists of a graded hierarchy of progressively specialized telephone assistance • technical on-site assistance (charged hourly) is offered to handle problems that cannot be solved through the telephone assistance route.

☐ IBM (S/370) Network Communications Control Facility (NCCF) for VTAM, ACF/VTAM, ACF/VTAME, TCAM & ACF/TCAM R.2

Type • general IBM network communications support facility.

Host Software Environment • runs under DOS/VSE with VSE Advanced Functions, OS/VS1 R.7 or MVS R.3.8 (which includes MVS/SE and MVS/SP); operates with ACF/VTAME, ACF/VTAM R.2 and R.3, and ACF/TCAM V.2/R.2; VTAM is required if data

services or a disk log is required; one NCCF is required for each different access method in the network; NCCF and NOSP cannot co-reside in the same host; cross-domain communications are not supported between NOSP and NCCF R.2 but are supported for NCCF R.1 under ACF/VTAM and ACF/VTAME.

Host Hardware Environment • any IBM computer that supports DOS/VSE or MVS operating systems • R.2 supports 3863, 3864, and 3865 modems, the 3867 Link Diagnostic Unit, 3600 Threshold Analysis; also contains remote access feature.

Installation Data • first installed 1979 for 4331-1 and 4341-1; 1980 for 4331-2; 1981 for 4341-2 • unknown number of users • distributed through a worldwide network of sales/distribution/maintenance offices.

Description • essentially a higher-powered version of NOSP; primary function is to support network operations as a set of tasks relatively independent of the device- or system-level interfacing tasks; works through command processors, which are effectively insulated from the various access method and operating system differences, to gather error and problem data and to provide a similarly independent level of control for network operations; operates with NPDA for data gathering; supports all TP network operations at program execution speeds • program product number is 5735-XX6.

Pricing & Support • available on a lease-only basis for a perpetual monthly fee of $120; the DSLO License fee is $90 per month • service is charged separately or $41 per month; service on multiple systems costs $66 per month • central service support consists of a graded hierarchy of progressively specialized telephone assistance • technical on-site assistance (charged hourly) is offered to handle problems that cannot be solved through the telephone assistance route.

☐ IBM (S/370) Network Control Program (ACF/NCP/VS) R.3

Type • IBM 3705-resident network control facility for SNA environment.

Host Software Environment • ACF/NCP/VS R.1 accommodates OS/VS1, SVS, and MVS groups, and DOS/VS but not DOS/VSE; ACF/NCP/VS R.2 accommodates OS/VS1, MVS, and DOS/VS but not SVS or DOS/VSE; ACF/NCP/R.3 accommodates OS/VS1, MVS, DOS/VS, and DOS/VSE groups, but not SVS; all versions supported by VM/370 groups through virtual machine interface; requires NCP/SSP SCP (5747-CH1).

Host Hardware Environment • IBM 3705-I or -II controller.

Installation Data • first installed 1979 for 4331-1 and 4341-1; 1980 for 4331-2; 1981 for 4341-2 • unknown number of users • distributed through a worldwide network of sales/distribution/maintenance offices.

Description • augments and complements the functions of ACF/TCAM and ACF/VTAM; resides and executes in the 3705s that form the communications backbone of SNA; supports complex host-to-NCP to NCP-to-host configurations with parallel linkages, multiple routes, multiple priority levels, and transmission group identities; 3 releases parallel ACF/VTAM migration history • program product number is 5735-XX1.

Pricing & Support • available on a lease-only basis for a perpetual monthly fee of $155; the DSLO license fee is $116 • service is charged separately at $24 per month; service on additional systems costs $14 per month • central service support consists of a graded hierarchy of progressively specialized telephone assistance • technical on-site assistance (charged hourly) is offered to handle problems that cannot be solved through the telephone assistance route.

☐ IBM (S/370) Network Job Entry Facility for JES2 R.2 (JES2/NJE)

Type • JES extension for IBM MVS users.

Host Software Environment • operates only under MVS R.3.7 and later MVS grouped either directly or as a virtual machine under VM/370 group.

Host Hardware Environment • any IBM computer that supports MVS.

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Installation Data ● first installed 1979 for 4331-1 and 4341-1; 1980 for 4331-2; 1981 for 4341-2 ● unknown number of users ● distributed through a worldwide network of sales/distribution/maintenance offices.

Description ● an upward-compatible extension of the JES2 component of the OS/VS2(MVS) R.3.7 SCP; supports up to 99 nodes in an independent job entry network that can function with or without ACF/VTAM and ACF/NCP/VS at the nodes; each node can be a uniprocessor, AP, MP, or a multiaccess spool system; nodes can be linked through BSC or SDLC communications lines or can be interconnected through local channels; the network is nonhierarchical, but each node contains a Network Path Manager for node-to-node routing control; control is passed through a Remote Terminal Access Method (RTAM) ● program product number is 5740-XR8.

Pricing & Support ● available on a lease-only basis for a perpetual monthly fee of $755; the DSLO license fee is $566 per month ● service is charged separately at $90 per month; service on multiple systems costs $144 per month ● central service support consists of a graded hierarchy of progressively specialized telephone assistance ● technical on-site assistance (charged hourly) is offered to handle problems that cannot be solved through the telephone assistance route.

☐ IBM (S/370) Network Operation Support Program (NOSP) for DOS/VS & OS/VS Groups

Type ● network support package for IBM ACF/VTAM.

Host Software Environment ● supports OS/VS1, SVS and MVS groups, DOS/VS groups but not DOS/VSE ● executes as a subset in the ACF/VTAM partition.

Host Hardware Environment ● any IBM computer that supports any OS/VS or DOS/VS (not VSE) operating system; supports the 3270 as a network operator station and 3270 print devices for online printing.

Installation Data ● first installed 1979 for 4331-1 and 4341-1; 1980 for 4331-2; 1981 for 4341-2 ● unknown number of users ● distributed through a worldwide network of sales/distribution/maintenance offices.

Description ● supports programmed local/remote operator functions in an ACF/VTAM network operating under OS/VS1, SVS, and MVS groups, and DOS/VS but not DOS/VSE (see NCCF following); supports multiple remote network operators; permits extensive user-defined command sequences for custom program control of an ACF/VTAM network ● program product number is 5735-XX2.

Pricing & Support ● available on a lease-only basis for a perpetual monthly fee of $163; the DSLO license fee is $122 per month ● service is charged separately at $36 per month; service on multiple systems costs $58 per month ● central service support consists of a graded hierarchy of progressively specialized telephone assistance ● technical on-site assistance (charged hourly) is offered to handle problems that cannot be solved through the telephone assistance route.

☐ IBM (S/370) Network Problem Determination Application (NPDA) R.1 & R.2

Type ● communications network data gathering facility.

Host Software Environment ● operates under MVS R.3.8 (which includes MVS/SE and MVS/SP) or OS/VS1 R.6.7 or R.7 and with ACF/TCAM V.1 and ACF/VTAM R.1 or R.2; runs under DOS/VS and DOS/VSE and ACF/VTAM R.2.

Host Hardware Environment ● any IBM computer that supports OS/VS1, MVS, DOS/VS, or DOS/VSE operating systems.

Installation Data ● first installed 1979 for 4331-1 and 4341-1; 1980 for 4331-2; 1981 for 4341-2 ● unknown number of users ● distributed through a worldwide network of sales/distribution/maintenance offices.

Description ● basically a record-gathering facility for monitoring/management programs such as NOSP and NCCF; collects all network error data for on-command display at a user-designated

control terminal; depends on certain NCCF facilities for operational transparency to the access method and the operating systems; gathers error data in hierarchical order from the link level to the device level ● R.2 usability enhancements announced in April 1981 ● program product number is 5735-XX8.

Pricing & Support ● available on a lease-only basis for a perpetual monthly fee of $64; the DSLO license fee is $48 per month ● service is charged separately at $21 per month; service on multiple systems costs $34 per month ● central service support consists of a graded hierarchy of progressively specialized telephone assistance ● technical on-site assistance (charged hourly) is offered to handle problems that cannot be solved through the telephone assistance route.

☐ IBM (S/370) Network Terminal Option R.2 (NTO)

Type ● IBM SNA interface for non-SNA terminals.

Host Software Environment ● runs under any operating system; NTO R.1 requires ACF/NCP/VS R.2 and operates with ACF/VTAM R.2 and R.3; NTO R.2 requires ACF/NCP/VS R.3 and also operates with ACF/VTAM R.2 and R.3; supported by CICS/VS.

Host Hardware Environment ● any IBM computer that supports any OS/VS or DOS/VS operating system; supports 2740-1, 2741, Western Union TWX 33/35, and World Trade Teletypewriter-Terminal (WTTY) through the SNA Record Mode Application interface of ACF/VTAM R.2 and R.3; executes in 3705.

Installation Data ● first installed 1979 for 4331-1 and 4341-1; 1980 for 4331-2; 1981 for 4341-2 ● unknown number of users ● distributed through a worldwide network of sales/distribution/maintenance offices.

Description ● extends SNA interfacing facilities to non-SNA terminals ● program product number is 5735-XX7.

Pricing & Support ● available on a lease-only basis for a perpetual monthly fee of $146; the DSLO license fee is $109 per month ● service is charged separately at $9 per month; service on multiple systems costs $14 per month ● central service support consists of a graded hierarchy of progressively specialized telephone assistance ● technical on-site assistance (charged hourly) is offered to handle problems that cannot be solved through the telephone assistance route.

☐ IBM (S/370) System Support Programs for ACF/NCP/VS R.2.1 (SSP/ACF/NCP/VS)

Type ● IBM network communications support.

Host Software Environment ● requirements and support features are similar to corresponding release of ACF/NCP/VS: Release 2 and 2.1 accommodate OS/VS1, MVS, and DOS/VS but not SVS or DOS/VSE; Release 3 accommodates OS/VS1, MVS, DOS/VS and DOS/VSE groups, but not SVS; all versions supported by VM/370 groups through virtual machine interface; additionally requires NCP/SSP SCP (5747-CH1).

Host Hardware Environment ● IBM 3705-I or -II controller.

Installation Data ● first installed 1979 for 4331-1 and 4341-1; 1980 for 4331-2; 1981 fo 4341-2 ● unknown number of users ● distributed through a worldwide network of sales/distribution/maintenance offices.

Description ● functional extensions provided for ACF/NCP/VS R.2/R.2.1/R.3; significant extensions are support for Network Communications Control Facility (NCCF), for Network Problem Determination Application Processor, for Link Problem Determination Aid (LPDA), for Network Terminal Option (NTO), and for the 230.4K-byte-per-second capability of the 3705-II ● program product number is 5735-XX3.

Pricing & Support ● available on a lease-only basis for a perpetual monthly fee of $55; the DSLO license fee is $41 per month; service is charged separately at $16 per month; service on additional systems costs $9 per month ● central service support consists of a graded hierarchy of progressively specialized telephone assistance ● technical on-site assistance (charged hourly) is offered to handle problems that cannot be solved through the telephone assistance route.

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☐ IBM (S/370) VTAM Entry (ACF/VTAME)

Type ● network communications adapter for IBM 4331 systems.

Host Software Environment ● IBM DOS/VSE operating system.

Host Hardware Environment ● IBM 4331 computer.

Installation Data ● first installed 1979 for 4331-1 and 4341-1; 1980 for 4331-2; 1981 for 4341-2 ● unknown number of users ● distributed through a worldwide network of sales/distribution/maintenance offices.

Description ● intended to support the Communications Adapter feature (in lieu of the 3705) of the 4331 operating under DOS/VSE; provides facilities similar to ACF/VTAM R.2 and supports most key functions of ACF/NCP/VS; can be used in single system or in multiple systems environments; contains integrated MNF facilities; supports cross-domain SDLC linkages to other processors equipped with ACF/TCAM w/MNF, or ACF/VTAM w/MNF; supports Network Communications Control Facility (NCCF) and Network Operation Support Program (NOSP); does not support NTO and many 3705-related extended features provided by SSP/ACF/NCP/VS; supports major SDLC devices but does not support SS devices and BSC devices except for non-switched BSC 3270; upward compatible with ACF/VTAM R.2 and R.3 ● program product number is 5746-RC7.

Pricing & Support ● available on a lease-only basis for a perpetual monthly fee of $142; the DSLO license fee is $106 per month ● service is charged separately at $75 per month; service on multiple systems costs $120 per month ● central service support consists of a graded hierarchy of progressively specialized telephone assistance ● technical on-site assistance (charged hourly) is offered to handle problems that cannot be solved through the telephone assistance route.

☐ IBM (S/1) CPS Auto-Call Unit Telephone Data Set Support

Type ● outgoing telephone call support package for Series/1 users.

Host Software Environment ● IBM CPS operating system and 2013 Auto-Call Originate Attachment card.

Host Hardware Environment ● any IBM Series/1 packaged system.

Installation Data ● first installed 1977 ● unknown number of users ● distributed through worldwide network of sales/distribution/maintenance offices.

Description ● PRPQ ● single macro routine that permits outgoing telephone number coding; supports 2-line interface on each Auto-Call unit and multiple units on a system ● program number is 5799-TBC.

Pricing & Support ● can be acquired for a $144 one-time license fee or for a $6 perpetual monthly lease; ● central service support is bundled into the price of all licensed software; consists of a graded hierarchy of progressively specialized telephone assistance ● technical on-site assistance (charged hourly) is offered to handle problems that cannot be solved through the telephone assistance route.

☐ IBM (S/1) HUDACS (Howard University Distributed Automation & Control System)

Type ● support for a S/1 distributed system.

Host Software Environment ● IBM EDX (Event Driven Executive) Version 3.0 operating system, GPAX (General-Purpose Automation Executive) Version 1 Modification 1, EDX Utilities Version 3.0, and EDX Program Preparation Facility Version 3.0; if Direct Sensor Attach Feature is used and if supplied interface requires modification, the EDX Macro Library and EDX Macro Assembler are also required.

Host Hardware Environment ● IBM Series/1 with 256K bytes of main memory; Floating Point Feature (#3920); Timer Adapter Feature (#7840); a Programmer Console (#5650); a 4964 Diskette Unit Attachment Feature (#3581); a 4963 Disk Subsystem Attachment (#3590); 2 4974-Printer Attachments (#5620) or 2 4973-Line Printer Attachments (#5630), or one of each of the printer attachments; a

4979 Display Station Attachment (#3585) or a 4978 Display Station Attachment (#DO2038); a 4963 Model 23A Disk Subsystem; a 4964 Model 1 Diskette Unit; a 4979 Display Station or a 4978 Display Station (#DO2055) with IBM keyboards (#DO2056); 2 4974-Printers or 2 4973-Printers, or one of each of the printers; a Binary Synchronous Communications 8-line control with a 4-line attachment feature (#2093, #2094); and a 4997 Model 2A rack enclosure.

Installation Data ● unavailable.

Description ● provides capabilities for multiple IBM Series/1 remote controllers to gather data and perform control actions when communicating with a central IBM Series/1 host; used primarily in an energy management and facilities control environment ● provides flexibility in processing speed, data manipulation, and attachment of instrumentation subsystems, while providing distributed intelligence and backup capabilities ● supplies an operational base for systems such as data acquisition, laboratory automation, production monitoring, and process control ● system features provide support for remote instrumentation signals to be concentrated, filtered for noise, and analyzed for significant changes; provide unattended intelligent data acquisition and terminals control; centralizes monitoring and control; supports analog input and output as well as digital input/output; supports up to 8 dedicated binary synchronous communications lines with up to 15 remote controllers attached to each; each remote controller can have digital/analog input/output points defined ● remote controllers transmit current values of its points to the host through a scan whereby the host periodically requests current values and checks for change, or by polling whereby the host periodically asks the remote controllers which points in the data tables had a change of state; current value data sent to the host includes a numeric value and various state indicators, such as on, off, high limit alarm, unauthorized control action, and proof error ● remote controllers also handle requests from the host operator for the display of data on the host, or to modify entries in the remote controller data tables.

Pricing & Support ● $1,080 one-time fee for license purchase; $45 monthly fee for 24 months on license purchase payout plan ● this program product is an IUP (Installed User Program) and is distributed on an "as is" basis.

☐ IBM (S/1) RPS Multiple Terminal Manager, Version 3

Type ● local terminal network manager for IBM Series/1 users.

Host Software Environment ● IBM RPS operating system.

Host Hardware Environment ● any IBM Series/1 packaged system; requires 128K bytes minimum of memory.

Installation Data ● first installed 1977 ● unknown number of users ● distributed through worldwide network of sales/distribution/maintenance offices.

Description ● licensed program ● provides all the features of Version 1; enhancements include 3270 device emulation to host (BSC and SNA/SDLC), 3101/3270 terminal support, disk file support for continuous files, and expanded utility functions ● utility functions allow terminal users to set date and time, build indexed access method files, display disk file statistics, display dynamic storage and variable control block area storage sizes, transmit messages between terminals, and broadcast messages to multiple terminals ● program number is PRPQ 5799-TDX.

Pricing & Support ● can be acquired for a $15,000 one-time license fee or for a $1,250 perpetual monthly lease; no distribution fee ● central service support is bundled into the price of all licensed software; consists of a graded hierarchy of progressively specialized telephone assistance ● technical on-site assistance (charged hourly) is offered to handle problems that cannot be solved through the telephone assistance route.

☐ IBM (S/1) RPS System/370 Channel Attach

Type ● IBM Series/1—System/370/3000 Series communications manager.

Host Software Environment ● IBM RPS operating system Version 3 or 4; System/370 must be operating under OS/VS1 or OS/VS2 (SVS or MVS) and BTAM.

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Host Hardware Environment ● any IBM Series/1 packaged system with the 4933 Series/1-to-System/370 Channel Attachment Feature.

Installation Data ● first installed 1977 ● unknown number of users ● distributed through worldwide network of sales/distribution/maintenance offices.

Description ● licensed program ● supports communications with System/370 Models 135 through 168 and 3031, 3032, and 3033 Systems over a selector or block multiplexer channel (2870 excluded) ● program number is 5719-CA1.

Pricing & Support ● can be acquired for a $1,305 one-time license fee or for a $33 perpetual monthly lease ● central service support is bundled into the price of all licensed software; consists of a graded hierarchy of progressively specialized telephone assistance ● technical on-site assistance (charged hourly) is offered to handle problems that cannot be solved through the telephone assistance route.

☐ IBM (S/1) RPS 4987 Programmable Communications Subsystem-Preparation Facility

Type ● communications macro library for IBM Series/1 users.

Host Software Environment ● IBM RPS operating system (any version) and either the RPS Program Preparation Subsystem Version 1, 2, or 3, or the Basic Program Preparation Facility.

Host Hardware Environment ● any IBM Series/1 packaged system.

Installation Data ● first installed 1977 ● unknown number of users ● distributed through worldwide network of sales/distribution/maintenance offices.

Description ● licensed program ● a library of communications and communications definitions macros that establishes the basic parameters of a communications environment; the communications macros code the function strings for each line; the definition macros establish the parameters and tables referenced by the function strings, including line control characters, pointers for controller storage, and similar details; the assembled products of the user-coded macros are linked into a load module through the facilities of either the RPS Program Preparation Subsystem Version 1, 2 or 3 (5719-AS1, -AS2, -AS3) or through similar facilities in the Basic Program Preparation Facility (5719-PA1); (this is one of the few RPS programs that can operate with 5719-PA1); the resulting load module is the controller storage image program ● program number is 5719-CSO.

Pricing & Support ● can be acquired for a $523 one-time license fee or for an $12 perpetual monthly lease; no distribution fee ● central service support is bundled into the price of all licensed software; consists of a graded hierarchy of progressively specialized telephone assistance ● technical on-site assistance (charged hourly) is offered to handle problems that cannot be solved through the telephone assistance route.

☐ IBM (S/1) RPS SNA Extended Support

Type ● extended SNA support for IBM Series/1 users.

Host Software Environment ● IBM RPS operating system.

Host Hardware Environment ● any IBM Series/1 packaged system.

Installation Data ● first installed 1977 ● unknown number of users ● distributed through worldwide network of sales/distribution/maintenance offices.

Description ● licensed program ● extends basic operating system SNA support; involves establishing host communications including message recovery/resynchronization assistance, message transmission to/from host, and terminating host communications ● program number is 5719-SN1.

Pricing & Support ● can be acquired for a $2,905 one-time license fee or for a $103 perpetual monthly lease; $190 one-time distribution fee ● central service support is bundled into the price of all licensed software; consists of a graded hierarchy of progressively specialized telephone assistance ● technical on-site assistance

(charged hourly) is offered to handle problems that cannot be solved through the telephone assistance route.

☐ IBM (S/1) SNA Extended Support

Type ● SNA extended-support utility for IBM Series/1 users.

Host Software Environment ● IBM EDX operating system.

Host Hardware Environment ● any IBM Series/1 packaged system with 32K bytes of memory.

Installation Data ● first installed 1977 ● unknown number of users ● distributed through worldwide network of sales/distribution/maintenance offices.

Description ● licensed program ● involves establishing host communications including message recovery/resynchronization assistance, message transmission to/from host, and terminating host communications; applications programs interface to SNA at GET/PUT level ● program number is 5719-SX1.

Pricing & Support ● can be acquired for a $2,005 one-time license fee or for a $71 perpetual monthly lease; $50 one-time distribution fee ● central service support is bundled into the price of all licensed software; consists of a graded hierarchy of progressively specialized telephone assistance ● technical on-site assistance (charged hourly) is offered to handle problems that cannot be solved through the telephone assistance route.

■ INFORMATION INTELLIGENCE INC
P.O. Box 31098, Phoenix, AZ 85046 ● 602-996-2283.

☐ A-C-C-E-S-S

Type ● networking/communications/bulletin-board system.

Host Software Environment ● Apple monitors in ROM that provide fundamental system services.

Host Hardware Environment ● Apple II Plus with 48K bytes of memory, 2 Apple Disk IIs, clock card, and upper-/lowercase adapter/modem.

Installation Data ● first installed 1980 ● 50 installations ● international distribution.

Description ● a bulletin-board format system that provides the ability to create a communications network for small-to-medium businesses ● provides support for 3 different modems: DC Hayes Micromodem II (300 baud Bell 103), the Novation Apple CAT II (300/1200 baud Bell 103/202) in both domestic and CCITT versions, and the OMNILINK communications package including modem (300/1200 baud Bell 103/212A) ● includes a built-in automatic feature that logs a user off the system if there is no input within any 5-minute period ● provides a split-screen operator monitor which reflects what a user is doing, plus the name and location of the user; maintains a log file of the user's name, address, telephone number, the time they called the system, and the time spent on the system ● provides capabilities for transferring any message or form on the system to another A-C-C-E-S-S system automatically; supports up to 10 messages being sent to up to 10 systems; also supports delayed forwarding and retrieving of messages ● includes extensive step-by-step instructions on the use of the system during operation.

Pricing & Support ● $450 (110 message support); one-time fee for license purchase ● no rental or lease plans available ● operating manual included in price ● includes free 24-hour hot-line support.

■ INTERACTIVE SYSTEMS CORPORATION
1212 Seventh Street, Santa Monica, CA 90401 ● 213-450-8363.

☐ INNET

Type ● interactive network system.

Host Software Environment ● Interactive Systems Corporation IS/1 or IS/1 Workbench operating systems with INmail (vendor's electronic message system); DEC VAX/VMS operating system with Interactive Systems Corporation INmail.

Host Hardware Environment ● DEC PDP-11, VAX-11 system with a DMC11 or an asynchronous serial line interface capable of

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operating at up to 9600 baud; Interactive Systems Corporation IDEA machine.

Installation Data • first installed 1979 • unknown number of users • international distribution.

Description • facilities support the transfer of electronic messages and files between remote locations • consists of 4 components: Queued File Transfer Protocol (QFTP), Remote-Mail, Remote-Type, and Remote-Print • QFTP allows users on separate, but interconnected computers, to move files from one computer to another • Remote-Mail facilities stack arriving messages into designated mailbox area • Remote-Type facilities allow users on separate, but interconnected, computers to send locally generated output to remote output devices • Remote-Print facilities allow users on separate, but interconnected, computers to print locally generated output on remote printers.

Pricing & Support • contact vendor for pricing and support • source code is available.

☐ INtelex

Type • interactive Telex interface.

Host Software Environment • Interactive Systems Corporation IS/1 or IS/1 Workbench operating systems with INmail (vendor's electronic message system); DEC VAX/VMS operating system with Interactive System Corporation IS/1 Workbench and INmail.

Host Hardware Environment • DEC PDP-11 or VAX-11 system with an asynchronous serial line interface capable of operating at 110 baud; Interactive Systems Corporation IDEA Machine.

Installation Data • first installed 1979 • unknown number of users • international distribution.

Description • provides facilities for electronic message sending and receiving using Western Union Telex I and II networks, various international carriers, and INFOMaster computer systems • accommodates sending of telegrams (U.S., Canada, Mexico), mailgrams (U.S., Canada), Telex II messages (continental U.S., Canada), Telex I messages (continental U.S., Canada, Mexico), and international telexes (outside of North America) • features include: direct routing of telex messages to a specific Telex I or Telex II number; direct routing of messages to an international carrier for international telex message sending; storing telex numbers under a name; and sending copies and blind copies of a message to local users.

Pricing & Support • contact vendor for pricing and support • source code is available.

■ JOINER ASSOCIATES, INC

1124 Edgehill Drive, P.O. Box 5445, Madison, WI 53705 • 608-238-8134.

☐ jnet

Type • networking software.

Host Software Environment • DEC VAX/VMS Version 3 or later; compatible with IBM VM/SP Release 2 or later, and IBM RSCS Networking, Release 2 or later.

Host Hardware Environment • DEC VAX-11; all Unibus models.

Installation Data • first installed 1982 • 45 current users • international distribution.

Description • system allows users of a VAX-11 computer running under the VAX/VMS operating system to exchange files, implement electronic mail, and transmit real-time messages with users of IBM 3770 terminals on 4300 and 308X computers running under the Virtual Machine/System Product (VM/SP) with the Conversational Monitor System (CMS); enables users to communicate over binary synchronous communication lines using the Remote Spooling Communications Subsystem Networking Program Product (RSCS) protocol; each copy of jnet is aware of all the nodes in the network and the link by which each node may be reached; VAX-11 systems running jnet act as full-routing nodes in the RSCS network.

Pricing & Support • 20-year license fee is $2,500 to $5,000 • maintenance is available at a charge of $600 annually.

■ MASSTOR SYSTEMS CORPORATION

5200 Great American Parkway, Santa Clara, CA 95050 • 408-988-1008.

☐ MASSNET

Type • general-purpose network software/hardware.

Host Software Environment • IBM OS/VS2(MVS); Honeywell GCOS III, GCOS 8; CDC NOS, NOS-BE, NOS-2; Sperry Corp 1100/OS; DEC VAX/VMS, RSX-11M.

Host Hardware Environment • IBM System/370, 3000, 4300, and compatible computers; Honeywell DPS-8 Series; CDC Cyber 170 through 700 Series and 800 Series; Sperry Corp 1100 Series; DEC VAX-11 Series and PDP-11 Series.

Installation Data • first installed 1978 • over 30 installations • international distribution.

Description • a networking facility that provides a broad range of capabilities for up to 64 interconnected host computers, at distances up to 1 mile, at speeds up to CPU channel rate • designed with layered architecture supporting a mixed vendor environment; follows the International Standards Organization (ISO) specifications for Open Systems interconnection levels 4 and 5 (levels 1 through 3 are implemented with hardware component) • provides both centralized administrative control of the network as well as the ability to communicate between authorized application programs executing on host computers connected to the network; supports communications of messages, records, files, and just about anything the network applications agree to transfer • consists of 4 functional components: network management, which is provided by the Network Administrator and the Network Manager; and Network Access, provided by the Network I/O Controller and the Network Language Communications Manager • Network Administrator is an application program executing on 1 computer in the network complex, assisting local Network Managers in establishing and terminating network connections; maintains global network configuration information and is the network computer operator's main point of control • Network Managers are application programs that execute on each computer in the network, monitors the local configuration, and along with Network Administrator establishes and terminates connections for processes executing on its local computer; maintains local configuration data and communicates with the local console operator • Network I/O Control interfaces all user programs to the network; provides support for overall control of the network hardware, including interrupt handling, exception processing, and request queuing; user-callable functions are: acquire (get a network connection), connect (initiate a conversation), send (send a message), receive (receive a message), terminate (end a conversation), and release (release connection) • Network Communication Language is a high-level language CALL interface; supports programs written in COBOL, FORTRAN, PL/1, and assembly language.

Pricing & Support • vendor must be contacted for pricing and support terms.

■ MATHEMATICA PRODUCTS GROUP, INC

P.O. Box 2392, Princeton, NJ 08540 • 609-799-2600.

☐ RAMLink

Type • mainframe/micro link.

Host Software Environment • IBM DOS/VSE, OS/VS1, MVS, VM/CMS, and VP/CSS; requires RAMIS II.

Host Hardware Environment • IBM PC and XT; 3270 access from a PC or CRT ASCII terminal linking with any IBM System/370-class mainframe or compatible computer; requires 70K-byte user storage with procedural language.

Installation Data • new product in 1984 • international distribution.

Description • a mainframe/micro link component of RAMIS II; connects the relational RAMIS II database management system

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on the mainframe with the IBM PC or XT, allowing bidirectional data transfer between mainframe and micro; user may upload or download data ● RAMLink enables PC data to be used directly as transactions in a mainframe RAMIS II file maintenance request; automatically reformats data for a variety of software products available on the PC, including: KeepIT of the ITSoftware series, VisiCalc, and others; supports comma-delimited and sequential-fixed format for BASIC programs and word processing; RAMLink also provides access to: mainframe data stored in RAMIS II database; VSAM, ISAM, or sequential files; and IMS, DL/1, IDMS, TOTAL, and ADABAS databases.

Pricing & Support ● RAMLink component of RAMIS II is priced at $4,500 to $9,000, based on the performance level rating for the CPU; includes first-year maintenance and a User Guide; the RAMLink floppy diskette for the PC or XT is priced at $185 per unit; discounts for multiple floppy diskettes are available; a monthly lease plan is available at 4% of the one-time single payment fee, as well as a 60-month time payment plan of 2.4% of the single payment fee ● maintenance is provided after the first year at 12% of the then-current single payment fee.

■ MICRO TEMPUS INC

440 Dorchester Boulevard West, Suite 300, Montreal, PQ H2Z 1V7 ● 514-397-9512.

☐ TEMPUS-LINK

Type ● micro-to-mainframe link.

Host Software Environment ● IBM VS/1, MVS, MVS/XA, DOS/VSE 3.0, VM/SP; requires VSAM on the mainframe and MS-DOS or PC-DOS on the PC.

Host Hardware Environment ● any IBM System/370-class mainframe and compatible computers; IBM PC/XT.

Installation Data ● first installed 1983 ● 70 current users ● international distribution.

Description ● TEMPUS-LINK is comprised of 3 modules: the mainframe program, which manages an unlimited number of micro-compatible "virtual disks" of variable sizes ranging from 32K bytes to 15M bytes; the communications module, which makes the entire system independent of the teleprocessing monitor and the communications media being used; and the micro portion, which allows the micro to access up to 4 mainframe virtual disks in addition to its own physical disks; any requests from programs or from PC-DOS commands are automatically routed to the mainframe; these accesses can also be in the background, while another PC-DOS application operates in the foreground ● TEMPUS-LINK comes with a set of utilities and subroutines that can be used to copy data to or from virtual diskettes to standard OS data sets; also provides direct access to the virtual diskettes for user-written mainframe batch and CICS applications ● password security is provided with system.

Special Features ● options available for TEMPUS-LINK include an Application Program Interface, Encryption for sensitive data, and a Supercopy feature which allows file transfers between virtual disks and the microcomputer with preallocation of file space to ensure that the file will fit and that no other program will take that space while the transfer occurs; also provides restart capability in case of communications failure; Supercopy can operate in background and foreground.

Pricing & Support ● license purchase price starts at $995 for the first MCU/CPU, with an average charge of $25,000 including first-year maintenance and documentation ● maintenance after the first year is 10% of the then-current purchase price.

■ NATIONAL INFORMATION SYSTEMS, INC

20370 Town Center Lane, Suite 130, Cupertino, CA 95014 ● 408-257-7700.

☐ TELEPORT II

Type ● micro/mainframe connection.

Host Software Environment ● DEC TOPS-10 or TOPS-20 and a variety of microcomputer operating systems.

Host Hardware Environment ● any DECsystem 10/20 computer; IBM PC, PC/XT, and compatibles; Apple II, IIe; Radio Shack 2, 3, 4, 12; Televideo 802, Compupro 816.

Installation Data ● first installed 1981 ● 250 current users.

Description ● provides a micro-to-mainframe communications link; TELEPORT II offers self-instructional menus and online HELP for ease of use; printer output can be provided simultaneously while in terminal mode, or files may be sent to the printer directly from TELEPORT II; either binary or ASCII files can be transferred; "wild" characters can be used in file name to specify groups of related files for transfer ● TELEPORT II requires no additional commands once initiated; system can dial a mainframe and log out, hanging up when finished; vendor claims TELEPORT II detects and corrects 100% of error bursts of 16 bits or less and over 99% of error bursts of 17 bits or greater.

Special Features ● error detection and retransmission provided for file uploading and downloading.

Pricing & Support ● license available purchase only; $3,500 for mainframe and $1,500 purchase price for first 5 microcomputers; includes maintenance; $500 each additional CPU ● source code available; contact vendor for price.

■ NCR/COMTEN INC

2700 Snelling Avenue North, St. Paul, MN 55113 ● 612-638-7777.

☐ Advanced Communications Function/Network Control Program 2

Type ● network control enhancement program for IBM systems.

Host Software Environment ● any IBM S/370-class operating system; requires an SNA access method (VTAM, TCAM, ACF/VTAM, etc) plus Multi-System Networking Facility (where required for cross-domain sessions); also requires NCR 3600 System Control Software, CODEL Release .57, DLC-MIN (for bit-oriented protocols), and SCS 63 Release 1.0; can co-reside with NCR EP4, CNS2, MAF2 and DSS packages.

Host Hardware Environment ● IBM System/370, 3000, 4300, and compatible computers; requires NCR 3600 Communications System.

Installation Data ● first installed 1981 ● 86 current users.

Description ● can be implemented in both front-end and remote communications processors for enhanced network control; supports the following IBM software: Network Communications Control Facility (NCCF), Network Problem Determination Application (NPDA), and Multi-System Networking Facility (MSNF) ● other significant features include dynamic reconfiguration, SDLC trunking for local-to-local and local-to-remote connections, intensive mode error recording, channel attachments for up to 8 host processors support for NCR standard utilities, support for certain pre-SNA start/stop devices with NCR NT01, remote partitioned emulation processing (PEP), automatic host switchover capability, and Communications Networking System 2 trunking for local-to-local and local-to-remote connections.

Pricing & Support ● available for a license fee of $194 per month; license fee includes correction of source bugs and documentation; training courses and consulting available at additional cost; source code not available.

☐ AMS (Automatic Message Switch)

Type ● store-and-forward message switching/transaction switching.

Host Software Environment ● IBM OS/VS1 or MVS; NCR Comten COS2/90 Release 1; IBM ACF/NCP3 Release 1E; CLSS1 Release 2; and NSS1 Release 2.

Host Hardware Environment ● IBM System/370, 303X, 308X, 4341, or equivalent systems; Comten 3690 communications processor.

Installation Data ● new product in 1984 ● international distribution.

Description ● an intelligent network-resident system that controls and operates user-assigned network resources and provides store-

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and-forward message switching plus transaction switching in the SNA environment; store-and-forward message switching holds messages on disk if later delivery is desired; AMS can be used to consolidate into one network the networking functions of an SNA data communications system and a store-and-forward message switching or transaction switching system; AMS also provides the means to connect IBM and non-IBM environments; the system provides network security through control of network access.

Pricing & Support ● initial license fee is $13,938 with a continuing license fee of $1,625 monthly; includes required family products; training and documentation are included in pricing.

☐ Link Evaluation Model

Type ● BSC and SDLC link performance analyzer for IBM systems.

Host Software Environment ● IBM System/370, OS/VS or DOS operating system.

Host Hardware Environment ● any IBM System/370, 3000, 4300, or compatible computer with 200K bytes of memory.

Installation Data ● first installed 1981 ● 6 current users.

Description ● analyses communication link activities to help users do capacity planning, performance management, and network design; system requires a minimum of host processing time for realistic results ● users specify values for network design factors or accept defaults; system computes performance data for specified links; performance data consists of total response time, polling statistics, response time components, utilization, and throughput; provides reports for management review in 80- or 132-column format.

Special Features ● consists of a requisite Basic Model with either or both of the BSC/SDLC modules.

Pricing & Support ● license available only on renewable lease arrangement; during the first year, the base model license costs $1,800, the BSC module costs $600, and the SDLC model costs $1,200; the renewal license fee for succeeding years is $600 for the basic model, $200 for the BSC module, and $400 for the SDLC module; license fee includes correction of source bugs and documentation; training courses and consulting available at additional cost.

☐ MAF/RHO (Multiple Access Facility With Remote Host Option)

Type ● communications extension.

Host Software Environment ● MAF/RHO Release 1 is supported under Comten 3600 System Control Software (SCS) and can co-reside with all other SCS software.

Host Hardware Environment ● IBM System/370, 303X, 308X, 4300, or equivalent systems; any computer which can interface with IBM 3271/4/6 BSC communications line.

Installation Data ● new product; planned release fourth quarter 1984.

Description ● extends communications capabilities for both IBM SNA and BSC 3270 terminals to non-IBM host computers; MAF/RHO allows the NCR Comten communications processor to be attached by a communications line to any host computer which can support a BSC 3270 cluster controller; terminal operators at 3270-type terminals can dynamically access applications residing on channel-attached hosts, CNS-attached hosts, or RHO-attached hosts; MAF/RHO also provides error recovery and control functions, extended color graphics support for SNA and BSC 3270s communicating with a channel-attached IBM host, and alternate routing for remote nodes in the event of a trunk failure.

Pricing & Support ● initial license fee is $3,200 with continuing license fee of $585 monthly or $6,435 annually; training is included in pricing.

☐ Measurement Technology for IBM 3705-II Communications Controllers

Type ● performance measurement facility for IBM 3705-II communications controllers.

Host Software Environment ● requires vendor's Performance Database or Dynapar Software to process data captured by Dynaprobe monitors and stored on tape.

Host Hardware Environment ● requires vendor's D-8016A Dynaprobe monitor, D-8028 Dynaprobe data handler, and D-8018/D-8027 magnetic tape subsystem; D-8008 Dynaprobe bar graph display is optional.

Installation Data ● first installed 1981 ● 4 current users.

Description ● collects and reports performance data about the IBM 3705-II Communications Controller so measurement analysts can study resource utilization and do capacity planning ● measurements provided are: processor utilization (total processing time, total wait time, total CCU idle time), program level analysis (length of time spent on error processing, scanner processing, channel processing, supervisor processing, and problem program processing), scanner byte count (byte count from scanner to attachment base, and vice versa), line utilization, channel adapter byte count (byte count from channel adapter to host, and vice versa), can measure the performance of Type I, II, and IV channel adapters, and Types I, II, and III communications scanners.

Pricing & Support ● available for a license fee of $600 for the first year, and $125 for each renewal year thereafter; license fee includes correction of source bugs and documentation; training courses and consulting available at additional cost.

☐ Multiple Access Facility 3

Type ● host access enhancement package for IBM BSC 3270 networks.

Host Software Environment ● any IBM 370-class operating system; requires an emulation access method; requires Comten 3600 System Control Software, SCS 63 Release 2.0, CNS2 Release 1.3 (for remote), either NCP5 Release 3.1 or ACF/NCP2 Release 1.0 or ACF/NCP 2.1 Release 1.0, and EP4 Release 1.2.

Host Hardware Environment ● any IBM System/370, 3000, 4300, or compatible computer; requires Comten 3600 Communications Processor.

Installation Data ● first installed 1981 ● 15 current users.

Description ● provides increased host accessibility and improved performance for 3270 devices (both local and remote) for users Comten 3600 Communications Processors; allowing 3270 devices to select any host processor defined in the network; can switch a single BSC 3270 device or combination of devices on a cluster controller to any host application program using emulation access methods (BTAM, TCAM, etc); places the 3270 polling functions in the 3600 Communications Processors closest to the cluster controller, thereby improving efficiency in the host processor ● provides 3270 user access/selection of different applications from the same terminal and intermediate node support for remote MAF; acknowledges remote reload; provides end-to-end control protocols; enhances MAF printer control and performance; enhances MAF trunking.

Pricing & Support ● available for a license fee of $95 per month or $1,045 per year; license fee includes correction of source bugs and documentation; training courses and consulting available at additional cost.

☐ Network Control Program (NCP)

Type ● controller for Comten/IBM network.

Host Software Environment ● NCR Comten 3600 System Control Software (SCS 63) and CODEL (assembly language) Release 57 or higher.

Host Hardware Environment ● NCR Comten 3600 Front End Processor connected to an IBM System/370, 3000, 4300, or compatible computer.

Installation Data ● first installed 1981 ● unknown number of users ● international distribution.

Description ● a network control program that replaces several control functions normally handled by the host processor ● ex-

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changes data and control information under supervision of the host access method; provides a logical path between the terminal and the host application using IBM VTAM or TCAM access methods ● features support polling, addressing, dialing, automatic answering, dynamic buffering, transmission control, code translation, automatic network slow down, and automatic error recovery ● can utilize Communications Networking System (CNS) and other products to establish a remote network with concentrator processors and NCP running in the 3600 Front End Processor.

Pricing & Support ● this software is bundled into 3600 hardware charges.

☐ 3600 System Control Software, Release 63.0

Type ● communications/networking control software for enhanced IBM SNA operations.

Host Software Environment ● any IBM S/370-class operating system; requires an SNA access method (pre-ACF and/or ACF where required; e.g., VTAM, TCAM, ACF/VTAM, etc) plus Emulation Access Method (where required); also requires NCR Comten CODEL Release 57 and DLC-MIM (for bit-oriented protocols).

Host Hardware Environment ● IBM System/370, 3000, 4300, or compatible computers; requires NCR Comten 3600 Communications Processor System.

Installation Data ● first installed 1981 ● 260 users currently.

Description ● consists of the program products and capabilities to allow the NCR Comten 3600 Communications Processor to communicate with an IBM SNA-oriented host system; Release 63 includes specific enhancements which include 1M-byte support (expands main storage addressability so that software can access up to 1M bytes of memory), support for the NCP (Network Control Program) SWAP command (allows the user to change (swap) a pair of communication line interfaces that have been defined for NCP operation), supports an NCP tuning utility (statistics gathering, performance enhancement that allows a user to tune the ACF/NCP software to achieve optimum operating characteristics of the network), and support for a local-to-local CNS link (for NCR Comten ACF/NCP sessions between NCR 3600 front-end processors) ● please refer to descriptions in this section for all referenced NCR Comten software products.

Pricing & Support ● available at no charge with the purchase of other 3600-oriented software from vendor; license agreement includes correction of source bugs and documentation; training courses and consulting available at additional cost; source code not available.

■ NCR CORPORATION

1700 Patterson Boulevard, Dayton, OH 45479 ● 513-449-2000.

☐ Telecommunications Software

Type ● supports multiple online users concurrent with batch processing.

Host Software Environment ● NCR VRX (Virtual Resource Executive).

Host Hardware Environment ● NCR V-8500-II or V-8600 Series systems.

Installation Data ● first installed 1982 ● unknown number of installations ● international distribution through local sales/service offices.

Description ● telecommunication software consisting of high-level Message Control System (MCS) and the Low Level Interface (LLI) that support multiple online users concurrent with existing batch processing operations ● MCS includes Enable, Disable, Send, Receive, and Accept instructions which control I/O and logical connections between remote terminals and online programs ● LLI provides interfaces from online programs to Telecommunications Drivers (TCD) that control interaction with specific categories of terminals; TCDs are available for: Teletype models 33 and 35, NCR 260 thermal printer models, NCR 796 CRT terminal models 101 and 201, or any terminal with asynchronous ASCII communications; for binary synchronous communications with IBM 2780/

3780 terminals; for polled networks of asynchronous/synchronous CRT terminals; and for communications with NCR 270/275/279 financial tellers, NCR 770 self-service teller terminals, and NCR 751 Digital Concentrator.

Pricing & Support ● $22 monthly charge for rental lease; $5 monthly charge for field service; $5 monthly charge for central or remote telephone software service.

■ ON-LINE SOFTWARE INTERNATIONAL

Ft. Lee Executive Park, Two Executive Drive, Fort Lee, NJ 07024 ● 201-592-0009.

☐ OMNILINK

Type ● message management enhancement package for IBM CICS/VS users.

Host Software Environment ● any IBM operating system that supports CICS/VS; accommodates COBOL, PL/1, and assembler.

Host Hardware Environment ● IBM System/370, 3000, 4300, and compatible computers; requires 50K bytes of memory; requires 3270/3280 or equivalent terminals.

Installation Data ● first installed 1980 ● over 100 current users.

Description ● provides CICS users with electronic mail and office automation capabilities ● provides abilities for users to create, display, send, file, edit, receive, and cancel messages electronically ● supports both selective and broadcast message modes; messages can be displayed on request or automatically as they arrive at a destination, includes a provision for hardcopy message printout at recipient site(s) ● addressee information is stored in an online directory; all users can be given an electronic file drawer for document editing and storage.

Special Features ● optional components are: OMNIMICRO, an integrated set of microcomputer software tools; OMNIQUERY, an English language command processor; OMNIGUARD, an online security package.

Pricing & Support ● $35,000 (OS), $28,000 (DOS) one-time license purchase price; no charge first-year maintenance; 15% of prevailing purchase price charged annually after first year ● 1-, 12-, 24-month, and 3-year leases available; no charge for maintenance ● quantity and OEM discounts available.

■ OXFORD SOFTWARE CORPORATION

174 Boulevard, Hasbrouck Heights, NJ 07604 ● 201-288-1515.

☐ pcMAINFRAME

Type ● micro-to-mainframe link.

Host Software Environment ● IBM MS-DOS, PC-DOS Release 1.1 or 2.0, DOS/VS(E), OS/VS1, MVS, SSX; requires CICS Release 1.4 or later.

Host Hardware Environment ● any IBM 370-class mainframe or compatible computer; IBM PC, PC/XT, or plug compatible; requires IRMA 3278/3279 terminal emulator board, ASYNCH communication card, or 3270 protocol converters.

Installation Data ● new product in 1984 ● 20 current users ● international distribution.

Description ● a generalized and intelligent file transfer system that connects IBM PCs to an IBM mainframe without special programming; can selectively extract, summarize, and automatically reformat mainframe data for use on the PC; provides several levels of security, as well as centralized control ● primary function of the system is to transfer files between the mainframe computer and PCs; pcMAINFRAME is capable of working with VSAM KSDS or ESDS files or a library file type that is part of the system; using these files, data is downloaded to, or uploaded from, a file on the PC according to predefined profiles; system provides the ability to download to the PC only those fields and records that are needed at the PC.

Pricing & Support ● license purchase price is $9,000 for the DOS version and $12,000 for the OS version, including 8 PC licenses and training and documentation; PC license is $300 each over 8 with quantity discounts available.

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■ P.M. SULCS & ASSOCIATES

4240 Manor Street, Suite 112, Burnaby, BC V5G 3X5 • 604-437-4494.

☐ Telex Communications Interface

Type • telex network connection for Wang VS.

Host Software Environment • Wang VS/DOS.

Host Hardware Environment • Wang VS Series, with 75M-byte disk.

Installation Data • first installed 1982 • 3 current users • international distribution.

Description • allows information to be distributed to all points on the telex network; both word processing and data processing documents created and stored on the computer can be earmarked for transmission; the programs scan the information for characters not acceptable to telex and telex formatting restrictions; corrected documents are transmitted to as many locations as indicated; capability can be expanded to allow for receiving, logging, and distributing telex documents to recipients as specified; it is also possible to attach several other word processing machines, allowing documents created on them to be put through the same telex connection without transcription.

Pricing & Support • license purchase price is $6,000 per computer with discounts for multiple computers; documentation is included in purchase price • training is provided at an additional charge.

■ PERKIN-ELMER

Computer Systems Division; 2 Crescent Place, Oceanport, NJ 07759 • 201-870-4500.

☐ PENNET PLUS

Type • CCITT X.25 network support and IEEE 802.3 ETHERNET network support.

Host Software Environment • Perkin-Elmer OS/32 Release 6.0 or higher operating system.

Host Hardware Environment • Perkin-Elmer 3200 Series processor with 80M bytes of disk storage, console, and synchronous adapter with communications hardware assist option.

Installation Data • unknown number of users • worldwide distribution through company sales and service offices.

Description • provides capabilities for connecting dispersed or locally clustered network configurations through CCITT X.25-based, packet-switched network and IEEE 802.3 ETHERNET network • ISO Open Systems Interconnect (OSI)-based architecture using switched- or leased-line access • network configurations include TELENET (U.S.), Packet Switched Service (U.K.), DATEX-P (Germany), and AUSTPAC (Australia) • terminal access across the network is provided through the Interactive Terminal Facility (ITF) which permits terminals attached to 1 Perkin-Elmer system to sign on to MTM or Reliance database environments in a second Perkin-Elmer system • network printing is provided through the Network Printing Facility (NPF) which provides for programs running under OS/32, MTM, or Reliance to output data to printers physically connected to other Perkin-Elmer systems in the network • network file transfers are provided through the File Transfer Facility (FTF) which supports copying files of any length, to be copied from one computer to another in the network.

Pricing & Support • $2,300 to $7,000 one-time license fee that includes 1-year maintenance; additional copies are $600 to $1,750 • maintenance service provides a regular software bulletin describing software defects and patches or alternatives, or defect resolutions; includes Software Change Revision Service and automatic update service • other assistance available on a time-and-material basis.

☐ ZDLC Channel Terminal Manager (OS/32)

Type • communications manager for bit-oriented protocols including HDLC, ADCCP, and IBM SDLC.

Host Software Environment • Perkin-Elmer OS/32 (multiprogramming, multiuser operating system).

Host Hardware Environment • Perkin-Elmer 32-bit processor with 256K bytes of memory, relocation and protection hardware, operator console, interval clock, line frequency clock, and power fail/auto restart.

Installation Data • first installed 1979 • unknown number of users • worldwide distribution through company sales and service offices.

Description • provides support for bit-oriented protocols, point-to-point and multipoint operations using full- and half-duplex communication lines; supports normal response mode, asynchronous response mode, and symmetrical control modes; a Sysgen provides for hand tailoring of system to eliminate all unused facilities and provides ability to increase/decrease polling on active/inactive terminals.

Pricing & Support • $4,500 one-time license fee (includes 1-year maintenance) and $200 annual maintenance fee (covers all services) • maintenance service provides a regular software bulletin describing software defects and patches or alternatives to resolve the defects; includes Software Change Revision Service and automatic update service; other assistance available on a time-and-material basis.

■ PRIME COMPUTER INC

40 Walnut Street, Wellesley Hills, MA 02181 • 617-237-6990.

☐ DPTX (Distributed Processing Terminal Executive)

Type • configuration aids for constructing IBM 3271-/3277-compatible communications networks.

Host Software Environment • Prime PRIMOS (multiprogramming, multiuser, virtual storage operating system).

Host Hardware Environment • any Prime 50 Series system.

Installation Data • unknown number of users • worldwide distribution through company sales offices and distributors.

Description • supports 3271/3277 Display System protocols and can be integrated into new or existing networks containing IBM mainframes and terminal controllers (or IBM-compatible vendors) without application code or access method changes; compatible with IBM IMS/VS and CICS/VS and BTAM, TCAM, and VTAM • TSF (Terminal Support Facility) module provides the ability to connect IBM 3271/3277 Display Systems to Prime computers so the stations can draw information and other resources from the Prime system; timesharing and data entry modes of operation are supported; supports up to 32 display stations on up to 4 multipoint communications lines using bisync line protocol • DSC (Data Stream Compatibility) module provides the capability for a Prime system to share a multipoint communication line with IBM 3271, controllers allowing Prime users to integrate Prime terminals into an IBM terminal network in lieu of 3277 display stations; software handles the translation between IBM and Prime data formats.

Special Features • Prime DPTX/DSC, DPTX/TCF, and DPTX/TSF can be combined into one product known as DPTX-3270 Emulation and Support.

Pricing & Support • $7,500 one-time license fee and $145 monthly maintenance fee, or $1,500 installation fee and $405 monthly use fee (includes monthly maintenance) • software information service included in monthly maintenance provides a Software Release Bulletin describing performance improvements, ordering information, and prices for revised software • Technical Action Requests sent to Prime provide means of reporting and correcting software errors • a separately priced Automatic Update Service provides users copies of software revisions twice a year with applicable documentation; includes one-day visit by analyst to discuss and commission the software • DPT-3270 Emulation and Support is $7,500 for one-time license fee and $145 monthly maintenance; or monthly license fee of $1,500 and a monthly maintenance charge of $405.

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☐ **DPTX/DSC (Distributed Processing Terminal Executive/Data Stream Compatibility)**

Type ● Prime-IBM 3271 line sharing facility.

Host Software Environment ● Prime PRIMOS (multiprogramming, multiuser, virtual storage operating system).

Host Hardware Environment ● any Prime Series 50 packaged system.

Installation Data ● unknown number of users ● worldwide distribution through company sales and service offices.

Description ● provides the ability for a Prime system to share a multidrop communications line with IBM 3271 controllers, allowing Prime users to integrate Prime terminals into an IBM terminal network in lieu of 3277 display stations ○ software handles the translation between IBM and Prime data formats; data can be transmitted from an IBM host to the Prime system and displayed on the Prime terminal operating in block mode; data can also be entered on the Prime terminal and transmitted to the IBM host providing access to the IBM host information.

Special Features ● separately priced Terminal Support Facility (TSF) module works in conjunction with DSC to connect IBM 3271/3277 Display Systems to Prime computers ● separately priced Transparent Connect Facility (TCF) module combined with the DSC and TSF modules to add a capability to use data on an IBM host even though terminal is connected to a Prime host; please refer to TSF and TCF descriptions in this section.

Pricing & Support ● $5,000 one-time license fee and $54 monthly maintenance fee, or $1,000 installation fee and $152 monthly use fee (includes monthly maintenance) ● software information service, included in monthly maintenance, provides a Software Release Bulletin describing performance improvements, ordering information, and prices for revised software ● Technical Action Requests sent to Prime provide means of reporting and correcting software errors ● a separately priced Automatic Update Service provides users copies of software revisions twice a year with applicable documentation; includes one-day visit by analyst to discuss and commission the software.

☐ **DPTX/TCF (Distributed Processing Terminal Executive/ Transparent Connect Facility)**

Type ● terminal network control facility.

Host Software Environment ● Prime PRIMOS (multiprogramming, multiuser, virtual storage operating system).

Host Hardware Environment ● any Prime Series 50 packaged system.

Installation Data ● unknown number of users ● worldwide distribution through company sales and service offices.

Description ● supports the attachment of IBM 3271/3277 Display System to Prime computers so the stations can draw information and other resources from the Prime system; supports timesharing and data entry modes of operations; 3271 controllers attach to Prime systems using bisync protocol; supports up to 32 display stations using up to 4 multipoint communications lines; display station input is handled in the same manner as input from Prime character-oriented terminals ● also provides the ability for a Prime system to share a multidrop communications line with IBM 3271 controllers allowing Prime users to integrate Prime terminals into an IBM terminal network in lieu of 3277 display stations ● software handles the translation between IBM and Prime data formats; data can be transmitted from an IBM host to the Prime system and displayed on the Prime terminal operating in block mode; data can also be entered on the Prime terminal and transmitted to the IBM host providing access to the IBM host information ● also has the capability for a 3277 terminal user to reach programs on an IBM mainframe even though the terminal subsystem is connected physically to a Prime host, which in turn is connected to the IBM host.

Special Features ● partial capabilities of this subsystem are contained in 2 separate modules, the DPTX/TSF (Terminal Support

Facility) and the DPTX/DSC (Data Stream Compatibility); please refer to TSF and DSC descriptions in this section.

Pricing & Support ● $12,000 one-time license fee and $108 monthly maintenance fee, or $2,400 installation fee and $342 monthly use fee (includes monthly maintenance) ● software information service, included in monthly maintenance, provides a Software Release Bulletin describing performance improvements, ordering information, and prices for revised software ● Technical Action Requests sent to Prime provide means of reporting and correcting software errors ● a separately priced Automatic Update Service provides users copies of software revisions twice a year with applicable documentation; includes one-day visit by analyst to discuss and commission the software.

☐ **DPTX/TSF (Distributed Processing Terminal Executive/Terminal Support Facility)**

Type ● bridging software between IBM 3271/3277 Display Systems and Prime computers.

Host Software Environment ● Prime PRIMOS (multiprogramming, multiuser, virtual storage operating system).

Host Hardware Environment ● any Prime Series 50 packaged system.

Installation Data ● unknown number of users ● worldwide distribution through company sales and service offices.

Description ● supports the attachment of IBM 3271/3277 Display Systems to Prime computers so the stations can draw information and other resources from the Prime system ● supports timesharing and data entry modes of operation; 3271 controllers attach to Prime systems using bisync protocol; supports up to 32 display stations using up to 4 multipoint communications lines; display station input is handled in the same manner as input from Prime character-oriented terminals.

Special Features ● separately priced Data Stream Compatibility (DSC) module works in conjunction with TSF for terminal integration into an IBM terminal network ● separately priced Transparent Connect Facility (TCF) module combines both the TSF and DSC modules and adds a capability to use data on an IBM host even though terminal is connected to a Prime host; please refer to DSC and TCF descriptions in this section.

Pricing & Support ● $6,000 one-time license fee and $54 monthly maintenance fee, or $1,200 installation fee and $171 monthly use fee (includes monthly maintenance) ● software information service, included in monthly maintenance, provides a Software Release Bulletin describing performance improvements, ordering information, and prices for revised software ● Technical Action Requests sent to Prime provide means of reporting and correcting software errors ● a separately priced Automatic Update Service provides users copies of software revisions twice a year with applicable documentation; includes one-day visit by analyst to discuss and commission the software.

☐ **File Transfer Service**

Type ● queued file transfer service operating under Prime Primenet Network Management System.

Host Software Environment ● Prime's PRIMOS operating system and Distributed Networking Software.

Host Hardware Environment ● any Prime 50 Series system with required Primenet supporting hardware.

Installation Data ● unknown number of users ● worldwide distribution through company sales offices and distributors.

Description ● works in conjunction with Primenet (which is a prerequisite) or Primenet with Packet Network Interface; provides controlled data movement throughout a widely distributed network of Prime systems ● FTS is an additional network service that enhances the facilities of remote file access and interprogram communications provided by Primenet networking software; supports queued transfer requests, automatic retry in event of failure, and user notification.

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Pricing & Support ● $2,000 one-time license fee and $22 monthly maintenance fee (reduced fees for subsequent licenses), or $400 installation fee and $65 monthly use fee (includes monthly maintenance) ● Prime's Standard Software Service includes: documentation (revised as necessary); software updates; trouble reporting service; telephone support from the Prime Customer Support Center; and on-site support if required ● a monthly service fee is charged for each product included in the service agreement; service programs outside the United States are adapted to suit local requirements.

☐ Packet Network Interface

Type ● CCITT X.25 communications support for Prime Primenet local to remote network facility.

Host Software Environment ● Prime PRIMOS (multiprogramming, multiuser, virtual storage operating system); requires Primenet (local and remote network communications manager).

Host Hardware Environment ● any Prime 50 Series system.

Installation Data ● unknown number of users ● worldwide distribution through company sales offices and distributors.

Description ● works in conjunction with Primenet (which is a prerequisite) and provides support that augments the operation for communications through packet networks supporting CCITT X.25 standards.

Pricing & Support ● $10,000 one-time license fee and $90 monthly maintenance fee, or $2,000 installation fee and $250 monthly use fee (includes monthly maintenance) ● software information service, included in monthly maintenance, provides a Software Release Bulletin describing performance improvements, ordering information, and prices for revised software ● Technical Action Requests sent to Prime provide means of reporting and correcting software errors ● a separately priced Automatic Update Service provides users copies of software revisions twice a year with applicable documentation; includes one-day visit by analyst to discuss and commission the software.

☐ Primenet

Type ● distributed network facility providing integrated communication services and support for all of Prime's 50 Series computers.

Host Software Environment ● requires PRIMOS, Prime's operating system for its 50 Series.

Host Hardware Environment ● any Prime 50 Series system and a Primenet Node Controller for a local area RINGNET network or an MDLC synchronous controller for point-to-point, full- or half-duplex networks.

Installation Data ● over 1,000 nodes installed worldwide ● worldwide distribution through company sales offices and distributors.

Description ● Primenet provides identical services to all users in a Prime network, independent of physical distribution of systems; systems are connected locally via RINGNET, a 10M-byte-per-second Token-Passing Ring local area network for Prime Hosts; widely dispersed systems connected via high-speed synchronous lines up to 56K baud ● Primenet Interactive Terminal Support allows terminals connected to any system in the network to access any other systems as if they were directly connected ● File Access Manager extends users' view of the PRIMOS file system to include files on remote systems ● Inter-Program Communications facility allows users to establish full-duplex communications between cooperating applications programs anywhere in the network.

Special Features ● Primenet with the Packet Network Interface allows all above services between Prime Systems and users connected to any Public Data Network which conforms to the CCITT X.25 recommendation ● separate File Transfer Service product adds support for controlled file transfers between systems in a widely distributed network of Prime systems.

Pricing & Support ● $7,500 one-time license fee and $60 monthly maintenance fee, or $1,500 installation fee and $170 monthly use fee (includes monthly maintenance) ● software information service, included in monthly maintenance provides a Software Release Bulletin describing performance improvements, ordering information, and prices for revised software ● Technical Action Requests sent to Prime provide means of reporting and correcting software errors ● a separately priced Automatic Update Service provides users copies of software revisions twice a year with applicable documentation; includes one-day visit by analyst to discuss and commission the software.

☐ Primenet With Packet Network Interface

Type ● CCITT X.25 communications support for Prime Primenet Distributed Network Facility.

Host Software Environment ● PRIMOS, Prime's single operating system for its 50 Series.

Host Hardware Environment ● any Prime Series 50 packaged system, MDLC synchronous controller with BSC or HDLC protocol support.

Installation Data ● unknown number of users ● worldwide distribution through company sales offices and distributors.

Description ● as a superset of Primenet, Primenet with Packet Network Interface extends and augments the Primenet services by allowing systems to be connected using packet-switching networks which support the CCITT X.25 recommendation.

Pricing & Support ● $10,000 one-time license fee and $90 monthly maintenance fee (reduced rates for subsequent licenses); or $2,000 installation fee and $250 monthly service fee (including monthly maintenance); to upgrade Primenet to Primenet with PNI $2,500 ● Prime's Standard Software Service includes documentation (revised as necessary); software updates; trouble reporting service; telephone support from the Prime Customer Support Center, and on-site support if required ● a monthly service fee is charged for each product included in the service agreement ● service programs outside the United States are adapted to suit local requirements.

■ SOFTWARE AG OF NORTH AMERICA, INC
11800 Sunrise Valley Drive, Reston, VA 22091 ● 703-860-5050.

☐ NATURAL/CONNECTION

Type ● micro-to-mainframe link.

Host Software Environment ● IBM DOS/VS(E), VM/CMS, MVS, OS/VS1, and IBM PC-DOS, MS-DOS.

Host Hardware Environment ● any IBM System/370-class mainframe or compatible computer; IBM PC family and compatibles.

Installation Data ● new product in 1984.

Description ● the enhancement extends the productivity benefits of NATURAL, Software AG's integrated information processing system (please see section 900 for full product report), to the personal computer user; NATURAL/CONNECTION runs on the IBM PC and works with NATURAL on a host mainframe; the system uses a direct menu approach for command selection; there are NATURAL/CONNECTION functions for logging on to the host and for running existing NATURAL applications; housekeeping chores, such as printing, listing, or erasing PC files that are transferred to or from the mainframe, are also NATURAL/CONNECTION functions ● NATURAL/CONNECTION supports a communications link between the mainframe and the PC, providing the ability to download data from the mainframe, format the downloaded data so that it can be used as input to a variety of popular PC software, upload data to the mainframe, execute mainframe NATURAL programs remotely, and allow the PC to communicate with NATURAL on the host as a 3270 terminal; NATURAL/CONNECTION can also be used with NATURAL/VSAM on the host which works with VSAM data sets.

Pricing & Support ● license purchase price is $40,000 which includes mainframe software, documentation, and software for 10 PCs plus one year of support and maintenance; pricing for additional PCs ranges from $500 at the high side to $250 at the low side, depending on quantity.

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■ SPERRY CORPORATION

P.O. Box 500, Blue Bell, PA 19422 ● 215-542-4011.

☐ CMS (Communications Management System)

Type ● communications interface for Sperry Series 1100 systems.

Host Software Environment ● requires Series 1100 Operating System plus Telcon software package.

Host Hardware Environment ● any Sperry Series 1100 system ● requires 10K to 12K words of resident main memory ● supports all Sperry terminals plus popular "foreign" devices.

Installation Data ● the 1100/60 first installed in 1979, the 1100/80 in 1976 ● over 200 systems delivered worldwide as of 1981 ● distributed through a nationwide network of sales/distribution/maintenance offices.

Description ● provides the connection between Series 1100 Operating System users and communications devices attached to a Series 1100 computer; supports communications interface between 1100 Series systems in a network configuration via Distributed Communications Architecture (DCA) and the DCP Telcon software; maintains a message queue that is accessible to the TIP Transaction Interface Package ● program number is 6148.

Pricing & Support ● available on a rental basis only for a perpetual monthly fee of $650 ● service is included in the monthly software rental charge ● customer education for this program product is offered at either a Sperry site or the customer site; there is a fee for the course work.

☐ OPTIMA 1100

Type ● network planning/analysis aid for Sperry Series 1100 systems.

Host Software Environment ● Series 1100 Operating System.

Host Hardware Environment ● any Sperry Series 1100 system.

Installation Data ● the 1100/60 first installed in 1979, the 1100/80 in 1976 ● over 200 systems delivered worldwide as of 1981 ● distributed through a nationwide network of sales/distribution/maintenance offices.

Description ● integrated, modular system for planning and control of network-based projects; factors that can be expressed include time analysis, resource analysis, cost analysis, resource allocation, reports, network drafting ● program number is 6107-11.

Pricing & Support ● available on a rental basis only for a perpetual monthly fee of $660 ● service is included in the monthly software rental charge ● many Series 1100 customer education courses are offered; they can be held at either a Sperry site or the customer site; there is a range of fees.

☐ TELCON

Type ● communications network system for the Sperry Series 1100.

Host Software Environment ● Series 1100 Operating System.

Host Hardware Environment ● any Sperry Series 1100 system; communicates with Series 90, System 80, and MCO V77-600 or V77-800 processors.

Installation Data ● the 1100/60 first installed in 1979, the 1100/80 in 1976 ● over 200 hardware systems delivered worldwide as of 1981; no software installation data available ● distributed through a nationwide network of sales/distribution/maintenance offices.

Description ● an intelligent communications network system that supports the Univac Distributed Communications Architecture (DCA); included in TELCON is support for a family of Distributed Communications Processors (DCPs) along with network software residing in the DCP and support software residing in the 1100 system; configurations supported by TELCON include front-end processors, remote processors, multiple processor networks, and multiple host system networks; CMS 1100 provides the communications management interface for the Series 1100 to the TELCON network; CMS 1100 supports file and job transfer for applications between Series 1100, Series 90, System 80, and MCO V77-600 or V77-800 processors equipped with the communications interface to the TELCON network.

Pricing & Support ● available on a rental basis only for a perpetual monthly fee of $500 ● service is included in the monthly software rental charge ● many Series 1100 customer education courses are offered; they can be held at either a Sperry site or the customer site; there is a range of fees.

■ STERLING SOFTWARE MARKETING

Crocker Bank Building, Suite 500, 1007 Seventh Street, Sacramento, CA 95814 ● 916-441-7234.

☐ TRACS (Teleprocessing Remote Access Control System)

Type ○ teleprocessing applications package.

Host Software Environment ● IBM OS/VS1, MVS (all releases), DOS/VS(E); BTAM is required.

Host Hardware Environment ● any IBM System/370-class mainframe or compatible computer; requires one disk or tape unit.

Installation Data ● first installed 1981 ● 200 current users ● international distribution.

Description ● software handles the bisynchronous transmission of batch data between IBM (and plug-compatible) mainframes, and a variety of remote computers and bisynchronous devices; enables host emulation of IBM 2780-/3780-type device, allows file-to-file transfer in transparency mode, transmits records of any size, eliminates remote job entry record length restrictions, and requires minimal support; leased lines and dial lines are supported by the system; accommodates manual dial, auto dial, and auto answer; no modifications to operating system are required; data to be sent or received can reside on either disk or tape.

Pricing & Support ● one-time license fee is $5,500 for DOS version and $8,000 for OS version; lease plans are available at $550 per month for DOS version and $800 per month for OS version; systems guide is provided with all plans.

■ STONEHOUSE & COMPANY

4100 Spring Valley Road, Suite 400, Dallas, TX 75234 ● 214-960-1566.

☐ MONIES (Management of Network Income, Expense & Services)

Type ● online, integrated telecommunications management system.

Host Software Environment ● IBM OS/VS; requires CICS, VSAM, IDCAMS, SORT.

Host Hardware Environment ● IBM System/370-class mainframe or compatible computer.

Installation Data ● first installed 1981 ● over 5 current users ● international distribution.

Description ● system provides users with tools to control and manage the communications business; MONIES consists of 7 modules; offers online order entry, order tracking, and inventory facilities; handles vendor invoice reconciliation, as well as rebilling information; MONIES also provides network performance analysis, online circuit cost estimation, and online network and subsystem outage tracking ● MONIES' features include menu-driven screens, online file maintenance, user profile parameter files for easy installation, online reporting, system modularity, automatic built-in access security system, complete file backup and restore procedures, and data validation at time of input; package is written in ANSI-standard COBOL.

Pricing & Support ● license purchase price for the total MONIES system is $250,000 including installation, training, and maintenance for one year; monthly rental is at the rate of $16,560, while the price of a 36-month lease is $13,800 per month; individual modules may be purchased, leased, or rented with prices ranging from $35,000 to $80,000 for a license purchase; $2,400 to $5,280 for a monthly rental and from $2,000 to $4,400 per month for a 36-month lease; maintenance after the first year for a license pur-

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chase is $37,500, and ranges from $5,250 to $12,000 for an individual system module.

■ SYSTAR CORPORATION

1762 Technology Drive, Suite 208, San Jose, CA 95110 ● 408-280-7066.

□ GATEWAY 34/38

Type ● front-end terminal network controller.

Host Software Environment ● SYSTAR CMX operating system.

Host Hardware Environment ● IBM Series/1 with 256K bytes of memory.

Installation Data ● first installed 1981 ● 15 current users.

Description ● communications front end for controlling terminal networks connected to an IBM System/34 or System/38; asynchronous terminals, personal computers, and word processors emulate IBM 5251-type terminals and printers; under user control, terminals can switch between multiple computers (up to 8); access to multiple hosts is accomplished through a single GATEWAY connection occupying only 1 port per host; terminals can be connected using any combination of local attachments, dial-up lines, leased lines, and public packet networks; also provides international access to the System/34/38 ● the system uses the IBM Series/1 minicomputer to perform protocol conversion between the SNA and X.25 network protocols, and between the 5251 and the 3101 display formatting commands; uses 3101 terminals and emulates operation of IBM 5251-12 workstations to allow existing System/34/38 software to run without modification; can also be used with other protocol converters and electronic mail systems from Systar on the same Series/1.

Pricing & Support ● one-time purchase fee for a perpetual license is $22,000; multiple-copy discounts are available.

□ GATEWAY/370

Type ● front-end communication package for IBM System/370-class users.

Host Software Environment ● SYSTAR CMX operating system.

Host Hardware Environment ● IBM Series/1 with 192K bytes of memory.

Installation Data ● first installed 1982 ● unknown number of installations.

Description ● provides the capability to communicate from ASCII terminals, personal computers, and word processors with a host IBM System/370, 3000, or 4300; terminals are connected through a Series/1 directly or via an X.25 protocol network and are able to enter "pass through" mode communications with the host system(s); multiple terminals may connect simultaneously to any given host and appear as remote, unformatted 3270 terminals using bisynchronous protocol; supports communication interfaces for direct dial, leased line, and X.25 public data networks; allows international communications via ASCII terminal devices; can be connected to multiple hosts (maximum 8); also supports installation with other Systar products.

Pricing & Support ● one-time license purchase price is $16,000; multiple-site discounts are available.

□ LODESTAR 34/36/38

Type ● communications front-end facilities.

Host Software Environment ● SYSTAR CMX operating system.

Host Hardware Environment ● IBM Series/1 system with 128K bytes of memory and a diskette drive.

Installation Data ● first installed 1982 ● 2 installations.

Description ● forms a private company network of IBM 525X terminals and printers in an SNA dedicated, high-speed line environment ● allows users of IBM 5251 Model 11 and Model 12 terminals and 5256 printers to connect to multiple IBM System/34/36 and System/38 computers ● operates using a leased line network; the Series/1 computer acts as a switching device between terminals

and hosts; connection is accomplished using high-speed synchronous lines, which appear to each host as a multipoint leased line having a specified number of remote 5251 Model 12 cluster controllers, 5251 Model 11 workstations, and 5256 workstation printers ● Series/1 is connected to remote 5251 Model 12 cluster controllers over leased multipoint lines; supports an operator's console that allows display of statistics, and supports dynamic reconfiguration of the network.

Special Features ● can be combined with SYSTAR's Gateway 34/36/38 software for access to System/34 and System/38 computers from ASCII asynchronous terminals such as IBM 3101, Texas Instruments 940, and IBM Personal Computers.

Pricing & Support ● $40,000 one-time license fee includes installation, training, and user's manual; $300 monthly charge for maintenance.

■ TANDEM COMPUTER INC

19333 Vallco Parkway, Cupertino, CA 95014 ● 408-725-6000.

□ ENVOY Data Communications Manager

Type ● transaction processing interface within a data communications network.

Host Software Environment ● Tandem Guardian Operating System.

Host Hardware Environment ● Tandem NonStop, NonStop II packaged system.

Installation Data ● first installed 1976 ● unknown number of users ● international distribution through direct sales and service offices.

Description ● operates as an integral part of the Guardian Operating System to interface transaction processing applications to an established data communications network ● consists of a set of data communications processes that control data communications lines and fulfills transaction requests from applications through the file management system; supports a Tandem system as a supervisor or tributary in a multipoint network, and as a station in a point-to-point network ● supports asynchronous, bisynchronous, ADM-2, TINET, Burroughs, IBM SDLC, and ISO HDLC protocols ● includes: a Trace Facility that records line events in a trace table; maintains line statistics as long as line is in use; provides test programs to verify that communications are functioning properly.

Pricing & Support ● this package is bundled into the hardware system charge.

□ Expand, T16/90X7

Type ● operating system networking extension.

Host Software Environment ● Tandem Guardian Operating System.

Host Hardware Environment ● Tandem NonStop, NonStop II packaged system.

Installation Data ● first installed 1976 ● unknown number of users ● international distribution through direct sales and service offices.

Description ● an extension to Tandem Guardian Operating System to supply networking capabilities ● supports up to 255 nodes, each composed of from 2 to 16 processors for a theoretical limit of 4080 processors ● supports end-to-end protocol for ensuring data integrity from sender to receiver; provides multiple communication paths between nodes; supports a Network Control Process at each node for automatic best path routing to other nodes and for network status logging ● includes a set of network utilities to monitor the network, trace data paths through the network, track events, display network statistics, and determine status of individual processors in the network.

Pricing & Support ● $2,000 one-time fee for license purchase; $100 basic monthly service charge ● maintenance support provides local on-site remedial maintenance and installation of software

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updates through partitioned operation so as not to interrupt user processing.

■ TEXAS INSTRUMENTS INC

P.O. Box 1444, Houston, TX 77001 • 512-250-7305.

□ Texas Instruments DNCS (Distributed Network Communications System)

Type • Texas Instruments to IBM SNA interface facility.

Host Software Environment • Texas Instruments DNOS (general-purpose, multitasking distributed network operating system).

Host Hardware Environment • Texas Instruments DS 990 Model 4 or larger with 512K bytes of memory, 4-Channel Communications Controller, dedicated non-switched line, and a synchronous modem.

Installation Data • first installed 1981 • unknown number of users • worldwide distribution through direct company sales and service offices.

Description • allows Texas Instruments systems to appear to IBM SNA network mainframes as standard (PU Type 2) IBM controllers and devices • supports up to 8 4-Channel Communications Controllers (FCCC), where each FCCC can handle up to 4 communications lines; FCCC handle all line protocol functions; supports a maximum aggregate line speed for each FCCC of 19.2K bps.

Pricing & Support • $7,100 one-time license fee includes documentation and one-year Subscription Support Service; ongoing annual fee for Subscription Support Service (SSS); SSS provides subscribers with additional features or improvements to software products plus Texas Instruments Customer Support Telephone Line.

■ TRANSACTION DATA SYSTEMS

5750 Major Boulevard, Orlando, FL 32819 • 305-351-1210.

□ PNF (Packet Networking Facility)

Type • task-to-task interface for Perkin-Elmer 3200 and 1600 users.

Host Software Environment • Perkin-Elmer OS/32 or ZDLC (3200) operating system; accommodates BASIC, FORTRAN, COBOL, RPG, and assembler.

Host Hardware Environment • any Perkin-Elmer 3200 or 1600 Series computer with 12.5K bytes of memory and asynchronous adapter.

Installation Data • first installed 1980 • 4 current users.

Description • provides complete protocol and network management facilities for establishing and operating a distributed processing environment among Perkin-Elmer (P-E) 3200 and 1600 Series systems; PNF is a packet system; intersystem communications are based on a 2- or 4-wire full-duplex implementation of an ADCCP subset; host software is based on P-E's ZDLC facility in the 3200 Series; maximum packet size is 4096 bytes, of which approximately 12 fields are reserved for control and other overhead functions; physical connections among networked processors are defined as trunks; no more than one trunk can exist between any 2 processors; each trunk can consist of up to 8 variable-speed physical lines; line protocol is full-duplex asynchronous control mode (ACM) with basic one-byte address and control fields; asynchronous balanced mode (ABM) will become the preferred mode when ABM support is incorporated into ZDLC; PNF supports a maximum of 256 logical channels within the physical framework of trunks; logical channel operations can be conducted in connected or message mode; connected-mode channels are semipermanent and support full-function task-to-task communications; message mode channels are transient simplex linkages designed for auxiliary nontask message/data transfers; each message transfer is limited to 64 bytes • general network management is based on a 6-level priority scheme combined with a "grade-of-service" algorithm; the middle 4 priority levels are used for channel assignments; the first and last levels are reserved for system use; up to 6 users can be line multiplexed within each priority level; the grade of service algorithm guarantees that each priority level is serviced at 1:2 ratio relative to its next highest level; the

worst-case servicing ratio between the lowest and the highest priority levels during maximum traffic conditions is thus 8:1; multiplexed users within each priority level are serviced through a nonpreferential circular queue; each processor node in PNF functions as a pass-through switch for packets not addressed to the processor.

Pricing & Support • license available purchase only for $5,000 each system (minimum of 2) • no charge first-year maintenance; $50 monthly maintenance after first year • quantity discount available • source code available for additional fee.

■ TRIANGLE SOFTWARE COMPANY

4340 Stevens Creek Boulevard, Suite 108, San Jose, CA 95129 • 408-554-8121.

□ NetCheck

Type • CICS network manager.

Host Software Environment • IBM OS/VS1, MVS, DOS/VSE; CICS/VS 1.5 or above and VSAM required.

Host Hardware Environment • IBM System/370, 4300, and 308X systems with 3270 or compatible terminals.

Installation Data • new product in 1984.

Description • provides control over a CICS network; creates and maintains an inventory of all user network resources; menus and preformatted displays are provided to input profile information on all user network terminals, control units, and lines allowing the user to add, change, delete, or review the profiles at any time • system has preformatted displays for creating groups and profiles of groups; up to 2,000 individual resources can be put into any one group with any individual resource appearing in up to 25 different groups; actions can be performed on groups as well as on individual resources; information on resources or groups can be accessed from a 3270 or compatible terminal at any time • NetCheck contains an automatic status checking facility for exception reporting of a resource failure.

Pricing & Support • one-time license purchase price is $8,500 for DOS/VSE sites and $12,500 for OS/VS sites; lease plans are available: for DOS/VSE sites at $779 monthly for one-year lease, $448 monthly for 2-year lease, and $399 monthly for 3-year lease; for OS/VS sites at $1,146 monthly for one-year lease, $718 monthly for 2-year lease, and $587 monthly for 3-year lease • first-year maintenance is included in purchase price; second and subsequent years at 15% of the then-current purchase price • one User's Guide included in purchase, with additional copies available at $15 each.

■ UNIQUE AUTOMATION PRODUCTS

15401 Redhill Avenue, Suite G, Tustin, CA 92680 • 714-730-1012.

□ UAP-LINK

Type • file transfer using telecommunications.

Host Software Environment • IBM OS/VS, VM/370; CMS, TSO; Digital Equipment VAX/VMS, RSX-11M, RSTS; TSX-PLUS or RT; UNIX.

Host Hardware Environment • IBM 370-class mainframes, IBM PC; DEC PDP-11, VAX, Rainbow 100 with VT-180, Victor 9000/Sirius.

Installation Data • first installed 1982 • over 150 current users • international distribution.

Description • a communications file transfer software product line designed to move binary or text files between mixed or matched computers using standard ports; can link micro and minicomputers to each other or to mainframes; a reliable protocol corrects line errors and compresses transmitted data; files are ready to be used as stored with no conversion programs required; UAP-LINK's virtual user facility permits remote timesharing system commands to be stored in a local command file; user can then develop automatic procedures to logon to the remote system, inject several commands, execute the host module, transfer several files, logoff, and disconnect from the modem to simplify the job • additional

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features include data compression, independent device defaults, file protection, and a smart terminal mode.

Pricing & Support ● license purchase price range is $250 to $1,500 based on a single computer system including documentation ● discounts are available for multiple CPU configurations.

■ XI SYSTEMS TECHNOLOGY, INC

P.O. Box 46126, Cincinnati, OH 45246 ● 513-771-6263.

□ DSNM

Type ● network manager with mainframe-mini-micro link.

Host Software Environment ● IBM MVS, DOS/VSE, EDX, PC-DOS.

Host Hardware Environment ● IBM System/370-class and compatible mainframes; Series/1 through System/36, and the IBM PC; requires 370X/3725 communications controller.

Installation Data ● first installed 1983 ● 370 sites.

Description ● a distributed systems network manager available in 3 versions: level 1 version provides batch processing facilities to workstations in a very large distributed network via a level 3 host mainframe; level 1 is available for both microcomputers and minicomputers ● level 2 version for micro- and minicomputers permits the interactive execution of programs or supervisor commands, or execution of a background job stream on any other DSNM-equipped computer in the network ● level 3 version has all the features of levels 1 and 2, plus multiple-switched line support, auto-answer/auto-dial support, transmission queueing/scheduling facility, local/remote error diagnostic support program and in-transit file processing, master system console support, and store-and-forward capability for routing data sets to one or more locations in the network.

Pricing & Support ● license purchase price for the mainframe version is $25,000; for the minicomputer version is $1,035 and for the PC version is $325 including documentation ● maintenance charge after the first year is $75 per month for the mainframe version; $18 per month for the minicomputer version.

Communications & Networking
Other Terminal Control Software

This subsection contains profiles on a variety of miscellaneous terminal, network, and general communications software products. Included in this category are communications access methods, local and/or remote terminal configuration managers, and descriptions of the various network and packet protocols being used in today's computer installations. Some of the products listed in this survey section are dependent on the existence of other products. Where this is the case, a Special Features section of the profile will identify these dependencies.

Most of the products listed in this subsection are designed to operate with mainframe or minicomputer hardware systems, although there are some microcomputer-oriented packages listed herein; especially where a supported communications network is composed of a mainframe host and microprocessor nodes.

Communications & Networking
Other Terminal Control Software

#	COMPANY • PRODUCT	TYPE	IBM DOS/VS-Based	IBM OS/VS1 & SVS	IBM MVS-Based & VM	IBM Small Systems	Burroughs MCP Systems	DEC PDP-11 Systems	DEC VAX/VMS	Data General Systems	Hewlett-Packard MPE/RTE	Honeywell GCOS 6/7/8	Honeywell MOD 200/400/600	Sperry Corp 100 OS	Wang VS/DOS	OTHER COMPUTERS	#
1	The ADESSE Corp • TSS	term simulation subsys			•	•											1
2	AST Research, Inc • AST-PCOX	IBM 3278/79 term emul	•	•	•												2
3	Burroughs • Power/RJE Remote Term	terminal emulator					•										3
4	Burroughs • Remote HASP Environ	remote term simulator					•										4
5	Burroughs • Remote Job Entry	RJE fac/Burroughs hosts					•										5
6	CECORP (Comp Enhance Corp) • CEMOS	online distrib process														NCR VRX	6
7	CGA Software • GCD	mult console supp	•	•	•												7
8	Clyde Digital • CALOUT	comp-to-comp comm						•	•								8
9	Clyde Digital • CONTRL	rem user monitor							•								9
10	Clyde Digital • DEMO	interactive supp tool							•								10
11	Clyde Digital • DOC	loc term mgr							•								11
12	Clyde Digital • WINDOW	term control/VAX users							•								12
13	Comm-Pro Asso • IBM 3705 Perf Enhn	perf enhancement	•	•	•	•											13
14	Computer Auto • IBM 3270 Emulator	term/con emulator														SyCLOPS	14
15	Computer Auto • IBM 3780 Emulator	RJE emulator														SyCLOPS	15
16	Computer Auto • IBM 360/20 HASP	workstation emulator														SyCLOPS	16
17	Computer Auto • IBM SNA PU	Type 2 emulator														SyCLOPS	17
18	Computer Auto • X.25 Emulator	CCITT comm support														SyCLOPS	18
19	Computer Projects • Fox/V	turnkey elec message											•				19
20	Computer Toolware, Inc • VTS/IMAS	interact mainfrm access											•				20
21	Cross Information • MATRIX	electronic mail			•	•											21
22	Data General • AOS RCX 70	3270 emulator								•							22
23	Data General • DG/SNA-3270	3270 emulator								•							23
24	Data General • HASP-II	IBM HASP workstation								•							24
25	Data General • IC/RJE 80	2780/3780 emulator								•							25
26	Data General • RDA	X.25 interface								•							26
27	Data General • RIA	X.25 interface								•							27
28	Data General • RJE 80	2780/3780 emulator								•							28
29	Data General • XODIAC/VTA/RMA/FTA	X.25 interface								•							29
30	Data General • X.25	X.25 protocol layer								•							30
31	Datanex • HASP+	workstation emulator							•	•							31
32	DEC • DECsystem 2780/3780 ET	2780/3780 emulator							•								32
33	DEC • MUX-200-VAX	multiterm emulator							•								33
34	DEC • SNA Protocol Emulator	SNA interface							•								34
35	DEC • TOPS-20 2780/3780/HASP	emulator							•								35
36	DEC • VAX-11 2780/3780	2780/3780 emulator							•								36
37	DEC • VAX-11 3271	3271 protocol emulator							•								37
38	DEC • 2780 Protocol Emulator	2780 emulator						•									38
39	DEC • 2780/3780 Protocol Emulator	2780/3780 protocol emul						•	•								39
40	DEC • 3271 Protocol Emulator	3271 emulator						•									40
41	Ergonomic • ERGOLINX 2780/3780	2780/3780 term emul														Apple II	41
42	Ergonomic • ERGOLINX 3270	3270 term emul														Apple II	42
43	Evans, Griffiths & Hart • TAM	terminal manager						•	•								43
44	Ferox Microsystems • LogOn	micro-to-mini/mnfrm														Apple II	44
45	Firesign Computer Co • COMM/1 Series/1	comp-to-comp comm				•											45
46	Four-Phase Sys • ATS/IV	asynch term emulator														MFE/IV	46
47	Gamma Tech • GT-70/AOS Central Site	3270 emulator								•							47
48	Gamma Tech • GT-70/AOS Display Monitor	3271/3275 emulator								•							48
49	Gamma Tech • IBM HASP MRJE	HASP-RJE emulator								•							49
50	Gamma Tech • IBM Workstation X780	2780/3780 RJE emulator								•							50

Communications & Networking
Other Terminal Control Software

COMPANY ● PRODUCT	TYPE	IBM DOS/VS-Based	IBM OS/VS1 & SVS	IBM MVS-Based & VM	IBM Small Systems	Burroughs MCP Systems	DEC PDP-11 Systems	DEC VAX/VMS	Data General Systems	Hewlett-Packard MPE/RTE	Honeywell GCOS 6/7/8	Honeywell MOD 200/400/600	Sperry Corp 1100 OS	Wang VS/DOS	OTHER COMPUTERS	
1 Gamma Tech ● CDC Workstation 200	CDC 200 emulator	—	—	—	—	—	—	—	●	—	—	—	—	—		1
2 Gamma Tech ● Sperry Workstation 1004	Sperry 1004 emulator	—	—	—	—	—	—	—	●	—	—	—	—	—		2
3 Gamma Tech ● Sperry Workstation NTR	Sperry NTR emulator	—	—	—	—	—	—	—	●	—	—	—	—	—		3
4 George W Hallahan ● XCHANGE-11	mini/micro file trans	—	—	—	—	—	—	●	—	—	—	—	—	—		4
5 Gould Inc ● HASP Remote Workstation	IBM HASP workstation	—	—	—	—	—	—	—	—	—	—	—	—	—	MPX-32	5
6 GTE Telenet ● DMEP	X.25 gateway	●	●	●	—	—	—	—	—	—	—	—	—	—		6
7 H&W Computer ● SYSM	elect mail/messg dist	●	●	●	—	—	—	—	—	—	—	—	—	—		7
8 Hewlett-Packard ● Asynchronous Multiplex	asynchronous comm	—	—	—	—	—	—	—	—	●	—	—	—	—		8
9 Hewlett-Packard ● IML/3000	IBM 3270 emulation	—	—	—	—	—	—	—	—	●	—	—	—	—		9
10 Hewlett-Packard ● LINK/125	file transfer fac	—	—	—	—	—	—	—	—	●	—	—	—	—		10
11 Hewlett-Packard ● MRJE/1000	HASP workstation emul	—	—	—	—	—	—	—	—	●	—	—	—	—		11
12 Hewlett-Packard ● MRJE/3000	remote job entry mgmt	—	—	—	—	—	—	—	—	●	—	—	—	—		12
13 Hewlett-Packard ● RJE/1000 Software	remote job entry mgmt	—	—	—	—	—	—	—	—	●	—	—	—	—		13
14 Hewlett-Packard ● RJE/3000	IBM 2780/3780 term emul	—	—	—	—	—	—	—	—	●	—	—	—	—		14
15 Honeywell ● HASP II	workstation emulator	—	—	—	—	●	—	—	—	—	—	●	—	—		15
16 Honeywell ● Communication & File	comm mgr	—	—	—	—	—	—	—	—	—	—	●	—	—		16
17 Honeywell ● IBM BSC Transport Fac	comm mgr	—	—	—	—	—	—	—	—	—	—	●	—	—		17
18 Honeywell ● Programmable Facility	3270 emulator	—	—	—	—	—	—	—	—	—	—	●	—	—		18
19 Honeywell ● Remote Terminal SuperII	gen interface	—	—	—	—	—	—	—	—	—	—	●	—	—		19
20 Honeywell ● Terminal Presentation	term emulation fac	—	—	—	—	—	—	—	—	—	—	●	—	—		20
21 Honeywell ● X.25 Public Data Network	comm mgr	—	—	—	—	—	—	—	—	—	—	—	●	—		21
22 Honeywell ● 2780/3780 Workstation	workstation emulator	—	—	—	—	—	—	—	—	—	—	●	—	—		22
23 Horizon Data Sys ● RIFLE	file transfer facility	—	—	—	—	●	—	—	—	—	—	—	—	—		23
24 Horizon Data Sys ● Virtual Terminal	virt conn local/remote	—	—	—	—	●	—	—	—	—	—	—	—	—		24
25 IBM S/370 ● ACF/TCAM-OS/VS	network comm	—	●	●	—	—	—	—	—	—	—	—	—	—		25
26 IBM S/370 ● ACF/VTAM OS/DOS VS/VSE	network comm	●	●	●	—	—	—	—	—	—	—	—	—	—		26
27 IBM S/370 ● BTAM-ES	enhancement	●	—	—	—	—	—	—	—	—	—	—	—	—		27
28 IBM S/370 ● DOS/VSE RJE	DOS/VSE-to-OS/VS RJE	●	●	●	—	—	—	—	—	—	—	—	—	—		28
29 IBM S/370 ● Host Interact Store Comm	host comm/IBM 3651	—	—	●	—	—	—	—	—	—	—	—	—	—		29
30 IBM S/370 ● JEP & FTP	job entry	●	—	—	—	—	—	—	—	—	—	—	—	—		30
31 IBM S/370 ● Passthrough	3270 emulator	—	●	●	—	—	—	—	—	—	—	—	—	—		31
32 IBM S/370 ● RSCS Network Program	spool & comm enhance	—	●	●	—	—	—	—	—	—	—	—	—	—		32
33 IBM S/370 ● VCNA	SNA BSC support	—	●	●	—	—	—	—	—	—	—	—	—	—		33
34 IBM S/370 ● VSE/3270 Bisynchronous Pass	3270 emulator	●	—	—	—	—	—	—	—	—	—	—	—	—		34
35 IBM S/38 ● Message Switching	S/38 electronic message	—	—	—	●	—	—	—	—	—	—	—	—	—		35
36 IBM S/34 ● MRJE Utility	BSC RJE support	—	—	—	●	—	—	—	—	—	—	—	—	—		36
37 IBM S/34 ● SRJE Utility	SNA/SDLC support	—	—	—	●	—	—	—	—	—	—	—	—	—		37
38 IBM S/1 ● CPS BSC Support	BSC comm utility	—	—	—	●	—	—	—	—	—	—	—	—	—		38
39 IBM S/1 ● CPS Intelligent Term SubSys	comm mgr	—	—	—	●	—	—	—	—	—	—	—	—	—		39
40 IBM S/1 ● CPS RJE	RJE support	—	—	—	●	—	—	—	—	—	—	—	—	—		40
41 IBM S/1 ● EDX Communications Fac	BSC comm support	—	—	—	●	—	—	—	—	—	—	—	—	—		41
42 IBM S/1 ● EDX Terminal Communications	ASCII interface	—	—	—	●	—	—	—	—	—	—	—	—	—		42
43 IBM S/1 ● EDX RJE	RJE suport	—	—	—	●	—	—	—	—	—	—	—	—	—		43
44 IBM S/1 ● RPS BSC Remote Mgmt	remote-host link util	—	—	—	●	—	—	—	—	—	—	—	—	—		44
45 IBM S/1 ● RPS MRJE	MRJE mgr	—	—	—	●	—	—	—	—	—	—	—	—	—		45
46 IBM S/1 ● RPS RJE	RJE mgr	—	—	—	●	—	—	—	—	—	—	—	—	—		46
47 IBM S/1 ● SVS/1	S/1 videotex support	—	—	—	●	—	—	—	—	—	—	—	—	—		47
48 IBM S/1 ● Text Routing	office comm controller	—	—	—	●	—	—	—	—	—	—	—	—	—		48
49 Informatics General ● TAPS	multisystem term opp	●	●	●	—	—	—	—	—	●	—	—	—	—	Prime PRIMOS	49
50 Interactive Systems ● CONNECT	minicomp rem connect	—	—	—	—	—	—	—	—	—	—	—	●	—		50

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Other Terminal Control Software

#	COMPANY • PRODUCT	TYPE	IBM DOS/VS-Based	IBM OS/VS1 & SVS	IBM MVS-Based & VM	IBM Small Systems	Burroughs MCP Systems	DEC PDP-11 Systems	DEC VAX/VMS	Data General Systems	Hewlett-Packard MPE/RTE	Honeywell GCOS 6/7/8	Sperry Corp MOD 200/400/600	Sperry Corp 1100 OS	Wang VS/DOS	OTHER COMPUTERS	#
1	Interactive Systems • FTP	interactive file trans							•								1
2	Interactive Systems • INremote/HASP	emulation IBM/HASP/ASP						•									2
3	Interactive Systems • SPOCNET	interprocess comm						•	•								3
4	Kolinar Corp • K3101	emulator for IBM 3278-2				•											4
5	Labyrinth Systems • TEL*M	retrieve update			•												5
6	Lexico Enterprises • DPG/Link	comm link pgr									•						6
7	MDS Qantel • BSCDRIV	BSC enhancement														Qantel BEST	7
8	MDS Qantel • RJE/A	IBM S/3 MRJE emulator														Qantel BEST	8
9	MDS Qantel • TTY-43	TTY-43 emulator														Qantel BEST	9
10	MDS Qantel • 2780 DRW	IBM 2780 emulator														Qantel BEST	10
11	MDS Qantel • 3270 DRW	IBM 3270 emulator														Qantel BEST	11
12	MDS Qantel • 3740 DRW	IBM 3740 emulator														Qantel BEST	12
13	MDS Qantel • 3780 DRW	IBM 3780 emulator														Qantel BEST	13
14	BI Moyle • BIMCMPRS	data compression fac	•	•	•												14
15	BI Moyle • BIMECHO	screen dupl/demo fac	•														15
16	BI Moyle • BIMP 3270	screen print fac	•														16
17	BI Moyle • BIMSPOOL	printer spooler	•	•													17
18	BI Moyle • BIMSPOON	TP-to-batch spooler	•	•													18
19	BI Moyle • BIMSWAP	term switching fac	•														19
20	NCR/Comten • Data Link Control (DLC)	DLC-MIM	•	•	•											NCR Comten 3600	20
21	NCR/Comten • Data Switching (DSS)	support for data messg	•	•	•											NCR Comten 3600	21
22	NCR/Comten • Emulation Processing (EP)	comm emulation	•	•	•											NCR Comten 3600	22
23	NCR/Comten • Extended Start/Stop (SSI)	asynchronous comm	•	•	•											NCR Comten 3600	23
24	NCR/Comten • IMPAD	messages logon/logoff	•	•	•											NCR Comten 3600	24
25	NCR Corp • Remote Batch Subsys	IBM term emulator														NCR 9020	25
26	Nixdorf Computer • S811 Batch Comm	synchronous comm														Nixdorf NIROS	26
27	On-Line Software Int'l • DB/LINK	mini-to-micro link				•											27
28	Pacific Software • X.DOT	source code X.25														"C" Compiler	28
29	Pennington Systems • SCRNIO/11	screen form library						•	•								29
30	Pennington Systems • VIDIO/11	lib/term/indep video						•	•								30
31	Perkin-Elmer • 2780/3780 RJE	2780/3780 emulator														PE OS/32	31
32	Polygon Associates • Poly-BSC/RJE	PC emul IBM 2780/3780	•	•	•			•								CP/M	32
33	Polygon Associates • Poly-BSC/3270	PC emul IBM 3270	•	•	•			•								CP/M	33
34	Polygon Associates • Poly-COM	DEC term emul/trans	•	•	•			•								IBM PC	34
35	Polygon Associates • Poly-TRM/VT	asynchronous term emul	•	•	•											CP/M	35
36	Polygon Associates • Poly-XFR	asynchronous file trans	•	•	•			•	•							CP/M	36
37	Prime Computer • RJE GRTS	HIS GRTS simulator														Prime PRIMOS	37
38	Prime Computer • RJE HASP	HASP II emulator														Prime PRIMOS	38
39	Prime Computer • RJE X80	2780/3780 emulator														Prime PRIMOS	39
40	Prime Computer • RJE 1004	1004 RPT emulator														Prime PRIMOS	40
41	Prime Computer • RJE 200 UT	CDC 200 UT emulator														Prime PRIMOS	41
42	Prime Computer • RJE 7020	ICL 7020 RBT emulator														Prime PRIMOS	42
43	SIS Sundata • SRPF	remote printing			•												43
44	Softron Inc • ICM	interactive comm mon				•											44
45	Softsystems • OLS	security pkg CICS/VS	•		•											req CICS/VS	45
46	Software Dynamics • SDOS/MT	micro operating sys														Motorola 6800/6809	46
47	Softworks Inc • VTF	term shar/switch fac	•	•	•												47
48	Sperry Corp • CS 1100	comm simulator												•			48
49	Sperry Corp • PCCS	comm sys application												•			49
50	Sperry Corp • RPS 1100	remote database access												•			50

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Communications & Networking
Other Terminal Control Software

COMPANY • PRODUCT	TYPE	IBM DOS/VS-Based	IBM OS/VS1 & SVS	IBM MVS-Based & VM	IBM Small Systems	Burroughs MCP Systems	DEC PDP-11 Systems	DEC VAX/VMS	Data General Systems	Hewlett-Packard MPE/RTE	Honeywell GCOS 6/7/8	Honeywell GCOS 200/400/600	Sperry Corp MOD 1100 OS	Wang VS/DOS	OTHER COMPUTERS	
1 Sperry Corp • TSS	terminal security mgr												•			1
2 Sperry Corp • UNIDAS*MESSAGE	message switching												•			2
3 Standard Software • DIALOGUE	total terminal supp						•									3
4 Supersoft, Inc • TERM II	micro comm														CP/M	4
5 Tandem • AM3270 Access Method	IBM term interface														Tandem GUARDIAN	5
6 Tandem • AM6520 Access Method	asynchronous comm														Tandem GUARDIAN	6
7 Tandem • Exchange Remote Batch	IBM workstation emul														Tandem GUARDIAN	7
8 Tandem • TR 3271 Access Method	IBM cluster emul														Tandem GUARDIAN	8
9 Texas Instruments • DX10 3270 ICS	2170 emulator														TI-DX10	9
10 Texas Instruments • 3780/2780 Comm	2780/3780 comm														TI-DX10	10
11 TRAX Softworks • TSF	3270 terminal emulator			•												11
12 Unique Information • MMS/1	message switching				•											12
13 VisiCorp • VisiTerm	comp-to-comp comm fac														Apple II, II Plus	13
14 VM Personal Computing • PLEASE/RELAY	asynchronous comm			•											IBM PC & PC/XT	14
15 Wang • VS 2780/3780 Protocol Emulation	2780/3780 emulator													•		15
16 Wang • VS 3270 Emulation	3270 emulator													•		16
17 Wang • VS 3274 Emulation	3274 emulator													•		17
18 Wang • VS 3777 Emulation	3777 emulator													•		18
19 Wang • Wang 2200 IBM 2780/3780 Emul	2780/3780 protocol													•		19
20 Wang • Wang 2200 3271 BSC Emulation	emulator IBM 3271													•		20
21 Wang • Wang 2200 3274 Emulation	emulator IBM 3274													•		21

■ THE ADESSE CORPORATION

P.O. Box 607, Ridgefield, CT 06877 • 203-431-3071.

☐ TSS (Terminal Simulation Subsystem)

Type • terminal simulation subsystem for CMS environment.

Host Software Environment • IBM VM/CMS/SP Releases 2 and 3 and CMS/BSE.

Host Hardware Environment • IBM System/370-class mainframe or compatible computer with ACU on a Telegraph Terminal Control Type II line, direct connect line, or interfaced to TYMNET, Telenet, or Datapac network; requires 393K bytes of virtual memory.

Installation Data • first installed 1982 • 55 installations • international distribution.

Description • TSS provides the CMS user with the ability to communicate as a TTY terminal to an external host computer system; communication is via an ACU connected to an asynchronous line attached to the virtual machine; TSS can transmit input from the user's console to the external host computer, and output from the host can be displayed, directed to a file, or to the VM spooling subsystem; TSS command sequences can be filed and reused; APL terminal emulation is provided; exit routines may be included to incorporate security and accounting functions; a telephone directory may be constructed to permit associations of names with telephone numbers or network destinations; TSS handles call initiation and termination, file communication, and environment control.

Pricing & Support • $5,300 one-time license purchase per CPU plus 1% per month for maintenance; $240 monthly lease includes maintenance, documentation, and source code are provided • educational institution discounts are allowed; contact vendor for details.

■ AST RESEARCH, INC

2121 Alton Avenue, Irvine, CA 92714 • 714-863-1333.

☐ AST-PCOX

Type • IBM 3278/3279 terminal emulator.

Host Software Environment • IBM DOS/VS(E), OS/VS1, OS/VS2(MVS).

Host Hardware Environment • IBM remote BSC or SNA/SDLC 3274/3276 Terminal Control or channel attached 3274.

Installation Data • first installed 1983 • unknown number of installations • international distribution.

Description • AST-PCOX allows the IBM PC to emulate the IBM 3278 Models 2, 3, and 4 and the IBM 3279 Models 2A and 3A (if a color display adapter is installed); only one model at a time can be emulated, however model types can be stored for switching from one to another; host software changes are not required • PWF (Professional Workstation Facility) is an optional program which enables the IBM PC to use SPF-like menu selections for file transfers to the host; AST-PCOX includes interfacing subroutines which are used with the file transfer utility to facilitate user-written PC applications that directly interface with host applications supporting existing 3278/3279 terminals.

Pricing & Support • one-time license purchase cost is $1,145 • documentation is included • source code is not available.

Communications & Networking
Other Terminal Control Software

■ BURROUGHS CORPORATION
Burroughs Place, Detroit, MI 48232 ● 313-972-7000.

☐ POWER/RJE Remote Terminal Program

Type ● terminal emulator that allows B 1900 to be connected to an IBM System/370-type host running DOS/POWER.

Host Software Environment ● Burroughs MCP II (Native Mode Master Control Program).

Host Hardware Environment ● Burroughs B 1900 Series system.

Installation Data ● first installed 1980 ● unknown number of users ● worldwide distribution through Burroughs sales/service offices.

Description ● provides support for a B 1900 to function as an online remote batch terminal connected to an IBM System/370-type host running under DOS with POWER; it emulates an IBM 2770 remote workstation ● provides support for: multiprogramming of POWER/RJE and local processing; submitting of jobs to the central system for execution; obtaining and changing job status; deleting jobs from the system; deferring output delivery; requesting printer/punch output to conform to special forms; and directing output to the central system by a remote user ● output can be discontinued/restarted/cancelled; remote user can send/receive messages to/from central system; transfer of data to central site can be in transparent or nontransparent mode; and there are page restart capabilities ● supports point-to-point bisynchronous line protocol, switched/leased lines, auto-answer, EBCDIC transparent/nontransparent transmission, space compression/expansion, buffer expansion, extended retry transmission, terminal identification option, and remote printer/punch/reader devices are supported.

Pricing & Support ● $1,430 one-time fee for perpetual license; $138 monthly fee for 12-month payout plan; $48 monthly fee for 3-year term license that includes maintenance service; $275 annual fee for maintenance ● service includes updates and new releases.

☐ Remote HASP Environment Simulator

Type ● HASP remote terminal simulator.

Host Software Environment ● Burroughs MCP II (Native Mode Master Control Program), or CMS-MCP (Computer Management System-Master Control Program).

Host Hardware Environment ● Burroughs B 1900, B 900, B 90, CP 9500.

Installation Data ● unknown number of users ● worldwide distribution through Burroughs sales/service offices.

Description ● provides the required Message Control System (MCS) and line procedures for Network Definition Language (NDL) to generate a data communications handler that will simulate a HASP remote terminal ● allows the system to function as a remote batch terminal, online to an IBM System/360 or /370 host computer; batch work can be multiprogrammed with HASP simulation ● features include simulation of IBM system with 1 output line printer, 1 output card punch, and 1 input card reader plus console printer; communication of data can be effected in transparent or nontransparent mode; there are provisions for handling of non-compressed data, compression of spaces only, or the compression of all duplicate characters; supports data links ranging from 2400 to 9600 bps; controls output data streams for line printers that require special forms; and dynamically controls output data streams to provide optional utilization of output peripherals.

Pricing & Support ● $1,430 one-time fee for perpetual license; $138 monthly fee for 12-month payout plan; $48 monthly fee for 3-year term license that includes maintenance service; $275 annual fee for maintenance service ● service includes updates and new releases.

☐ Remote Job Entry to Burroughs Hosts

Type ● RJE facilities for Burroughs hosts.

Host Software Environment ● Burroughs MCP II (Native Mode Master Control Program), or CMS-MCP (Computer Management System-Master Control Program).

Host Hardware Environment ● Burroughs B 1900, B 900, B 90, CP 9500.

Installation Data ● unknown number of users ● worldwide distribution through Burroughs sales/service offices.

Description ● a variety of utilities that enables the system to be used as a remote terminal to any of the larger Burroughs mainframes ● features include support for entry of a job at the system for execution by the central (host) computer; programs are monitored and controlled using the system printer or display console; all print and punch output is transmitted back to the remote system.

Pricing & Support ● $1,349 one-time fee for perpetual license; $131 monthly fee for 12-month payout plan; $46 monthly fee for 3-year term license that includes maintenance service; $171 annual fee for maintenance service ● service includes updates and new releases.

■ CECORP (COMPUTER ENHANCEMENT CORPORATION)
3189-E Airway Avenue, Costa Mesa, CA 92626 ● 800-854-6861; in CA 714-754-0521.

☐ CEMOS (Computer Enhancement Modular Online System)

Type ● online distributed processing system for NCR VRX mainframe.

Host Software Environment ● NCR VRX mainframes and CP/M-based microcomputers; requires VRX COBOL and NEAT VS; NCR-compatible polled or non-polled networks may be installed in remote sites.

Host Hardware Environment ● NCR V Series and microcomputers under CP/M control; RS-232 communication capabilities.

Installation Data ● first installed 1981 ● over 20 installations ● international distribution.

Description ● CEMOS provides selective mainframe file extraction in order to create work files for downloading to a CEMOS-supported microcomputer in formats required by CP/M applications; promotes online distributed processing and general-purpose micro-to-NCR mainframe communication while acting on each computer's database information ● NCR markets this product as STARSTREAM.

Pricing & Support ● first-year license charge is $20,000 for the mainframe and $2,000 per microcomputer version, with a discount for multiple micros; thereafter, the annual fee is 20% of the first-year price; the license agreement includes all documentation, updates, service, and support.

■ CGA SOFTWARE
Software Products Group; 1100 Fifth Avenue South, Suite 310, Naples, FL 33940 ● 813-263-5011.

☐ GCD (Global Console Director)

Type ● multiple console support across system lines.

Host Software Environment ● IBM OS/VS1, OS/VS2(SVS), OS/VS2(MVS) operating systems.

Host Hardware Environment ● IBM System/370, 3000, 4300, and compatible computers.

Installation Data ● first installed 1980 ● 500 installations ● international distribution.

Description ● makes provisions for consoles physically attached to any one system to be logically connected to any other system, or simultaneously to any set of systems ● supports full console capabilities, which includes receiving any desired class of messages, as well as command entry and response ● commands may be executed on any system by specifying a generalized GCD routing prefix; operators can reply to any outstanding WTOR across system boundaries; and any system or console can receive messages from any other vendor.

Pricing & Support ● $5,400 annual lease or $9,000 purchase includes maintenance; minimum one-year lease per site ● source code not available.

Communications & Networking
Other Terminal Control Software

■ CLYDE DIGITAL SYSTEMS

3707 North Canyon Road, Suite 3E, Provo, UT 84604 • 801-224-5306.

□ CALOUT

Type • computer-to-computer communications package.

Host Software Environment • DEC RSTS/E, VAX/VMS, and RSX.

Host Hardware Environment • DEC PDP-11, VAX-11.

Installation Data • first installed 1980 • 1,000 current users • international distribution.

Description • communication package that allows dial-up of another computer from a terminal connected to the host processor; access to the remote system is accomplished by simply entering the phone number at a terminal connected to the system running CALOUT; once connected, the user has the ability to move files from one system to the other; all types of disk files may be moved between the computers in either direction, including binary program files; error-checking facilities ensure the validity of transferred data • the package works with any acoustically coupled modem and baud rate; a special optional modem, that runs at either 300 or 1200 baud, is also supported, as are TWX and Telex systems.

Pricing & Support • one-time license purchase price is $1,500; no lease or rental plans are available • source code is not available.

□ CONTRL (Remote User Monitoring Facility)

Type • general-purpose system security, system management, and user training tool for DEC PDP-11 users.

Host Software Environment • DEC RSTS/E and VMS operating system; supports BASIC PLUS and BASIC PLUS-II.

Host Hardware Environment • DEC PDP-11 and VAX-11 computers with 128K bytes of memory.

Installation Data • first installed 1977 • 500 current users • international distribution.

Description • standalone package; can be used by system manager to interactively monitor a user (remote or local) without user's awareness and without interrupting the job currently running; input by manager and user and output by system are displayed on both terminals; manager can also interactively instruct a remote user who requests assistance with program; either can enter terminal input to the program; CONTRL creates and prints a log file for the job session that is monitored; file contains all manager and user input and terminal output.

Pricing & Support • license available purchase only; RSTS at $950 and VMS at $1,600 purchase price includes documentation and hot-line installation assistance • no maintenance plan offered • source code is not available.

□ DEMO

Type • interactive training and support tool.

Host Software Environment • DEC VAX/VMS operating system.

Host Hardware Environment • DEC VAX-11 Series systems.

Installation Data • first installed November 1980 • over 100 installations • international distribution.

Description • provides interactive user training and troubleshooting facilities • allows a technical manager to monitor, from his terminal, what a particular user is doing at his own terminal; anything keyed or displayed on either terminal will be reflected on both terminals • with this tool the technical manager can "walk" a user through any particularly troublesome area, guiding him over the rough spots • a special log file automatically records the entire interactive user support session; all keystrokes that were entered from either terminal are underlined to distinguish them from computer responses; log files can be printed and kept for future reference.

Pricing & Support • license purchase only; $950 purchase price includes documentation and hot-line installation assistance • no maintenance plan offered • source code is not available.

□ DOC (Session Monitor & Terminal Expander Facility)

Type • terminal control manager for DEC PDP-11 users.

Host Software Environment • DEC RSTS/E operating system; supports BASIC PLUS and BASIC PLUS-II.

Host Hardware Environment • any DEC PDP-11 computer with 128K bytes of memory and 44K bytes of disk.

Installation Data • first installed 1980 • 200 current users • international distribution.

Description • can expand one terminal into 4 effective interactive terminals; controls up to 4 different interactive job sessions on any terminal, thus permitting interactive multitasking from a single keyboard; creates a separate log file for each session capturing all user-entered data, including control characters and system-generated data; permits user to selectively include descriptive text into the log file without affecting the current session.

Pricing & Support • license available purchase only for $650; includes documentation and telephone installation assistance • annual maintenance fee is 10% of prevailing purchase price • source code is not available.

□ WINDOW

Type • terminal control system for VAX users.

Host Software Environment • DEC VAX/VMS.

Host Hardware Environment • DEC VAX-11 Series.

Installation Data • first installed 1984 • number of installations unknown.

Description • expands a terminal's interactive capability under the DEC VMS operating system; provides job status by specifying the name of the window to open; the terminal screen becomes a window to each job session; users may move from job to job at any time without affecting the jobs in progress.

Pricing & Support • license purchase available for $1,200; includes 60-day maintenance, documentation, and telephone assistance.

■ COMM-PRO ASSOCIATES

638 14th Street, Manhattan Beach, CA 90266 • 213-376-1344.

□ IBM 3705 Performance Enhancements

Type • performance enhancement packages for IBM 3704/3705 communications controllers.

Host Software Environment • any IBM operating system that supports 3704/3705 or Amdahl 4705 communication controllers.

Host Hardware Environment • any IBM System/370, 3000, 4300, or compatible computer.

Installation Data • first installed 1973 • over 200 users • worldwide distribution.

Description • packages are based on building block approach that forms a logical pyramid, beginning with the basic enhancement package and becoming more sophisticated as the design criteria become more sophisticated • Speed Select (PP01) module allows 3705-connected TWX terminals to operate at baud rates of 10, 15, 30, or 120 cps on the same synchronous line interface; supports IBM 2741s on the same interface providing the host access method accommodates both device types on single Unit Control Block address • Code Conversion (PP02) module provides ASCII-to-BCD or Correspondence code conversion facilities permitting TWX terminals to interface with host systems that support 2740-1 or 2741 terminals • Speed Select module with Code Conversion (PP03) is a combination of PP01 and PP02 • Network Facilities (PP04) module includes all PP03 facilities and functions as a compatible multiplexing controller between a low-speed line interface and mixed protocol/speed/address subchannel on the 3705-resident console control program • NCP Virtual Line Switch

Communications & Networking
Other Terminal Control Software

(VLSW) module includes PP04 facilities and provides support for an asynchronous terminal user to have unrestricted selective access to any number of NCP or EP host applications over the same communications line ● the system provides a Dual Host Support facility which accommodates 2 Type 4 channel adapters ● X.25 Network Access Support (NAS) module includes VLSW facilities while providing an SNA X.25 gateway and permitting asynchronous and IBM 3270-type terminals to access host IBM systems through X.25-based network ● TYMNET Network Access Support (TAS) module is designed for worldwide TYMNET users, providing support for 3705 users to interface to TYMNET packet-switched networks; supports remote asynchronous terminal-to-3705 communications via a BSC line with TYMNET-designed 2790-like protocol ● please refer to the 900 section for a detailed analysis of this product.

Special Features ● 10 mix and match options can be appended to the basic packages; some options are mutually exclusive of certain packages, some are standard options, and others are added as no-cost options ● Multiple Host Support option supports 4 Type 4 channel adapters ● PEP option supports multiple Type 4 channel adapters (EP support in an NCP environment) ● CONS option provides 3705 operator console support ● STAT option provides EP statistics support ● SPCM option provides special CWW processing ● TEKG option provides Tektronix graphics support ● PTSO option provides TSO paper tape spooling ● XL41 option provides BCD/Correspondence translation.

Pricing & Support ● all licenses available lease only; $100 (PP01), $125 (PP02), $150 (PP03), $225 (PP04), $425 (VLSW), $600 (NAS), $200 (Multiple-Host), $100 (PEP for PP04), $200 (PEP for NAS), $50 (SPCM), $40 (TEKG), $50 (PTSO), $50 (XL41) monthly use fee that includes maintenance and all changes required to support the IBM operating system, program modifications, and Program Temporary Fixes; educational discounts are available for PP04, VLSW, and NAS packages; 30-day free trial is available.

■ COMPUTER AUTOMATION
2181 Dupont Drive, Irvine, CA 92713 ● 714-833-8830.

☐ IBM 3270 Emulator

Type ● 3270 terminal controller emulator.

Host Software Environment ● Computer Automation SyCLOPS (SyFA Concurrent Logic Operating System).

Host Hardware Environment ● Computer Automation SyFA 200/300/1000/2000 packaged system with Bisynchronous Communications feature.

Installation Data ● first installed 1975 ● unknown number of users ● worldwide distribution through direct company sales and service offices.

Description ● provides IBM 3270 emulation; supports up to 15 terminals operating in 3270 mode; interfaces with SyBOL programs to send or receive RJE-type messages to mainframes; supports intermingling of batch data with interactive 3270 communications.

Pricing & Support ● $5,000 one-time license fee, $550 installation charge.

☐ IBM 3780 Emulator (RJE)

Type ● 3780 emulator for RJE operations.

Host Software Environment ● Computer Automation SyCLOPS (SyFA Concurrent Logic Operating System).

Host Hardware Environment ● Computer Automation SyFA 200/300/1000/2000 packaged system with Bisynchronous Communications feature.

Installation Data ● first installed 1975 ● unknown number of users ● worldwide distribution through direct company sales and service offices.

Description ● supports communications in bisynchronous point-to-point mode with mainframe computer or with another SyFA system by emulating IBM 3780 RJE protocol; supports communications concurrently with other applications work; under RJE fa-

cility, SyFA system appears as emulated hardware as seen from the remote computer.

Pricing & Support ● $2,000 one-time license fee, $250 installation charge.

☐ IBM 360/20 HASP Workstation Emulator (RJE)

Type ● HASP workstation emulator for RJE operations.

Host Software Environment ● Computer Automation SyCLOPS (SyFA Concurrent Logic Operating System).

Host Hardware Environment ● Computer Automation SyFA 200/300/1000/2000 packaged system with Bisynchronous Communications feature.

Installation Data ● first installed 1975 ● unknown number of users ● worldwide distribution through direct company sales and service offices.

Description ● supports communications in bisynchronous point-to-point mode with mainframe computer or with another SyFA system by emulating IBM 360/20 HASP workstation; supports communications concurrently with other applications work; under RJE facility, SyFA system appears as emulated hardware as seen from the remote computer.

Pricing & Support ● $2,500 one-time license fee, $350 installation charge.

☐ IBM SNA PU Type 2 Emulator

Type ● emulator.

Host Software Environment ● Computer Automation SyCLOPS (SyFA Concurrent Logic Operating System).

Host Hardware Environment ● Computer Automation SyFA 200/300/1000/2000 packaged systems.

Installation Data ● first installed 1979 ● unknown number of users ● worldwide distribution through direct company sales and service offices.

Description ● provides IBM PU Type 2 controller emulation; allows SyFA system and IBM systems to share the same multipoint communications line; SNA communications can be initiated and/or received through any of the terminals running applications on the SyFA system; special read and write commands in the SyBOL language are used to send or receive information to the emulator; supports all SNA commands and SDLC protocol including bit stuffing, CRC checking, and message framing.

Pricing & Support ● $7,500 one-time license fee, $1,000 installation charge.

☐ X.25 Emulator

Type ● CCITT X.25 communications support package.

Host Software Environment ● Computer Automation SyCLOPS (SyFA Concurrent Logic Operating System).

Host Hardware Environment ● Computer Automation SyFA 200/300/1000/2000 packaged system.

Installation Data ● first installed 1981 ● unknown number of users ● worldwide distribution through direct company sales and service offices.

Description ● establishes communications from programs running on SyFA systems with other SyFA or vendor systems that support the CCITT X.25 standard protocol.

Pricing & Support ● $7,500 one-time license fee, $1,000 installation charge.

■ COMPUTER PROJECTS, INC
9-B Terrace Way, 4 Seasons Executive Center, Greensboro, NC ● 919-292-4820.

☐ Fox/V

Type ● turnkey electronic message and data communication system.

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Other Terminal Control Software

Host Software Environment • Honeywell GCOS 6; Custom Computer Projects Inc operating system.

Host Hardware Environment • Honeywell Level 6/DPS 6; requires a minimum 128K-byte memory and dual disks.

Installation Data • first installed 1968 • over 70 users • international distribution.

Description • integrated multifunction system for use in message communication, data communication, and office automation; applications include message switch (store-and-forward and conversational/core), electronic mail, X.25 packet-switching networks, mailbox, automated office controller, data collection and distribution, data switch/remote concentrator/host front end, remote job entry (RJE) workstation, and CRJE • the FOX provides a means to integrate all existing communications facilities into a single compatible entity; allows universal data exchange among all terminals, hosts, and networks, thereby providing all elements with global communications capability, each having access to electronic mail and office automation facilities; incompatible word processors can exchange documents or word processors, and can send and receive international TELEX and mailgrams; allows access to one or more host processors on a conversational basis; networking allows multiple FOX systems and other remote systems to communicate with each other.

Special Features • computer conferencing, PC workstations, bulletin boards, video text information services, and electronic mail.

Pricing & Support • the system is available on a turnkey basis starting at $150,000; customization price is based on time and degree of difficulty • source code is available.

■ COMPUTER TOOLWARE, INC

4227 Monroe Street, Toledo, OH 43606 • 419-473-1573.

□ VTS/IMAS (Virtual Terminal System/Interactive Mainframe Access System)

Type • Hewlett-Packard 3000 to IBM mainframes interactive access.

Host Software Environment • HP MPE III, IV, V; HP DSN/IMF.

Host Hardware Environment • HP 3000 Series.

Installation Data • first installed 1981 • over 20 installations • international distribution.

Description • VTS/IMSA utilizes the HP DSN/IMF (Distributed Systems Network/Interactive Mainframe Facility) as the basis for emulation of IBM 3270-type terminals on the HP 3000 Series; the PASSTHRU program uses block-mode data transfer and allows HP terminals to emulate IBM 327X displays and printers • VTS/IMAS uses character-mode data transfer to reduce HP 3000 CPU time; it provides files of preprogrammed dialogues between IMAS and mainframe application(s), a print file for IBM screen images, and a trace file that can be used when designing automatic dialogs; the configuration file adapts IMAS to different environments without program modification whenever an IMAS program is executed; automatic dialogs may be created by HP 3000 batch programs for file/message transfer.

Pricing & Support • one-time license purchase of $7,500 includes documentation; the annual maintenance fee is $1,500; training services at the user site are available, contact vendor for details; source code is not available.

■ CROSS INFORMATION COMPANY

934 Pearl Street, Suite B, Boulder, CO 80302 • 303-444-7799.

□ MATRIX

Type • electronic mail/message and teleconferencing system for DEC users.

Host Software Environment • any DEC operating system.

Host Hardware Environment • operates on any DEC computer with any ASCII-compatible video or hardcopy terminal with zero parity; Apple, PET, TRS-80, other microcomputers, and certain word processing equipment can also access MATRIX with the proper software and communications hardware.

Installation Data • first installed 1981 • 50 trial users.

Description • menu-based system for sending and receiving private messages and public information, and for conferencing • categories of public messages include national events calendar, corporate or local events calendar, and submission of items to a journal or newsletter.

Pricing & Support • available on either a purchase or timesharing basis; purchase price: $15,000, timesharing fee: $25 per hour • maintenance plus updates and enhancements available for $2,000 per year • no training or technical assistance necessary to use the package; training and help are contained in the system.

■ DATA GENERAL

4400 Computer Drive, Westboro, MA 01581 • 617-366-8911.

□ AOS RCX 70

Type • emulator for IBM 3270 Information Display Systems.

Host Software Environment • Data General AOS (Advanced Operating System) or AOS/VS (Advanced Operating System/Virtual Storage).

Host Hardware Environment • Data General Eclipse (16-bit and 32-bit) processors • AOS version requires processor with 256K bytes of memory, a Dasher display, and a synchronous multiplexer with CRC option • AOS/VS version requires processor with 1M bytes of memory, 50M bytes of disk storage, terminal, 9-track magnetic tape unit, and Character Synchronous Interface with a Data Control Unit.

Installation Data • first installed 1977 • unknown number of users • worldwide distribution through direct sales and service offices.

Description • supports interactive tasks and communications with IBM 360/370 systems via IBM bisynchronous protocol and 3270 screen commands • supports 16 local/remote terminals, which can be used for program development, applications, or RCX 70 applications • can interface with Data General Interactive Data Entry/Access (IDEA) and INFOS II (file management) software packages for accessing capabilities • supports line speeds up to 9600 bps • 2 versions available.

Pricing & Support • $6,010 one-time license fee (both versions) and $360 Comprehensive Software Support (CSS) annual fee or $180 documentation software support (DSS) annual fee • CSS is in effect for 90 days following shipment of software; provides assistance with problem diagnosis, identification, and temporary corrections or bypasses if software is inoperable; also provides updates, additions, corrections, software news, and documentation • Software Trouble Reporting (STR) is free; STR provides for submitting software difficulties to Data General for resolution • source listings available for $10,000; documentation available on tape or disk.

□ DG/SNA-3270 (AOS/VS-AOS)

Type • IBM 3270 Information Display System emulator and interface to IBM SNA networks.

Host Software Environment • Data General AOS/VS (Advanced Operating System/Virtual Storage) or AOS (Advanced Operating System); requires DG/SNA-SDLC (basic SNA communications protocol software-link layer) and DG/SNA-SNA (transmission/data flow/path control layers).

Host Hardware Environment • AOS/VS version: Data General Eclipse (32-bit) system with 1M bytes of memory, 96M bytes of disk storage, Dasher display, Model 4251 communications chassis, Bit Synchronous Interface, and a dedicated Data General Data Control Unit • AOS version: Data General Eclipse (16-bit) system with 512K bytes of memory, 10M bytes of disk storage, a Dasher display, a Model 4251 communications chassis, a Bit Synchronous Multiplexer, and a dedicated Data General Control Unit.

Installation Data • first installed 1981 • unknown number of users • worldwide distribution through direct sales and service offices.

Description • provides IBM 3270 Information Display System emulation • executes interactive tasks and communicates with IBM SNA networks while supporting all IBM 3270 screen commands for reading and writing • supports 3278 terminals, 3286 Data Stream

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Other Terminal Control Software

Compatible printer, and 3289 SCS printer; 3278 terminal emulator allows a Dasher terminal to appear as an IBM 3278 to the network; both 3286 and 3289 printer emulators accept print data from the host, format it to the particular printer type, and pass output to the print spooler ● 2 versions available.

Pricing & Support ● $2,000 (VS), $1,950 (AOS) one-time license fee and $400 (VS), $300 (AOS), Comprehensive Software Support (CSS) annual fee, or $200 (VS), $180 (AOS), Documentation Software Support (DSS) annual fee ● CSS is in effect for 90 days following shipment of software; provides assistance in problem diagnosis, identification, and temporary corrections or bypasses if the software is inoperable; includes all DSS provisions; DSS provides updates, additions, corrections, software news, and documentation ● Software Trouble Reporting (STR) is free; STR provides for submitting software difficulties to Data General for resolution.

☐ HASP-II

Type ● IBM HASP workstation emulator.

Host Software Environment ● Data General AOS (Advanced Operating System) or AOS/VS (Advanced Operating System/Virtual Storage), RDOS (Real-time Disk Operating System), DOS (Disk Operating System), or RTOS (Real-Time Operating System).

Host Hardware Environment ● Data General Eclipse (16-bit) processor with 256K bytes of memory, any compatible terminal, 10M bytes of hard disk, real-time clock, interval timer, mag tape or diskette drive, and SLM 2 or ULM 5 with CRC generator/checker or DCU ● Data General Eclipse (32-bit) processor with 1M bytes of memory, 50M bytes of disk storage, a terminal, 9-track magnetic tape unit, and Character Synchronous Interface with a Data Control Unit ● Data General Nova processor with 32K bytes of memory, hard disk (under RDOS) or diskette (DOS) or card reader (RTOS), real-time clock, a printer, and synchronous multiplexer ● Data General microNova with 32K bytes (RTOS) or 64K bytes (DOS) of memory, diskette or hard disk, synchronous interface, and printer (RTOS), or terminal (DOS).

Installation Data ● first installed 1977 ● unknown number of users ● worldwide distribution through direct sales and service offices.

Description ● a workstation emulator utility that supports communications from Data General processors to IBM System/360/370 or other Data General computers by emulating an IBM HASP workstation ● supports HASP, ASP, JES command format; multileaves up to 7 input and 7 output data streams using IBM bisync line protocol; supports full data compression, full use of Data General I/O devices, vertical forms control simulation for printer operation, and CRC polynomial; spooler feature provides temporary storing on disk until printer is available; line speed is a function of multiplexer or control unit on the system.

Pricing & Support ● one-time license fee is $1,300 (Eclipse); $2,925 (Nova); $2,320 (microNova) ● Comprehensive Software Support (CSS) is $300 (Eclipse); $1,200 (Nova); $360 (microNova) ● Documentation Software Support (DSS) is $150 (Eclipse) and $180 (microNova) ● CSS is in effect for 90 days following shipment of software; provides assistance with problem diagnosis, identification, and temporary corrections or bypasses if software is inoperable; includes all DSS provisions; DSS provides updates, additions, corrections, software news, and documentation ● Software Trouble Reporting (STR) is free; STR provides for submitting software difficulties to Data General for resolution ● source listings are available.

☐ IC/RJE 80

Type ● emulator for IBM 2780/3780 RJE terminals.

Host Software Environment ● Data General ICOS (Interactive COBOL Operating System) or RDOS (Real-time Disk Operating System).

Host Hardware Environment ● any Data General CS/CB (Commercial System/Commercial Basic) packaged system or Nova packaged system; requires synchronous communications option.

Installation Data ● first installed 1977 ● unknown number of users ● worldwide distribution through direct sales and service offices.

Description ● supports 4 types of remote job entry including point-to-point between a CS/CB system emulating a 2780/3780 terminal and an IBM-compatible or another Data General computer, and multipoint Data General systems emulating 3780 slave terminals and an IBM-compatible host or Data General System running IC/RJE 80 ● provides information on names of files being processed and on the number of records transmitted; features automatic answering with dial-up lines, transparent mode transmission for exchange of nonprinting files, and space compression.

Pricing & Support ● $2,400 (Nova), $1,575 (CS) one-time license fee; Comprehensive Software Support is in effect for 90 days following shipment of software and is available for an annual service charge of from $150 to $950 depending on system and media of distribution ● source listings not available; reproduction of software and documentation is available on tape or disk.

☐ RDA (Remote DG/DBMS Agent) AOS/VS-AOS

Type ● communications software interface to CCITT X.25 protocol for remote DBMS operations.

Host Software Environment ● Data General AOS/VS (Advanced Operating System/Virtual Storage) or AOS (Advanced Operating System); requires X.25 (AOS/VS-AOS) software and DG/DBMS software.

Host Hardware Environment ● AOS/VS version: Data General Eclipse (32-bit) system with 1M bytes of memory, 96M bytes of disk storage, magnetic tape drive, console device, and Multiprocessor Communications Adapter or Synchronous Line Multiplexer with CRC option ● AOS version: Data General Eclipse (16-bit) system with 256K bytes of memory, a terminal, 10M bytes of disk storage, real-time clock, interval timer, 9-track magnetic tape drive, and Multiprocessor Communications Adapter or Synchronous Line Multiplexer with CRC option.

Installation Data ● first installed 1981 ● unknown number of users ● worldwide distribution through direct sales and service offices.

Description ● provides remote access to DG/DBMS database files using DG/DBMS DML commands as if attached to a local database ● runs as a single process on each host; DG/DBMS software must be running on system where the databases reside ● 2 versions available.

Pricing & Support ● $1,630 one-time license fee (both versions) and $330 Comprehensive Software Support (CSS) annual fee, or $105 Documentation Software Support (DSS) annual fee ● CSS is in effect for 90 days following shipment of software; provides assistance with problem diagnosis, identification, and temporary corrections or bypasses if the software is inoperable; includes all DSS provisions; DSS provides updates, additions, corrections, software news, and documentation ● Software Trouble Reporting (STR) is free; STR provides for submitting software difficulties to Data General for resolution.

☐ RIA (Remote INFOS II Agent) AOS/VS-AOS

Type ● communications software interface to CCITT X.25 protocol for remote INFOS II file operations.

Host Software Environment ● Data General AOS/VS (Advanced Operating System/Virtual Storage), AOS (Advanced Operating System), or RDOS (Real-time Disk Operating System); requires X.25 (AOS/VS-AOS) software and INFOS II software.

Host Hardware Environment ● AOS/VS version: Data General Eclipse (32-bit) system with 1M bytes of memory, 96M bytes of disk storage, magnetic tape drive, console device, and Multiprocessor Communications Adapter or Synchronous Line Multiplexer with CRC option ● AOS version: Data General Eclipse (16-bit) system with 256K bytes of memory, a terminal, 10M bytes of disk storage, real-time clock, interval timer, 9-track magnetic tape drive, and Multiprocessor Communications Adapter or Synchronous Line Multiplexer with CRC option.

Installation Data ● first installed 1981 ● unknown number of users ● worldwide distribution through direct sales and service offices.

Description ● provides remote access to Data General INFOS II files; runs as a single process on each host; INFOS II data man-

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agement software must be running on system where INFOS II files are residing ● 2 versions available.

Pricing & Support ● $1,630 one-time license fee (both versions) and $330 Comprehensive Software Support (CSS) annual fee or $110 Documentation Software Support (DSS) annual fee ● DSS is in effect for 90 days following shipment of software; provides assistance with problem diagnosis, identification, and temporary corrections or bypasses if the software is inoperable; includes all DSS provisions; DSS provides update, additions, corrections, software news, and documentation ● Software Trouble Reporting (STR) is free; STR provides for submitting difficulties to Data General for resolution.

☐ RJE 80

Type ● emulator for IBM 2780/3780 terminals.

Host Software Environment ● Data General AOS (Advanced Operating System) or AOS/VS (Advanced Operating System/Virtual Storage), RDOS (Real-time Disk Operating System), DOS (Disk Operating System), or RTOS (Real-Time Operating System).

Host Hardware Environment ● Data General Eclipse (16-bit) processor with 256K bytes of memory, a terminal, 10M bytes of disk storage, real-time clock, interval timer, 9-track magnetic tape unit or diskette drive, and synchronous multiplexer with CRC generator/checker ● Data General Eclipse (32-bit) processor with 1M bytes of memory, 50M bytes of disk storage, a terminal, 9-track magnetic tape unit, and Character Synchronous Interface with a Data Control Unit ● Data General Nova processor with 32K bytes of memory, hard disk (under RDOS) or diskette (DOS) or card reader/diskette (RTOS), real-time clock, a printer, and synchronous multiplexer ● Data General microNova with 32K bytes (RTOS) or 64K bytes (DOS) of memory, diskette or hard disk, synchronous interface, and printer (RTOS) or terminal DOS.

Installation Data ● first installed 1977 ● unknown number of users ● worldwide distribution through direct sales and service office.

Description ● supports point-to-point and multipoint communications to and from IBM 360/370 or another Data General computer ● features include space compression, horizontal format control, vertical format control, and cyclic redundancy check polynomial with automatic retransmission ● 3 versions available.

Pricing & Support ● $2,050 (AOS-AOS/VS) or $2,000 (RDOS-DOS-RTOS) one-time license fee and $360 (AOS-AOS/VS) or $360 (RDOS-DOS-RTOS) Comprehensive Software Support (CSS); or $180 (AOS-AOS/VS) or $180 (RDOS-DOS-RTOS) Documentation Software Support (DSS) ● CSS is in effect for 90 days following shipment of software; provides assistance with problem diagnosis, identification, and temporary corrections or bypasses if software is inoperable; includes all DSS provisions; DSS provides updates, additions, corrections, software news, and documentation ● Software Trouble Reporting (STR) is free; STR provides for submitting software difficulties to Data General for resolution ● source listings are available for $1,000 (AOS-AOS/VS) or $250 (RDOS-DOS-RTOS).

☐ XODIAC/VTA/RMA/FTA (AOS/VS-AOS-RDOS)

Type ● communications software interface to CCITT X.25 protocol for user-oriented remote resource access function management.

Host Software Environment ● Data General AOS/VS (Advanced Operating System/Virtual Storage), AOS (Advanced Operating System), or RDOS (Real-time Disk Operating System); requires X.25 (AOS/VS-AOS-RDOS) software.

Host Hardware Environment ● AOS/VS version: Data General Eclipse (32-bit) system with 1M bytes of memory, 96M bytes of disk storage, magnetic tape drive, console device, and Multiprocessor Communications Adapter or Synchronous Line Multiplexer with CRC option ● AOS version: Data General Eclipse (16-bit) system with 256K bytes of memory, a terminal, 10M bytes of disk storage, real-time clock, interval timer, 9-track tape drive, and Multiprocessor Communications Adapter or Synchronous Line Multiplexer with CRC option ● RDOS version: Data General Eclipse (16-bit) system with 64K bytes of memory, a terminal, hard disk real-time clock, Multiprocessor Communications Adapter, or Synchronous Line Multiplexer with CRC option.

Installation Data ● first installed 1979 ● unknown number of users ● worldwide distribution through direct sales and service offices.

Description ● functional layer of network performing user-oriented access functions consists of 3 modules ● VTA (Virtual Terminal Agent) allows a terminal on a local system to appear as if connected to a remote process; VTA establishes the connection with the remote system; remote process can be user application, CLI (Command Line Interpreter) command, or a utility program ● RMA (Resource Management Agent) allows users to access remote files, devices, or processes; runs as a single process on each host on behalf of all local and remote users ● FTA (File Transfer Agent) allows a user to transfer files across a XODIAC network using the operating system's user name/password name, and to transfer file access controls across the entire network ● 2 versions available.

Pricing & Support ● $8,465 one-time license fee (both versions) and $1,200 Comprehensive Software Support (CSS) annual fee or $180 Documentation Software Support (DSS) annual fee ● CSS is in effect for 90 days following shipment of software; provides assistance with problem diagnosis, identification, and temporary corrections or bypasses if the software is inoperable; includes all DSS provisions; DSS provides updates, additions, corrections, software news, and documentation ● Software Trouble Reporting (STR) is free; STR provides for submitting software difficulties to Data General for resolution.

☐ X.25 (AOS/VS-AOS-RDOS)

Type ● basic communications enhancement; provides CCITT X.25 protocol connection layer.

Host Software Environment ● Data General AOS/VS (Advanced Operating System/Virtual Storage), AOS (Advanced Operating System), or RDOS (Real-time Disk Operating System).

Host Hardware Environment ● AOS/VS version: Data General Eclipse (32-bit) system with 1M bytes of memory, 96M bytes of disk storage, magnetic tape drive, console device, and Multiprocessor Communications Adapter or Synchronous Line Multiplexer with CRC option ● AOS version: Data General Eclipse (16-bit) system with 256K bytes of memory, a terminal, 10M bytes of disk storage, real-time clock, interval timer, 9-track tape drive, and Multiprocessor Communications Adapter or Synchronous Line Multiplexer with CRC option ● RDOS version: Data General Eclipse (16-bit) or Nova or microNova system with 64K bytes of memory, a terminal, hard disk, real-time clock, Multiprocessor Communication Adapter, or Synchronous Line Multiplexer with CRC option.

Installation Data ● first installed 1979 ● unknown number of users ● worldwide distribution through direct sales and service offices.

Description ● supports multiple switched or permanent virtual circuits between Data General processes and X.25-based processes; connections can be via private, leased, or switched communication facilities with X.21 bisynchronous/RS-232C interface, Data General Multiprocessor Communication Adapter (MCA), or public packet-switched network ● supports both character-oriented and bit-oriented HDLC protocols ● 3 versions available.

Special Features ● this package is a prerequisite for Data General XODIAC, RIA, and RDA ● please refer to descriptions in this section.

Pricing & Support ● $1,760 (all versions) one-time license fee or $360 (all versions) Comprehensive Software Support (CSS) annual fee; or $180 Documentation Software Support (DSS) ● CSS is in effect for 90 days after shipment of software; provides assistance with problem diagnosis, identification, and temporary corrections or bypasses if the software is inoperable; includes all DSS provisions ● DSS provides updates, additions, corrections, software news, and documentation ● Software Trouble Reporting (STR) is free; STR provides for submitting software difficulties to Data General for resolution.

■ DATANEX

P.O. Box 30008, Eugene, OR 97403 ● 503-687-2520.

☐ HASP+

Type ● HASP workstation emulator for DEC PDP-11 and VAX users.

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Host Software Environment ● DEC RSX-11M/-11M+, or VMS; supports FORTRAN and assembler.

Host Hardware Environment ● any DEC PDP-1 or VAX computer; requires a DEC DVP-11 synchronous interface; 14K words of memory, and 500K bytes of disk storage.

Installation Data ● PDP-11 version first installed 1984; VAX version first installed 1981 ● 600 current users ● international distribution.

Description ● connects DEC PDP-11 and VAX computers to other DEC systems, to alien mainframes, and to networks by permitting DEC hardware to emulate a HASP workstation; input streams can be labeled-batch and can be queued on disk; up to 7 print and punch streams are accommodated; several automatic console functions are supported for screening and reponse sequences, and automatic dialing/sign-on features are standard.

Pricing & Support ● license available purchase only for $5,000 (PDP-11 Version) or $5,500 (VAX Version); quantity discounts available ● no charge first-year maintenance; 15% of prevailing purchase price after first year ● source code available $1,000 additional.

■ DIGITAL EQUIPMENT CORPORATION
146 Main Street, Maynard, MA 01754 ● 617-897-5111.

☐ DECsystem 2780/3780 ET (TOPS-10/-20)

Type ● IBM 2780/3780 terminal emulator for DECsystems.

Host Software Environment ● DEC TOPS-10 (multiuser, multiprogramming, virtual storage operating system); DEC TOPS-20 (multiuser, multiprogramming, virtual storage operating system).

Host Hardware Environment ● TOPS-10 version: DECsystem 10 packaged system with front-end processor; TOPS-20 version: DECsystem 20 packaged system with front-end processor.

Installation Data ● first installed 1977 ● unknown number of users ● distributed through direct sales and service offices in all major cities.

Description ● supports remote job entry to IBM 360/370 where DECsystem appears to be a 2780/3780 terminal ● host system must be running OS/VS2(SVS), HASP II(MVS), JES2(SVS), or OS/MVT HASP II or OS/MVT ASP ● supports jobs submitted from 2780/3780 terminals ● supports up to 6 synchronous communications lines at transfer rates up to 40K bps; interfaces can be AT&T 201C, 208A, 208B, 209A, or 303 modems as well as ICC COM LINK II modems ● 2 versions available.

Pricing & Support ● $8,600 (both versions) one-time license fee and $132 monthly maintenance service charge ● 90-day warranty period is provided during which time defects are remedied on-site by temporary corrections or emergency bypass; ongoing remedial work handled by normal service channels with updating provided for user implementation.

☐ DEC MUX-200-VAX Multiterminal Emulator

Type ● RJE off-load control facility.

Host Software Environment ● DEC VAX/VMS (multiuser, multiprogramming, virtual memory operating system).

Host Hardware Environment ● any DEC VAX-11 packaged system with a DUP11 synchronous communications interface.

Installation Data ● first installed 1978 ● unknown number of users ● distributed through direct company sales and service offices in all major cities.

Description ● provides the ability for an interactive terminal to control remote job entry or to communicate at command level with a host system using 200 UT Mode 4A communications protocol in either ASCII or BCD ● supports file transfers to/from any DEC VAX-11 supported mass storage, unit record, or terminal device; host system can off-load programs such as file editing to local processing on DEC VAX/VMS systems ● supports up to 16 simultaneous users over a single physical point on a switched or dedicated leased 2- or 4-wire common carrier facility at up to 9600 bps; communicates with a CDC 6000 CYBER series or other host

computer system capable of using 200 UT Mode 4A communications protocol in either ASCII or BCD.

Pricing & Support ● $8,100 one-time license fee; includes maintenance service ● 90-day warranty is provided, during which time defects are remedied on-site by temporary correction or emergency bypass; ongoing remedial work is handled by normal service channels with updating provided for user implementation.

☐ DEC SNA Protocol Emulator

Type ● DEC PDP-11 to IBM SNA interface facility

Host Software Environment ● DEC RSX-11M (multiuser, multiprogramming operating system).

Host Hardware Environment ● DEC PDP-11 system with 128K bytes of memory and a synchronous communications line.

Installation Data ● first installed 1980 ● unknown number of users ● distributed through direct company sales and service offices in all major cities.

Description ● provides the ability to communicate with an IBM Systems Network Architecture network by emulating an IBM 3790 programmable cluster controller; communicates with an IBM application on a task-to-task basis ● 3 levels of support are: Emulator Control, which is a restricted subset of a type 1 interactive session on the IBM 3790 cluster controller; Extended Emulator Control, which is a restricted subset of a type 2 interactive session; and Application Control, which gives direct access to SNA protocol.

Pricing & Support ● $10,000 one-time license fee; includes maintenance service ● 90-day warranty is provided, during which time defects are remedied by temporary corrections or emergency bypass; ongoing remedial work is handled by normal service channels with updates provided for user implementation.

☐ DEC TOPS-20 2780/3780/HASP

Type ● IBM 2780/3780/HASP terminal emulator.

Host Software Environment ● DEC TOPS-20 (multiuser, multiprogramming, virtual storage operating system).

Host Hardware Environment ● any DECsystem 20 packaged system with synchronous communications line.

Installation Data ● first installed 1978 ● unknown number of users ● distributed through direct sales and service offices in all major cities.

Description ● supports remote job entry to IBM 360/370 where DECsystem appears to be a 2780/3780/HASP (multileaving) terminal ● host system must be running OS/VS2(SVS), HASP II(MVS), JES2(SVS), or OS/MVT HASP II or OS/MVT ASP ● supports jobs submitted from 2780/3780/HASP terminals ● supports up to 6 synchronous communications lines at transfer rates up to 40K bps; interfaces can be AT&T 201C, 208A, 208B, 209A, or 303 modems as well as ICC COM LINK II modems.

Pricing & Support ● $10,000 one-time license fee and $117 monthly maintenance service charge ● 90-day warranty period is provided, during which time defects are remedied on-site by temporary corrections or emergency bypass; ongoing remedial work handled by normal service channels with updating provided for user implementation.

☐ DEC VAX-11 2780/3780 Protocol Emulator

Type ● IBM 2780/3780 terminal emulator for DEC VAX systems.

Host Software Environment ● DEC VAX/VMS (multiuser, multiprogramming, virtual memory operating system).

Host Hardware Environment ● DEC VAX-11 packaged system with a synchronous communications interface.

Installation Data ● first installed 1978 ● unknown number of users ● distributed through direct company sales and service offices in all major cities.

Description ● provides the ability for sharing a communication line among several users; allows users to transfer files to/from another system equipped to handle 2780 or 3780 communications protocols; supports automatic answering; command procedures

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can be combined to form sophisticated control sequences ● supports a maximum of 4 physical lines, each with a different set of attributes, at up to 9600 bps per line; emulates synchronous line protocol used by 2780/3780 batch terminals.

Pricing & Support ● $6,400 one-time license fee; includes maintenance service ● 90-day warranty is provided, during which time defects are remedied on-site by temporary correction or emergency bypass; ongoing remedial work handled by normal service channels with updating provided for user implementation.

☐ DEC VAX-11 3271 Protocol Emulator

Type ● 3271 protocol emulator.

Host Software Environment ● DEC VAX/VMS (multiuser, multiprogramming, virtual memory operating system).

Host Hardware Environment ● any DEC VAX-11 Series system (except VAX-11/782) with 512K bytes of memory and a DUP11 synchronous communication interface.

Installation Data ● unknown number of users ● distributed through direct company sales and service offices in all major cities.

Description ● provides IBM 3271 protocol emulation enabling user programs to communicate interactively with other user programs running on an IBM host System/370-type processor ● communications discipline is the 3271 subset of IBM's Binary Synchronous Communications (BSC) protocol using EBCDIC code.

Pricing & Support ● $7,500 one-time license fee; includes maintenance service ● 90-day warranty is provided, during which time defects are remedied on-site by temporary correction or emergency bypass; ongoing remedial work handled by normal service channels with updating provided for user implementation.

☐ DEC 2780

Type ● IBM 2780 terminal emulator for DEC PDP-11 systems.

Host Software Environment ● DEC RSX-11M (multiuser, multiprogramming operating system); RSTS/E or CTS-500 (multiuser, multitasking operating system).

Host Hardware Environment ● RSX-11M version: any PDP-11 with 16K bytes of user memory, communications arithmetic unit, and a synchronous interface ● RSTS/E and CTS-500 version: any PDP-11 with 16K bytes of user memory, communications arithmetic unit, and a synchronous line interface.

Installation Data ● first installed 1976 ● unknown number of users ● distributed through direct company sales and service offices in all major cities.

Description ● emulates communications protocol of an IBM 2780 device ● features include: transmission from card reader or disk storage devices; spooling or queueing transmission requests; maximum 400-character block size; up to 7 records per block; binary or EBCDIC transmission; and maximum line speed of 4800 bps ● 2 versions available.

Pricing & Support ● $6,400 (RSX-11M), $7,000 (RSTS/E) one-time license fee; includes maintenance service ● 90-day warranty is provided during which time defects are remedied on-site by temporary correction or emergency bypass; ongoing remedial work is handled by normal service channels with updates provided for user implementation.

☐ DEC 2780/3780 Protocol Emulator

Type ● IBM 2780/3780 remote job entry terminal emulator for DEC PDP-11 and Datasystem.

Host Software Environment ● DEC RT-11 (disk-based single-user operating system); CTS-300 (disk-based single-/multiuser operating system); CTS-500 (multiuser, multitasking operating system).

Host Hardware Environment ● RT-11 version: any PDP-11 with a synchronous interface ● CTS-300 versions: DEC Datasystem 320 with 56K bytes of memory and FB or SJ monitor, or Datasystem 330, 340, or 350 with SJ or XM monitor ● RSTS/E and CTS-500 versions: any PDP-11 with 56K bytes of memory.

Installation Data ● first installed 1976 ● unknown number of users ● distributed through direct company sales and service offices.

Description ● emulates IBM 2780/3780 RJE terminal functions for transmission over synchronous lines ● supports communications to IBM System/360/370 or another DEC system with 2780/3780 emulation capability ● appears as a 2780 Model 2 or 3780 data transmission terminal in a point-to-point data link ● 4 versions available.

Special Features ● CTS-300 version operates at 9600 bps for Datasystem 330, 340, and 350, and at 4800 bps for Datasystem 320; includes DUV11-DD or DUP11-DA communications hardware.

Pricing & Support ● $3,500 (RT-11), $7,000 (RSTS/E) one-time license fee; includes maintenance service ● 90-day warranty is provided, during which time defects are remedied on-site by temporary correction or emergency bypass; ongoing remedial work handled by normal service channels with updates provided for user implementation.

☐ DEC 3271

Type ● IBM 3271/3277 display terminal system emulator for DEC PDP-11 and Datasystem.

Host Software Environment ● DEC RSX-11M and RSX-11M-PLUS (multiuser, multiprogramming operating system); CTS-300 (disk-based single/multiuser operating system); RSTS/E and CTS-500 (multiuser, multitasking operating system).

Host Hardware Environment ● RSX-11M and RSX-11M-PLUS version: any PDP-11 with 16K bytes of user memory and a synchronous interface (2K bytes of memory required for each additional synchronous line) ● CTS-300 version: any DEC Datasystem with 8K bytes of user memory and synchronous interface ● RSTS/E and CTS-500 versions: any PDP-11 with 4K bytes of user memory, a synchronous line interface, and communications microprocessor (4K bytes of memory required for each additional synchronous line).

Installation Data ● first installed 1976 ● unknown number of users ● distributed through direct company sales and service offices in all major cities.

Description ● IBM 3271 protocol emulator ● supports interactive communications with user jobs running on an IBM 360/370/3030 host system; appears to the IBM host as an IBM 3277 display unit attached to an IBM 3271 control unit operating in slave mode ● communications discipline is IBM bisynchronous; supports operation on full- or half-duplex leased lines in either point-to-point or multipoint configurations at transmission speeds up to 9600 bps ● does not perform IBM Video Display emulation or respond to SENSE, COPY, or READ BUFFER commands ● 4 versions available.

Pricing & Support ● $6,700 (RSX-11M/11M-PLUS) or $7,000 (RSTS/E) one-time license fee; includes maintenance service ● 90-day warranty is provided, during which time defects are remedied on-site by temporary correction or emergency bypass; ongoing remedial work is handled by normal service channels with updates provided for user implementation.

■ ERGONOMIC SOFTWARE

79 Dartmouth Street, Boston, MA 02116 ● 617-267-4545.

☐ ERGOLINX 2780/3780

Type ● IBM 2780/3780 terminal emulator.

Host Software Environment ● Apple DOS 3.3.

Host Hardware Environment ● Apple II or IIe with 48K bytes of memory and a disk drive.

Installation Data ● first installed 1982 ● 100 installations ● international distribution.

Description ● provides a communications link between an Apple microcomputer and an IBM mainframe using bisynchronous (BSC) protocol; interacts with the user as an intelligent file handling agent, while at the same time emulating an IBM 2780 or 3780 terminal to the remote host computer ● also supports communications from micro to micro using bisynchronous protocols; ex-

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tends Applesoft vocabulary to include data communication commands.

Pricing & Support ● $850 one-time fee for license purchase that includes a synchronous communications card and user's manual.

☐ ERGOLINX 3270

Type ● IBM 3270 terminal emulator.

Host Software Environment ● Apple DOS 3.3.

Host Hardware Environment ● Apple II or IIe; 48K-byte memory; one disk drive; 80-column card.

Installation Data ● first installed 1983 ● 100 installations ● international distribution.

Description ● communications link between an Apple microcomputer and an IBM mainframe using bisynchronous (BSC) protocol; the Apple can emulate an IBM 3274 or 3275 Display System Controller; supports 3278 keyboard functions and formatted screen attributes; uses nonswitched leased lines or dialup connection at speeds up to 9600 bps ● screen data can be saved to a disk file; attached printer supported as IBM 3287 printer ● features multipoint and point-to-point dialup.

Pricing & Support ● $850 one-time license purchase includes user's manual and a synchronous communication card ● source code is not available.

■ EVANS, GRIFFITHS & HART, INC

55 Waltham Street, Lexington, MA 02173 ● 617-861-0670.

☐ TAM (Terminal Access Module)

Type ● transaction processor for the DEC PDP-11 and VAX systems.

Host Software Environment ● DEC RSTS/E Version 7.0 and later, RSX-11M Version 3.2 and later, and VMS Version 3.0 and later; supports BASIC, assembler, COBOL, and FORTRAN.

Host Hardware Environment ● any DEC PDP-11 computer with 96K words of memory ● supported terminals are DEC VTO5, VT50, VT50H, and VT52; Tektronix 4023; Hazeltine 2000 and Modular One; Infotron Vistar/2 and Satellite; Hewlett-Packard HP 2640A and 2644; CDC 92452; Ann Arbor K2480D; ADDS 580; Beehive Mini-Bee; Perkin-Elmer Fox; Mini-Tec Data-Screen; and LSI ADM-3A.

Installation Data ● first installed 1975 ● 96 current users ● international distribution.

Description ● although defined and marketed by the vendor primarily as an applications development aid (a screen handler for data entry/update) for DEC PDP-11 users, it contains substantial terminal-handling software that can augment the usual terminal-management communications chores; significant capability consists of software that permits any executing job or task to communicate with other jobs and tasks through the send/receive facility of DEC's RSTS/E or the send-by-reference facility of RSX-11M ● CRT interaction details (screen layout, prompting text, field edits, cursor positioning, etc) are generated in specified formats, compiled into a library, and executed later under application program control; TAM support facilities create, modify, and test formats ● under VMS, TAM format-execution code is linked with user programs via standard VAX/VMS conventions; TAM VAX-11 MACRO procedures are position-independent and supplied as a shareable image.

Pricing & Support ● license purchase only for $6,000; includes first-year maintenance; annual maintenance after first year is 10% of the prevailing purchase price; instruction and training are available at extra cost ● quantity discounts available ● source code is not available.

■ FEROX MICROSYSTEMS, INC

1701 North Fort Myer Drive, Suite 611, Arlington, VA 22209 ● 703-841-0800.

☐ LogOn

Type ● micro-to-mini/mainframe communication.

Host Software Environment ● IBM PC-DOS; Apple Pascal or U.C.S.D. Pascal.

Host Hardware Environment ● Apple II or TRS-80 Model II with 64K bytes of memory, Apple III or IBM PC with 128K bytes of memory, or DEC Professional 325/350 with 256K bytes of memory.

Installation Data ● unknown number of installations.

Description ● provides the ability for micros to communicate, using telephone lines, with minicomputers and mainframe computers ● maintains a permanent directory of frequently accessed configurations, names, and telephone numbers where the directory number only need be indicated for ease of access ● supports sending/receiving text, binary files, messages, or electronic mail files.

Pricing & Support ● $150 one-time fee for license purchase that includes user's manual ● product is supported by telephone hotline ● source code is not available.

■ FIRESIGN COMPUTER COMPANY

524 Union Street, Suite 208, San Francisco, CA 94133 ● 415-398-7228.

☐ COMM/1 Series/1 Telecommunication

Type ● IBM Series/1 computer-to-computer communications.

Host Software Environment ● IBM EDX, all versions; supports all EDX and PXS files.

Host Hardware Environment ● IBM Series/1, all models.

Installation Data ● first installed 1982 ● over 20 installations ● international distribution.

Description ● COMM/1 is compatible with most IBM and non-IBM mainframes and associated communications software; it supports dial, leased, and digital lines, point-to-point, or multipoint, contention or master/slave, central or tributary site transmission; transmits to/from major timesharing services; supports attended or unattended operation; transmits and/or receives multiple files in one execution; handles records of 1 to 512 bytes in length; transmits and receives transparent and nontransparent data; records to disk file, CRT, or printer; provides manual or automatic answer and manual or optional automatic dial capabilities; operates from stored commands or terminal-entered commands.

Pricing & Support ● $965 for a single CPU license; $2,395 for a corporate multi-CPU license; documentation and maintenance is included; contact vendor for details of turnkey installation ● source code is available.

■ FOUR-PHASE SYSTEMS, INC

10700 North DeAnza Boulevard, Cupertino, CA 95014 ● 408-255-0900.

☐ ATS/IV (Asynchronous Terminal Simulator)

Type ● ASCII terminal emulator.

Host Software Environment ● Four-Phase MFE/IV operating system.

Host Hardware Environment ● Four-Phase Series 4000/5000 systems.

Installation Data ● first installed 1984 ● unknown number of installations ● international distribution.

Description ● package emulates "dumb" ASCII terminal as a multifunction workstation ● features include: manual dialing; automatic dialing; sign on of up to 32 concurrent users on different remote services; MFE/IV security by user-id; unique menu creation by MFE/IV user-id; location and command mode menu display options; and user prompts for self teaching ● system supports line speeds ranging from 100 to 4800 bps; documents received can be saved for future edit/reference/reports; extensive local processing, word processing, electronic mail, COBOL processing, data entry, and spreadsheet analysis capabilities are included; ATS/IV can emulate Teletype Model 33 KSR, Lear-Siegler ADM-3A, and TI Silent 700 terminals.

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Pricing & Support ● license purchase price for 1 to 5 copies is $1,500 per copy; 6 to 15 copies—$1,350 per copy; 16 to 25 copies—$1,200 per copy; and over 25—$1,050 per copy ● source code is not available.

■ GAMMA TECHNOLOGY

2452 Embarcadero Way, Palo Alto, CA 94303 ● 415-856-7421.

☐ Gamma Technology GT-70 CENTRAL SITE

Type ● IBM 3270 emulator for Data General Eclipse users.

Host Software Environment ● DG AOS and RDOS operating systems.

Host Hardware Environment ● operates on any DG Eclipse with 256K bytes of memory; requires an SLM, ULM, or SLA sync interface; conditionally requires a DCU.

Installation Data ● first installed 1978 ● 5 current users.

Description ● permits a DG Eclipse System running under AOS to emulate an IBM 3270 (or equivalent) central site with 3270 BSC multidrop protocol; supports COBOL, PL/1, DGL, and F5 and supports multiple concurrent applications programs; provides automatic screen formatting and reconstruction facilities; single-line systems running at rates up to 4800 bps do not require a DG DCU; faster single-line or multiline systems require a DCU; multiple DCUs are supported up to the resource limits.

Special Features ● can accommodate a DCU optionally; RDOS version available for Nova.

Pricing & Support ● license purchase price is $8,500 (AOS version) or $4,000 (RDOS version); quantity discount available ● no charge first-year maintenance; 10% of prevailing purchase price after first year ● source code available $4,000 additional.

☐ Gamma Technology GT-70 DISPLAY MONITOR

Type ● IBM 3271/3275 BSC emulator for Data General users.

Host Software Environment ● DG RTOS, RDOS, or AOS operating system.

Host Hardware Environment ● operational and resource requirements are similar to GT-70 CENTRAL SITE package; additionally requires Dasher D1, D2, or similar async terminals.

Installation Data ● first installed 1977 ● 25 current users.

Description ● permits a DG Nova or Eclipse system running under RTOS, RDOS, or AOS to emulate an IBM 3271 or 3275 Display System Controller; communicates to the host through a non-switched leased line or dialup connection using IBM BSC protocol; controls up to 16 devices on a BSC link; supports all 3277 keyboard functions; can also communicate with another Eclipse system running GT-70/AOS CENTRAL SITE.

Special Features ● selected special functions are table-driven function keys, disk-based screen panel support, and interactive screen building/editing features.

Pricing & Support ● purchase price is $4,500 (AOS version) or $4,000 (RDOS version); quantity discount available ● no charge first-year maintenance; 10% of prevailing purchase price after first year; source code available $4,000 additional.

☐ Gamma Technology IBM HASP Multileaving-RJE Workstation Program

Type ● HASP-RJE emulator for Data General users.

Host Software Environment ● DG AOS, RTOS, RDOS, or AOS/VS operating systems.

Host Hardware Environment ● any DG Nova or Eclipse system; requires 20K bytes of memory for RTOS or RDOS and 32K bytes for AOS or AOS/VS; requires real-time clock, 4074, 4242, or 4264 series synchronous controller, AT&T/Teletype or CRT console, any standard input/output devices, and an AT&T 201A3, 201C, 208B, or equivalent modem; supports IBM OS/MVT HASP II V.3.1, OS/VS2 HASP II V.4.0, OS/MVT ASP V.2.6, OS/VS2 ASP V.3.0, OS/VS1 RES, OS/VS2 JES2, and OS/VS2 JES3.

Installation Data ● first installed 1975 ● 107 current users.

Description ● converts a DG Nova MV Series or Eclipse system running under AOS, AOS/VS, RTOS, or RDOS into an RJE terminal using HASP multileaving BSC protocol; provides data compression and transparency, multiple I/O streams with console support, and operator control from any AOS console; supports concurrent foreground/background processes.

Pricing & Support ● license purchase price $3,000 (AOS or RDOS version) or $4,000 (AOS/VS); quantity discounts available ● no charge first-year maintenance; 10% of purchase price after first year ● source code available $1,500 ($4,000 AOS/VS) additional.

☐ Gamma Technology IBM Workstation X780

Type ● 2780/3780 RJE emulator for Data General users.

Host Software Environment ● DG AOS, RDOS, RTOS, and AOS/VS operating systems.

Host Hardware Environment ● any DG Eclipse or Nova computer; requires 32K-byte memory, real-time clock, 4074, 4242, or 4264 series synchronous controller, AT&T/Teletype or CRT console, any standard input/output devices, and an AT&T 201C, 208B, or equivalent modem; a DCU is required at line rates above 4800 bps.

Installation Data ● first installed 1979 ● 54 current users.

Description ● permits a DG Nova MV Series or Eclipse computer to emulate a 2780/3780 workstation for RJE operations; supports 2780 and 3780 protocols in ASCII or EBCDIC and accommodates 3780 polled multidrop operation; offers data compression and transparency options; permits automatic component selection for print and punch streams, and supports job queueing facilities under AOS; foreground/background partitioning allows 2 independent processes to execute concurrently.

Special Features ● a DCU can be used optionally under AOS at line rates under 4800 bps.

Pricing & Support ● identical to the Gamma Technology IBM HASP package.

☐ Gamma Technology CDC Workstation 200

Functionally similar to the IBM HASP package but intended for use with the CDC-supported 200 UT protocol ● requirements and prices are identical to IBM HASP package.

☐ Gamma Technology Sperry Workstation 1004

Functionally similar to IBM HASP package but intended for Sperry 1004 line transmission protocol ● requirements and prices are identical to IBM HASP package ● not available under AOS/VS.

☐ Gamma Technology Sperry Workstation NTR

Functionally similar to IBM HASP package but intended for Sperry NTR line transmission protocol ● requirements and prices are identical to IBM HASP package.

■ GEORGE W HALLAHAN & CO, INC

1660 Soldiers Field Road, Boston, MA 02135 ● 617-332-2423.

☐ XCHANGE-11

Type ● file-to-file transfer utility between minicomputer and microcomputer.

Host Software Environment ● DEC VAX/VMS operating system, RSTS/E, or CTS-500 operating systems with BASIC-PLUS and Apple II DOS, Apple CP/M, IBM CP/M, or any standard CP/M system.

Host Hardware Environment ● DEC VAX-11 Series, PDP-11 Series, or Data System 500; all require serial line interface and an Apple II, II Plus, IBM PC, or any micro supporting CP/M operating system.

Installation Data ● unknown number of users ● international distribution.

Description ● a utility program that provides the capability to transfer files between a minicomputer and a microcomputer, and vice versa ● uses the CP/M standard Christensen Protocol at both ends of the transfer; volume of transfer is limited only by the size of the microcomputer's disk capacity ● a compatible copy of

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XCHANGE-11 must reside in both the minicomputer and micro-computer.

Special Features ● a combination package that consists of both the mini and micro versions of XCHANGE is available for a price less than the sum of the individual packages.

Pricing & Support ● one-time license purchase fees are: $895 (PDP-11 version only), $995 (VAX version only), $119.95 (Apple DOS version only), $139.95 (Apple CP/M version only), $189.95 (IBM CP/M or any standard CP/M version only), $995 (Apple DOS or CP/M or any standard CP/M version and PDP-11 version); all license purchase fees include software and documentation.

■ GOULD INC

6901 West Sunrise Boulevard, Fort Lauderdale, FL 33313 ● 305-587-2900.

☐ HASP Remote Workstation

Type ● IBM HASP workstation emulation.

Host Software Environment ● Gould S.E.L. mapped MPX-32 or RTM concurrent real-time operating system.

Host Hardware Environment ● Gould S.E.L. Systems Series 32, VPS (Vector Processing System).

Installation Data ● unknown number of users ● distributed through direct sales/service offices.

Description ● provides HASP workstation emulation which allows Series 32 systems to communicate with any host system support-ing IBM HASP II Release 4.0 multileaving protocol; functionally equivalent to IBM System 360/30 HASP support package.

Pricing & Support ● $3,000 one-time fee for BSS (Binary Single System) license with single-year Software Update Service; Soft-ware Update Service is available after first year for a $300 annual fee.

■ GTE TELENET COMMUNICATIONS CORP

8229 Boone Boulevard, Vienna, VA 22180 ● 703-827-9565.

☐ DMEP (Data Network Modified Emulation Program)

Type ● data-network emulator; X.25 gateway for IBM users.

Host Software Environment ● any IBM DOS/VS, OS/VS, or VM/370 operating system.

Host Hardware Environment ● IBM System/370, 3000, 4300, and compatible computer with IBM 3704 or 3705 Communications Con-troller; requires 64K bytes of memory.

Installation Data ● first installed 1975 ● 50 current users ● inter-national distribution.

Description ● provides a gateway for IBM 370/4300/3000 users to an X.25 network; also supports conventional network config-urations in any combination of switched/private line, ASCII/EBCDIC, point-to-point/multipoint, etc in the same sense and with the same terminal-accommodation facilities as a standard IBM Emulation Program (EP); additional functions are Network Oper-ator Control Support, Multiple Host Support, Multiple Network Access Link Support, and Application Subsystem Selection; runs on any standard IBM 370X Communications Controller with no changes to existing software; EP can run concurrently as a sub-system of DMEP; a network access link is defined as a full-duplex synchronous leased line supported at rates up to 56K bps; multiple links are supported at rates up to 19.2K bps; currently accommo-dates TELENET, DATAPAC, TRANSPAC, and TYMNET public networks and TP 3010, TP 4000, and TRAN XPRO private network processors; supports HDLC, EBCDIC BSC, and ASCII BSC fram-ing techniques; network protocol interface is defined by CCITT X.3, and X.29 Recommendations plus 3270 Display Systems Pro-tocol (DSP) and Block-Mode Terminal Packet Assembler and Dis-assembler (BPAD) protocol.

Pricing & Support ● license available lease only; $750 monthly lease; $1,000 one-time installation fee; lease fee includes mainte-nance and documentation; training is available ● source code is not available.

■ H & W COMPUTER SYSTEMS INC

P.O. Box 4785, Boise, ID 83704 ● 208-377-0336.

☐ SYSM—CICS Electronic Message Distribution

Type ● electronic mail message distribution system.

Host Software Environment ● IBM OS/VS1, OS/VS2(SVS), OS/VS2(MVS), with CICS/VS; supports VSAM.

Host Hardware Environment ● IBM System/370, 3000, 4300, and compatible computers running CICS/VS Version 1.4 or above.

Installation Data ● first installed 1982 ● over 300 installations ● international distribution.

Description ● an electronic message distribution system that sup-ports network and selected broadcast facilities as well as private message dissemination ● uses menus to prompt users through the functions for composing messages and distribution lists and re-view unreceived and unread messages; uses simple commands to send and respond ● a full-screen text editor handles message building and distribution list preparation; a broadcast mode pro-vides message distribution to CRTs and printers; distribution uses existing lists and can be based on location, division, branch office, responsibility level, or any combination; an activity monitor paces release of messages to minimize contention with CICS workload; the system maintains an audit log with time stamps, destination, and recipient's ID ● private distribution mode guarantees that only intended recipient reviews messages; maintains 1 copy of a mes-sage even if message is to be routed to multiple people; an SPF-like editor routine with PF key assignments identical to those sup-ported by TSO are used to compose messages ● SYSM supports all terminals supported by CICS/VS Basic Mapping Service; it automatically uses upper- and lowercase facilities if present on terminal device.

Pricing & Support ● $12,000 DOS, $14,000 OS one-time fee for license purchase includes documentation and first year of main-tenance; maintenance after first year is available for an annual fee of 15% of the then-current purchase price ● purchase price also includes source libraries, telephone consulting during in-stallation, and a quarterly newsletter covering customer experi-ences and user-submitted system applications ● 30-day free trial is available.

■ HEWLETT-PACKARD

Computer Systems Division; 19447 Pruneridge Avenue, Cuper-tino, CA 95014 ● 408-725-8111.

☐ Asynchronous Multiplexer Subsystem

Type ● asynchronous communications for HP 1000 users.

Host Software Environment ● Hewlett-Packard RTE-IVB or RTE-IVE (Real-Time Executive) operating system.

Host Hardware Environment ● Hewlett-Packard HP 1000 Series system with a minimum of 128K bytes of memory.

Installation Data ● first installed 1975 ● unknown number of users ● international distribution through direct sales and service of-fices.

Description ● provides support for asynchronous communications with display and printing terminals ● supports up to 2 multiplexer interfaces with up to 16 channels per interface, or up to 32 termi-nals.

Pricing & Support ● $265 one-time license fee; $40 monthly charge for CSS (Customer Support Service); $15 monthly charge for SSS (Software Subscription Service) ● CSS includes account-respon-sible system engineer, phone-in consulting service, and manual update service; SSS includes software update/enhancements, software problem reporting, software notification service, and manual update service.

☐ IML/3000 (Interactive Mainframe Link)

Type ● IBM 3270 emulation for HP 3000 users.

Host Software Environment ● Hewlett-Packard MPE multipro-gramming, multiuser virtual memory executive.

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Host Hardware Environment ● Hewlett-Packard HP 3000 Series with an INP (Intelligent Network Processor).

Installation Data ● first installed 1978 ● unknown number of users ● international distribution through direct sales and service offices.

Description ● provides IBM 3270 bisynchronous protocol emulation ● supports interactive exchanges between COBOL, BASIC, FORTRAN, or SPL application programs on a HP 3000 and an IBM System/360, System/370, 3000 Series, or 4300 host program such as CICS/VS, IMS/VS, and TSO and BTAM/TCAM-based program; interfaces with IMAGE, VIEW, KSAM, and DS/3000 functions in an HP 3000 program ● HP terminals can switch between HP local access and remote IBM access; IBM host applications can be written or modified to use HP 3000 capabilities ● supports 246X series terminals and 3270 mode with 1920-character screens, 2048-character or less blocks, and bisynchronous protocol.

Pricing & Support ● $7,000 one-time license fee includes one year of CSS (Customer Support Service); $125 monthly charge for CSS; $50 monthly charge for SSS (Software Subscription Service) ● CSS includes account-responsible system engineer, phone-in consulting service, and manual update service; SSS includes software update/enhancements, software problem reporting, software notification service, and manual update service.

☐ **LINK/125**

Type ● file transfer facility for HP 125 users.

Host Software Environment ● CP/M operating system.

Host Hardware Environment ● Hewlett-Packard HP 125.

Installation Data ● first installed 1981 ● unknown number of users ● international through direct sales and service offices.

Description ● provides bidirectional file transfer capability between HP 125 and HP 3000 ● allows remote files to be accessed, transferred, processed locally, and output locally or transferred back to HP 3000 ● LINK/125 guides user through file transfer or query process using predefined "soft key" commands ● supports full-duplex transmission from 110 to 9600 baud; file sizes limited only by diskette storage space available.

Special Features ● this transfer program is bundled in with other HP software, including VISICALC/125, GRAPHICS/125, and WORD/125.

Pricing & Support ● $125 one-time license fee ● $50 monthly charge for software update service.

☐ **MRJE/1000**

Type ● HASP workstation emulation.

Host Software Environment ● Hewlett-Packard RTE (Real-Time Executive) operating system.

Host Hardware Environment ● Hewlett-Packard HP 1000 Series.

Installation Data ● unknown number of users ● worldwide distribution through direct company sales and service offices.

Description ● provides HASP workstation protocol emulation that enables an HP 1000 system to function as an IBM HASP workstation ● uses IBM multileaving binary synchronous protocol; supports line speeds up to 9600 baud.

Pricing & Support ● one-time license fee $3,000 (HP 1000 A600); $4,000 (HP 1000 A700 or E-/F-Series); $6,000 (HP 1000 A900) ● $75 monthly charge for CSS (Customer Support Service); $25 monthly charge for SSS (Software Subscription Service) ● CSS includes account-responsible system engineer, phone-in consulting service, and manual update service; SSS includes software updates/enhancements, software problem reporting, software notification service and manual update service.

☐ **MRJE/3000**

Type ● multileaving remote job entry management for HP 3000 users.

Host Software Environment ● Hewlett-Packard MPE multiprogramming, multiuser, virtual memory executive.

Host Hardware Environment ● Hewlett-Packard HP 3000 Series.

Installation Data ● first installed 1978 ● unknown number of users ● international distribution through direct sales and service offices.

Description ● provides multileaving remote job entry management to any HP 3000 connection to any IBM host equipped with HASP II, JES 2, JES 3, or ASP job entry systems ● supports up to 22 concurrent usage data streams, 1 operator console, 7 logical printers, 7 logical card readers, and 7 logical card punches ● handles multiple-host and multiple-line/single-host environments; supports unrestricted use of I/O devices ● supports dial-up or leased line communications at transfer rates up to 9600 bps (modem dependent) ● constitutes a spooling facility for off-line job entries and automatically queues entries into multileaved job stream.

Pricing & Support ● $2,520 one-time license fee that includes 1 year of CSS (Customer Support Service); $75 monthly charge for CSS thereafter; $25 monthly charge for SSS (Software Subscription Service) ● CSS includes account-responsible system engineer, phone-in consulting service, and manual update service; SSS includes software update/enhancements, software problem reporting, software notification service, and manual update service.

☐ **RJE/1000 Software**

Type ● IBM 2780 emulation for HP 1000 users.

Host Software Environment ● Hewlett-Packard RTE-IVB (Real-Time Executive) operating system.

Host Hardware Environment ● Hewlett-Packard HP 1000 Series.

Installation Data ● first installed 1975 ● unknown number of users ● international distribution through local sales and service offices.

Description ● provides the ability for a system to function as an IBM 2780 data transmission terminal ● uses IBM binary synchronous protocol ● supports ASCII and EBCDIC line codes at speeds up to 9600 baud.

Special Features ● this package includes a 2-card synchronous modem interface.

Pricing & Support ● $3,150 one-time license fee ● $65 monthly charge for CSS (Customer Support Service); $20 monthly charge for SSS (Software Subscription Service) ● CSS includes account-responsible system engineer, phone-in consulting service, and manual update service; SSS includes software updates/enhancements, software problem reporting, software notification service, and manual update service.

☐ **RJE/3000**

Type ● IBM 2780/3780 terminal emulation for HP 3000 users.

Host Software Environment ● Hewlett-Packard MPE multiprogramming, multiuser, virtual memory executive.

Host Hardware Environment ● Hewlett-Packard HP 3000 Series.

Installation Data ● first installed 1978 ● unknown number of users ● international distribution through direct sales and service offices.

Description ● provides remote job entry batch operation support to HP 3000 systems hooked to any IBM host equipped to handle IBM 2780/3780 terminals ● provides support for any I/O device on a HP 3000 Series system running under RJE/3000 to enter or receive job data to/from the host; supports multiple hosts and multiple lines to a single host ● supports dial-up or leased-line connections to the host at rates up to 19.2K bps ● supports all IBM 2780 features except 6-bit transcode and all IBM 3780 features except conversational mode ● user-specifiable options include ability to transfer more than 7 records per block, IBM 2780/3780 vertical format control and horizontal tab control, internal blank suppression for message compression and trailing blank suppression for message truncation, ASCII/EBCDIC transparency, and print/punch component selection at the host.

Pricing & Support ● $1,350 one-time license fee includes one year of CSS (Customer Support Service); $60 monthly charge for CSS

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thereafter; $15 monthly charge for SSS (Software Subscription Service) ● CSS includes account-responsible system engineer, phone-in consulting service, and manual update service; SSS includes software update/enhancements, software problem reporting, software notification service, and manual update service.

■ HONEYWELL INFORMATION SYSTEMS INC

200 Smith Street, MS 486, Waltham, MA 02154 ● 617-895-6000.

□ HASP II Multileaving Facility (GCOS 6)

Type ● IBM System 360/370 workstation emulator.

Host Software Environment ● Honeywell GCOS 6 Mod 400 operating system and BSC Transport Facility.

Host Hardware Environment ● Honeywell DPS 6 or Series 60 Level 6 packaged system.

Installation Data ● first installed 1976 ● unknown number of users ● worldwide distribution through direct company sales and service offices.

Description ● provides workstation emulation; supports all IBM teleprocessing systems that handle bisynchronous multileaving protocols.

Pricing & Support ● $200 (primary), $150 (secondary) for 6/45 and larger systems; $110 (primary), $85 (secondary) for smaller systems; the annual license fee includes software support ● software support entitles customer to assistance by telephone and mail; includes software release bulletins and updates.

□ Honeywell Communication & File Transfer Facility (GCOS 6)

Type ● communications manager for transmitting files in synchronous protocol to other Honeywell systems.

Host Software Environment ● Honeywell GCOS 6 Mod 400 operating system.

Host Hardware Environment ● Honeywell DPS 6 or Series 60 Level 6 packaged system.

Installation Data ● first installed 1976 ● unknown number of users ● worldwide distribution through direct company sales and service offices.

Description ● provides support for the exchange of data files at maximum speed of 9600 bps using Honeywell's Visual Information Projection Series and bisynchronous protocols; maximum speed increases to 50K bps using High-Level Data Link Control protocol; files are transferred between any Honeywell GCOS 6 supported peripheral and a Honeywell Level 6, 62, 64, 66, 66/DPS, 68/DPS, and Series 200/2000 using either polled VIP or HDLC protocols; includes a polled VIP emulator to allow a DPS 6 or Level 6 to connect to a dedicated or switched, synchronous, half-duplex communications link and to transmit data at 2K to 9.6K bps to a host operating as the control station with the polled VIP protocol ● VIP emulator makes DPS 6 or Level 6 appear as one or more tributary terminals to the control station; can support up to 32 tributary stations.

Pricing & Support ● $75 (primary), $55 (secondary) for 6/45 and larger systems; $40 (primary), $30 (secondary) for smaller systems; the annual license fee includes software support ● software support entitles customer to assistance by telephone and mail; includes software release bulletins and updates.

□ IBM BSC Transport Facility (GCOS 6)

Type ● communication manager for all BSC facilities.

Host Software Environment ● Honeywell GCOS 6 Mod 400 or 600 operating system.

Host Hardware Environment ● Honeywell DPS 6 or Series 60 Level 6 packaged system.

Installation Data ● first installed 1976 ● unknown number of users ● worldwide distribution through direct company sales and service offices.

Description ● converts native ASCII code to IBM EBCDIC for transmission to IBM hosts; reentrant file transmission software allows

multiple simultaneous transfers; transmits 80-column card images handled by standard IBM software; supports line speeds up to 9600 bps; files can be transmitted between any GCOS 6 operating system supported device and an IBM host ● the BSC Transport Facility includes 3 line protocol modules: 2780/3780, HASP, and 3271.

Special Features ● this package is a prerequisite for 2780/3780 Workstation Facility and HASP Multileaving Facility Software packages ● please refer to Index for survey locations.

Pricing & Support ● $75 (primary), $55 (secondary) for 6/45 and larger systems; $40 (primary), $30 (secondary) for smaller systems; the annual license fee includes software support ● software support entitles customer to assistance by telephone and mail; includes software release bulletins and updates.

□ Programmable Facility/3271/(PF3271)

Type ● IBM 3270-type emulator.

Host Software Environment ● Honeywell GCOS 6 Mod 400 operating system and BSC Transport Facility.

Host Hardware Environment ● Honeywell DPS 6 or Series 60 Level 6 packaged system.

Installation Data ● first installed 1976 ● unknown number of users ● worldwide distribution through direct company sales and service offices.

Description ● provides means to emulate 3270 connection to IBM System/370 host although Honeywell does not claim full 3270 compatibility; provided primarily for development of new applications; provides user exits to programs.

Pricing & Support ● $235 (primary), $175 (secondary) for 6/45 and larger systems; $130 (primary), $95 (secondary) for smaller systems; the annual license fee includes software support ● software support entitles customer to assistance by telephone and mail; includes software release bulletins and updates.

□ Remote Terminal Supervisor-II

Type ● general remote facilities interface package.

Host Software Environment ● Honeywell GCOS or GCOS 8 (multiuser, multiprogramming virtual storage operating system).

Host Hardware Environment ● Honeywell DPS 8 or DPS 88 packaged system with 64K bytes of memory and a Datanet 6641, 6651, or 6661 Front-End Network Processor.

Installation Data ● first installed 1980 ● unknown number of users ● distributed through worldwide network of direct company sales and service offices.

Description ● remote facility interface supports remote job entry ● devices supported include Honeywell RJE systems, 702- and 707-based Remote Network Processors, and IBM 2780-compatible RJE devices; also supports all functions of Honeywell's Time Sharing System software; provides direct program access to communicate with an application program; supports High-Level Data Link Control (HDLC), Honeywell's unifying link control protocol for networking; supports BSC line protocol; can coexist with Network Processing Supervisor ● 2 versions are available depending on the operating system in force.

Special Features ● HDLC is available as an add-on option.

Pricing & Support ● monthly software license is available for $306 (GCOS) or $273 (GCOS 8); license includes Basic Service; expanded software service costs $144 (GCOS) or $129 (GCOS 8) ● Basic Software support entitles customer to assistance by telephone and mail, and includes release bulletins and updates.

□ Terminal Presentation Facility

Type ● terminal emulation facility in DSA network.

Host Software Environment ● Honeywell GCOS 6 Mod 400 operating system, and Basic Network Service.

Host Hardware Environment ● Honeywell DPS 6 or Series 60 Level packaged system.

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Installation Data ● first installed 1983 ● unknown number of users ● worldwide distribution through direct company sales and service offices.

Description ● a terminal emulation facility that provides capabilities for a VIP 7300 terminal connected to a DPS 6 DSA node to emulate the block mode/forms mode of a VIP 7800 terminal ● allows the VIP 7300 terminal to be used with local Mod 400 character mode applications and also communicate with 66/DPS, DPS 8, and DPS 88 applications as a block mode terminal with forms capability.

Pricing & Support ● $235 (primary), $175 (secondary) for 6/45 and larger systems; $130 (primary), $95 (secondary) for smaller systems; the annual license fee includes software support ● software support entitles customer to assistance by telephone and mail; includes release bulletins and updates.

☐ **X.25 Public Data Network Connection—Telenet or Tymnet**

Type ● communications manager CCITT X.25 packet-switched and X.21 circuit-switched network interface protocols.

Host Software Environment ● Honeywell GCOS 6 Mod 400 operating system and Basic Network Services.

Host Hardware Environment ● Honeywell DPS 6 packaged system or Series 60 Level 6 packaged system.

Installation Data ● first installed 1981 ● unknown number of users ● worldwide distribution through direct company sales and service offices.

Description ● provides public data network connection support allowing a DPS 6 or Level 6 to communicate with a Honeywell Level 64/DPS or DPS-8 processor connected to an X.25 network.

Pricing & Support ● $1,896 (primary), $1,422 (secondary) for 6/45 and larger systems; $1,040 (primary), $780 (secondary) for smaller systems; the annual license fee includes software support ● software support entitles customer to assistance by telephone and mail; includes software release bulletins and updates.

☐ **2780/3780 Workstation Facility (GCOS 6)**

Type ● IBM 2780 and 3780 workstation emulator.

Host Software Environment ● Honeywell GCOS 6 Mod 400 or 600 operating system and BSC Transport Facility.

Host Hardware Environment ● Honeywell DPS 6 or Series 60 Level 6 packaged system.

Installation Data ● first installed 1976 ● unknown number of users ● worldwide distribution through direct company sales and service offices.

Description ● provides file transfer capabilities where Honeywell DPS 6 or Level 6 appears to IBM host as a 2780 or 3780 workstation; transmission is by public telephone or private leased lines at speeds ranging from 1200 bps to 9600 bps ● supports bisynchronous line protocol in a point-to-point connection; supports multiple workstations.

Pricing & Support ● $200 (primary), $150 (secondary) for 6/45 and larger systems; $110 (primary), $85 (secondary) for smaller systems; the annual license fee includes software support ● software support entitles customer to assistance by telephone or mail; includes software release bulletins and updates.

■ HORIZON DATA SYSTEMS
1901 Wildflower Terrace, Richmond, VA 23233 ● 804-740-9244.

☐ **RIFLE (Remote Interactive File Exchange)**

Type ● file transfer facility between PDP-11 computers.

Host Software Environment ● DEC RT-11 operating system.

Host Hardware Environment ● DEC PDP-11; requires at least 24K bytes of memory and a DEC DL11 or DLV11 asynchronous interface.

Installation Data ● first installed 1981 ● 100 installations ● international distribution.

Description ● this utility package supports file transfers between 2 PDP-11 computers ● files can be of any type, including source, data, object, or binary ● handles communication supported on hard-wired connections, and/or dial-up or dedicated telephone lines; operates as a foreground, background, or system job ● sending and receiving computers are both required to be running RIFLE with both able to send or receive files and notes; notes are short interactive messages that are displayed on console terminals ● package maintains 3 file-resident queues for data transfers: one for files to be sent to the remote computer (send file queue), one for files to be received from the remote computer (fetch file queue), and one for notes to be sent to the remote computer (send note queue) ● other features are: interactive keyboard entry commands, or unattended use of RIFLE comand files; password protection that controls access to files/devices; an audit trail provision at each end that provides a record of all files transferred; error processing; and an automatically controlled restart facility.

Pricing & Support ● $2,500 one-time fee for license purchase includes 6-month warranty, user manual, and a central site and remote site copy of software; $400 one-time fee for license for additional add-on central site copy that supports talking to original remote site; multiple single-site discounts are available; yearly maintenance after 6-month warranty period is available for an annual charge of 20% of the then-current purchase price; maintenance support includes software updates ● source code is not available.

☐ **Virtual Terminal**

Type ● virtual connection of local host terminal to a remote host.

Host Software Environment ● DEC RT-11; S&H Computer TSX-Plus.

Host Hardware Environment ● DEC PDP-11.

Installation Data ● first installed 1982 ● 75 current users.

Description ● permits a virtual connection to be established between any host system terminal (including dial-in ports) and an input port of a second, remote computer without disconnecting or otherwise altering the local terminal configuration ● once established, the virtual path allows the user to interact with the remote system as if the terminal were directly connected; locally resident text files can be transmitted to the remote system as if they had been input directly from the terminal; text data from the remote computer can be transferred to local files or devices; no special software is required in the remote system.

Pricing & Support ● $650 one-time fee for license purchase includes 6-month warranty and documentation; yearly maintenance after 6-month warranty period is available for an annual charge of 20% of the prevailing price.

■ IBM CORPORATION/Information Systems Group
National Accounts Division; 1133 Westchester Avenue, White Plains, NY 10604; 914-696-1900 ● National Marketing Division; 4111 Northside Parkway, Atlanta, GA 30327; 404-238-2000.

☐ **IBM (S/370) ACF/TCAM—OS/VS Group Only**

Type ● inter-processor network communications facility for IBM OS/VS and VM/370 communications.

Host Software Environment ● requires OS/VS1 R.7 or MVS R.3.8; can operate under VM/370 group operating systems, which can concurrently support both TCAM and VTAM environments; operates with 3705-I and 3705-II Communication Controller as supported by NCP/VS R.5 or ACF/NCP/VS R.1/R.2/R.3; functions compatibly with all IMS/VS DB/DC products, with MVS group JES2/JES3 products, with TSO and VSPC, and with the NCCF and LPDA communications network management products; requires the Multi-System Networking Facility (MNF) to fully exploit the many host-NCP-host configurations permitted by ACF/TCAM V.2/R.3 and to implement distributed processing.

Host Hardware Environment ● any IBM computer that supports any OS/VS1 or OS/VS2(MVS) operating system.

Installation Data ● first installed 1979 for 4331-1 and 4341-1; 1980 for 4331-2; 1981 for 4341-2 ● unknown number of users ● distributed

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through a worldwide network of sales/distribution/maintenance offices.

Description • a somewhat complex program product that is currently offered in 2 distinct variations with different program product numbers; ACF/TCAM Version 1 (5735-RC1) runs under OS/VS1 and both SVS and MVS and is ostensibly compatible with all current versions of NCP/VS and ACF/NCP/VS; Version 2 of ACF/TCAM is designated 5735-RC3; it consists of 3 releases and supports only OS/VS1 and MVS; ACF/TCAM V.1 (5735-RC1) is not upward compatible with ACF/TCAM V.2 (5735-RC3); particularly if the host operating system for ACF/TCAM V.1 is SVS, although the 2 product variations are functionally similar; there is upward compatibility among the releases of ACF/TCAM V.2; the following describes the general capabilities of ACF/TCAM V.2/R.3 • as a front-end management module ACF/TCAM functions to establish and maintain orderly communications flow between local processor facilities and among remote processor facilities by way of a 3705 with ACF/NCP/VS installed; multiple active links are supported between adjacent 3705s, and up to 8 routes are supported for SNA and non-SNA message communications between network nodes for alternate routing as needed; transmission links between network nodes can also be defined as transmission groups (up to 8 types) which permits multiple transmission links to be assigned a single logical identity; up to 3 levels of transmission priority can be defined to maximize response times for selected groups and to provide a time-sensitive tool for message volume control; up to 8 host systems can share a channel or link attached 3705 ACF/TCAM V.1 • program product number is 5735-RC1/01.

Special Features • ACF/TCAM V.1 with Multi-System Network Facility (MSNF) • program product number is 5735-RC1/02 • ACF/TCAM V.2/R.3 • program product number is 5735-RC3/01 • ACF/TCAM V.2/R.3 with Multi-System Networking Facility (MSNF) • program product number is 5735-RC3/02.

Pricing & Support • for each of the program products listed below, the first entry is the monthly license charge; the second entry is the DSLO monthly license charge, the third entry is the service charge, and the fourth entry is the service charge for multiple systems: ACF/TCAM V.2—$329/$246/$12/$19; ACF/TCAM V.2 with Multi-System Networking Facility—$1,220/$915/$31/$50; ACF/TCAM V.2 R.3—$723/$542/$83/$132; ACF/TCAM V.2 R.3 with Multi-System Networking Facility—$1,125/$910/$103/$165 • central service support consists of a graded hierarchy of progressively specialized telephone assistance • technical on-site assistance (charged hourly) is offered to handle problems that cannot be solved through the telephone assistance route.

☐ **IBM (S/370) ACF/VTAM/OS/VS, ACF/VTAM/DOS/VS & ACF/VTAM/DOS/VSE (VSE System)**

Type • inter-processor virtual communications network facility for all IBM OS/VS and DOS/VS environments.

Host Software Environment • ACF/VTAM R.1 supports OS/VS1, SVS, and MVS groups, and DOS/VS but not DOS/VSE; ACF/VTAM R.2/R.3 additionally support DOS/VSE but do not support OS/VS2(SVS) and DOS/VS • ACF/VTAM R.3 operates under OS/VS1 R.7, MVS R.3.8 (as well as MVS/SE and MVS/SP), and DOS/VSE with the VSE/Advance Functions product; operates under VM/370 groups, which support concurrent TCAM and VTAM operations; requires Multisystem Networking Facility (MNF).

Host Hardware Environment • any IBM computer that supports any OS/VS, DOS/VS, or VM/370 system • supports most IBM SS/BSC/SDLC terminals and the 3704/3705 (I and II).

Installation Data • first installed 1979 for 4331-1 and 4341-1; 1980 for 4331-2; 1981 for 4341-2 • unknown number of users • distributed through a worldwide network of sales/distribution/maintenance offices.

Description • functionally similar to ACF/TCAM in that it provides front-end communications control functions for interfacing a system into SNA, but it supports both OS/VS and DOS/VS groups; migration path history is not quite as complex as ACF/TCAM and consists of 3 releases of the same product number • the following summary describes the general capabilities of ACF/VTAM R.3 for OS/VS and DOS/VS groups • R.3 provides same multiple link,

transmission group, multiple route, and multiple priority level facilities as ACF/TCAM; supports single- and multiple-host environments; supports Multisystem Network Facility (MNF) for comprehensive cross-system message routing and resource sharing; major differences between ACF/TCAM and ACF/VTAM are the increased flexibility and usually consequent throughput improvements gained through VTAM's virtual characteristics; the more universal operating system support offered by ACF/VTAM also clearly marks it as the mainstream access method and as the most logical recipient of future major enhancements in front-end management • program product number is 5735-RC2/01 • ACF/VTAM R.3 • for DOS/VSE • program product number is 5746-RC3.

Special Features • MSNF Feature • for DOS/VSE • 5746-RC3 option number is 6059: Encrypt/Decrypt feature • for OS/VS1 and MVS groups.

Pricing & Support • for each of the program products listed below, the first entry is the monthly license charge, the second entry is the DSLO monthly license charge, the third entry is the service charge, and the fourth entry is the service charge for multiple systems: ACF/VTAM R.4 for OS/VS1 and MVS groups—$378/$282/$50/$80; ACF/VTAM R.4 for OS/VS1 and MVS groups with Multi-System Networking Facility (MSNF)—$909/$681/$149/$237; ACF/VTAM R.4 for OS/VS1 and MVS groups with Encrypt/Decrypt feature—$223/$166/$7/$11; ACF/VTAM R.3 for DOS/VSE—$157/$115/$50/$80; MSNF feature for DOS/VSE—$298/$223/$149/$237 • central service support consists of a graded hierarchy of progressively specialized telephone assistance • technical on-site assistance (charged hourly) is offered to handle problems that cannot be solved through the telephone assistance route.

☐ **IBM (S/370) Basic Telecommunications Access Method-Extended Support (BTAM-ES)**

Type • enhanced BTAM for IBM DOS/VSE users.

Host Software Environment • requires DOS/VSE with VSE/Advanced Functions; operates in System/370 or in ECPS: VSE mode.

Host Hardware Environment • any IBM computer that supports DOS/VSE; supports 4331 integrated communications adapter in SS and BSC modes.

Installation Data • first installed 1979 for 4331-1 and 4341-1; 1980 for 4331-2; 1981 for 4341-2 • unknown number of users • distributed through a worldwide network of sales/distribution/maintenance offices.

Description • duplicates BTAM facilities of DOS/VS R.34 with capabilities to operate under DOS/VSE; not compatible with DOS/VS/communications serviceability features of DOS/VS BTAM are optional on BTAM-ES; BTAM application programs must be recompiled to operate under BTAM-ES; number is 5746-RC5.

Pricing & Support • available on a lease-only basis for a perpetual monthly fee of $38; the DSLO license fee is $28 per month • service is charged separately at $7 per month; service on multiple systems costs $11 per month • central service support consists of a graded hierarchy of progressively specialized telephone assistance • technical on-site assistance (charged hourly) is offered to handle problems that cannot be solved through the telephone assistance route.

☐ **IBM (S/370) DOS/VSE Remote Job Entry Workstation Program Product**

Type • IBM DOS/VSE-to-OS/VS RJE package.

Host Software Environment • IBM DOS/VSE operating system with VSE/Advanced Functions; OS/VS-compatible with VM/370 R.6 with RSCS networking, OS/VS1 R.6 with RES, SVS R.1.7 with ASP V.3.1 or HASP V.4, or MVS R.3.7 with JES2, JES3/NJE, or JES3 (including MVS/SE and MVS/SP versions).

Host Hardware Environment • IBM System/370, 3000, 4300, and compatible computers; requires BSC-compatible communications line through either integrated communications adapter, 2701/2703, or 3704/3705 (in emulation mode).

Installation Data • first installed 1979 for 4331-1 and 4341-1; 1980 for 4331-2; 1981 for 4341-2 • unknown number of users • distributed

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through a worldwide network of sales/distribution/maintenance offices.

Description ● permits a computer with DOS/VSE to function as a multileaving remote workstation for submitting jobs to a host to execute under OS/VS group software; can thus function as an aid for DOS/VS to OS/VS transactions; supports up to 7 input, print, output, and output writer functions; supports BSC half-duplex communications; supports data set and program transmissions (with embedded JCL statements); can also function as local processor to execute batch jobs in other DOS/VSE partitions ● program product number is 5746-RC9.

Pricing & Support ● available on a lease-only basis for a perpetual monthly fee of $110; there is no separate DSLO license fee ● central service support is included in the monthly lease fee and consists of a graded hierarchy of progressively specialized telephone assistance ● technical on-site assistance (charged hourly) is offered to handle problems that cannot be solved through the telephone assistance route.

□ IBM (S/370) Host Interactive Store Communications

Type ● host communications with IBM 3651 store controller.

Host Software Environment ● IBM OS/VS2(MVS) with CICS/VS.

Host Hardware Environment ● IBM System/370-class mainframe or compatible computer; IBM 3651 store controller.

Installation Data ● first installed 1984 ● unknown number of installations ● distributed through a worldwide network of sales/distribution/maintenance offices.

Description ● Host Interactive Store Communications requests the transmission of transaction data from the IBM 3651 Store Controller periodically during daily operations; it operates as an application under CICS/OS/VS, sharing network and other resources with first level credit program (IBM 3651 Host Positive Credit Authorization) operating in SDLC line protocol; provides online logging and monitoring of all communications activity; up to 15 separate inbound data sets can be handled ● program product number is 5798-DNH.

Pricing & Support ● one-time charge license fee of $24,000 ● all modules of this program will be available with source licensed program materials; central service support will be available through June 1986

□ IBM (S/370) Job Entry Program (JEP) & File Transfer Program (FTP)

Type ● job transfer program for IBM DOS/VS, OS/VS, and DOS/VSE systems.

Host Software Environment ● subhost requires DOS/VSE, VSE/Advanced Functions R.2, VSE/POWER R.2, ACF/VTAM with MNF R.2, and ACF/NCP/VS R.1 or R.2; a 4331 subhost with the Communications Adapter (for SDLC) requires ACF/VTAME instead of ACF/VTAM and ACF/NCP/VS; host can use DOS/VSE, OS/VS1, SVS, or MVS groups; a 4300 host additionally requires ACF/NCP/VS.

Host Hardware Environment ● IBM System/370, 3000, 4300, and compatible computers.

Installation Data ● first installed 1979 for 4331-1 and 4341-1; 1980 for 4331-2; 1981 for 4341-2 ● unknown number of users ● distributed through a worldwide network of sales/distribution/maintenance offices.

Description ● a dual package that supports practically any combination of DOS/VS and OS/VS family hosts to DOS/VSE subhost job transfers; JEP executes in the subhost, and FTP executes in the host; JEP and FTP control job upload/download operations with routing and communications link sharing functions ● FTP consolidates maintenance functions in the host; operates with VSE/POWER with or without POWER/RJE; VSE/POWER with RJE permits subhost to function as a spooler/front-end controller for remote job submissions to the host ● JEP for DOS/VSE: program product number is 5746-XE6 ● FTP for DOS/VSE and OS/VS: program product number is 5748-XE6.

Pricing & Support ● available on a lease-only basis for a perpetual monthly fee of $242 for JEP and $45 for FTP; the DSLO license fee is $181 and $33 per month for JEP and FTP, respectively ● service is charged separately at $35 and $5 per month, respectively; service on multiple systems costs $56 and $8 per month, respectively ● central service support consists of a graded hierarchy of progressively specialized telephone assistance ● technical on-site assistance (charged hourly) is offered to handle problems that cannot be solved through the telephone assistance route.

□ IBM (S/370) Passthrough

Type ● 3270 emulator for IBM VM/370 systems.

Host Software Environment ● IBM VM/BSE R.2, VM/SE R.2, and VM/SP.

Host Hardware Environment ● IBM System/370, 3000, 4300, and compatible computers.

Installation Data ● first installed 1979 for 4331-1 and 4341-1; 1980 for 4331-2; 1981 for 4341-2 ● unknown number of users ● distributed through a worldwide network of sales/distribution/maintenance offices.

Description ● functionally similar to VSE/3270 Bisynchronous Passthrough (5746-AMS) ● permits any system operating under VM/370 to appear as a remote BSC 3270 Controller to any other system; can interact with host systems through ACF/TCAM/VTAM/VTAME, TCAM, VTAM, or BTAM-ES; supports terminal sharing among local and remote CICS/VS host applications; simulates support for up to 32 3270-type displays and printers in conjunction with CICS-VS ● program product number is 5748-RC1.

Pricing & Support ● available on a lease-only basis for a perpetual monthly fee of $174; the DSLO license fee is $130 per month ● service is charged separately at $82 per month; service on multiple systems costs $131 per month ● central service support consists of a graded hierarchy of progressively specialized telephone assistance ● technical on-site assistance (charged hourly) is offered to handle problems that cannot be solved through the telephone assistance route.

□ IBM (S/370) VM/370 Remote Spooling Communications Subsystem (RSCS) Networking Program Product

Type ● spooling and communications enhancement package for IBM VM/370 systems.

Host Software Environment ● requires VM/370 R.6; interfaces with VME, VM/BSE, and VM/SP, but does not require them.

Host Hardware Environment ● any IBM computer that supports VM/370.

Installation Data ● first installed 1979 for 4331-1 and 4341-1; 1980 for 4331-2; 1981 for 4341-2 ● unknown number of users ● distributed through a worldwide network of sales/distribution/maintenance offices.

Description ● both a functional and communications extension of the RSCS facility integrated into the VM/370 SCP; supports nonprogrammable terminals by way of a 2701 or a 3704/3705 operating in emulation mode or by way of the 4331 Integrated Communications Adapter; also supports the 2777, 2780, and 3780 Terminals by way of a 2703; supports programmable terminals or processors programmed to function as a HASP workstation; can interface with a POWER/VSE host system; can also appear as a HASP workstation and interface with other HASP, ASP, JES2, or JES3 systems; supports Network Job Initialization/Entry (NJI/NJE) participation; provides a network-compatible protocol, store-and-forward facilities, and routing control (through destination tables); supports 3310 and 3370 FBA DASDs ● program product number is 5748-XP1.

Pricing & Support ● available on a lease-only basis for a perpetual monthly fee of $104; the DSLO license fee is $78 per month ● service is charged separately at $35 per month; service on multiple systems costs $56 per month ● central service support consists of a graded hierarchy of progressively specialized telephone assistance ● technical on-site assistance (charged hourly) is of-

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fered to handle problems that cannot be solved through the telephone assistance route.

☐ IBM (S/370) VCNA (Virtual Machine/VTAM Communications Network Application)

Type ● support package for use of SNA BSC or local terminals as virtual machines under VM/370.

Host Software Environment ● runs under DOS/VSE with VSE/AF, or under OS/VS1 with BPE ● operates in conjunction with ACF VTAM or ACF VTAME.

Host Hardware Environment ● any IBM computer that supports DOS/VSE.

Installation Data ● first installed 1979 for 4331-1 and 4341-1; 1980 for 4331-2; 1981 for 4341-2 ● unknown number of users ● distributed through a worldwide network of sales/distribution/maintenance offices.

Description ● allows VM/SP users to use SNA BSC or local terminals as console for a virtual machine ● virtual consoles include 4331 display adapter, 8100 DPPX system, 8775, and most current 3271, 3272, 3274, 3275, 3276, 3278, and 3279 display models as well as 3284, 3286, 3287, 3288, 3289, 3767, and 3262 printers ● program number is 5735-RC5.

Pricing & Support ● available on a lease-only basis for a perpetual monthly fee of $333; the DSLO license fee is $249 per month ● service is charged separately at $123 per month; service on multiple systems costs $196 per month ● central service support consists of a graded hierarchy of progressively specialized telephone assistance ● technical on-site assistance (charged hourly) is offered to handle problems that cannot be solved through the telephone assistance route.

☐ IBM (S/370) VSE/3270 Bisynchronous Passthrough

Type ● 3270 emulator for IBM DOS/VSE systems.

Host Software Environment ● IBM DOS/VSE operating system with VSE/Advanced Function and requires CICS/DOS/VS R.1.4.

Host Hardware Environment ● IBM System/370, 3000, 4300, and compatible computers with a minimum of 384K bytes of memory.

Installation Data ● first installed 1979 for 4331-1 and 4341-1; 1980 for 4331-2; 1981 for 4341-2 ● unknown number of users ● distributed through a worldwide network of sales/distribution/maintenance offices.

Description ● permits any system operating under DOS/VSE to appear as a remote BSC 3271 Controller to any other system; can interact with host systems through ACF/TCAM/VTAM/VTAME, TCAM, VTAM, or BTAM-ES; supports terminal sharing among local and remote CICS/VS host applications; simulates support for up to 32 3270-type displays and printers in conjunction with CICS/VS ● program product number is 5746-AM5.

Pricing & Support ● available on a lease-only basis for a perpetual monthly fee of $185; there is no separate DSLO license fee ● central service support is included in the monthly license fee and consists of a graded hierarchy of progressively specialized telephone assistance ● technical on-site assistance (charged hourly) is offered to handle problems that cannot be solved through the telephone assistance route.

☐ IBM (S/38) Message Switching System

Type ● S/38 electronic message distribution.

Host Software Environment ● IBM CPF (Control Program Facility) Release 3.0 and RPG III Release 3.0.

Host Hardware Environment ● IBM System/38 with 64K bytes of memory, 64M bytes of disk storage, any 5251/5252 Display Station, and a printer.

Installation Data ● unavailable.

Description ● provides electronic message distribution to support the routing of administrative message traffic between a location with an IBM System/38 display station connected to a common System/38, or between any 2 System/38s coupled by Binary Syn-chronous Communications or Synchronous Data Link Control to an IBM System/370 ● system highlights include: supports messages up to 999 lines, with each line supporting up to 78 characters; user-assigned priorities; acknowledged deliveries; originator copies; and supports sending of messages to up to 20 predefined destinations ● the package is menu driven, and contains both a HELP facility and a glossary; allows users to send and receive messages to destinations defined at other System/38 locations, and to perform all options as though all destinations were defined on a single System/38 with all stations attached to it ● product number 5798-RHF.

Pricing & Support ● $1,950 one-time fee for license purchase ● purchased on an "as is" basis ● this is a Field Developed Program (FDP).

☐ IBM (S/34) MRJE (Multileaving Remote Job Entry) Utility

Type ● point-to-point, switched/nonswitched BSC support package for IBM System/34-to-System/370 RJE.

Host Software Environment ● IBM System/34 SSP.

Host Hardware Environment ● any packaged IBM System/34 computer.

Installation Data ● first installed 1977 ● unknown number of users ● distributed through worldwide network of direct sales and service offices.

Description ● supports point-to-point and switched/nonswitched BSC communications; supports submission of jobs to an IBM S/370 for processing by RES under OS/VS1, JES2 under OS/VS2, JES3 under OS/VS2, HASP II under OS/VS2, ASP under OS/VS2, and VM/370 RSCS ● jobs that can be entered into the host system from locally attached and similarly functioning I/O devices can be entered remotely from the System/34 through MRJE; output can be returned to a remote terminal attached to the host or to a host-system local device.

Pricing & Support ● price is bundled into cost of IBM System/34 SSP; local on-site and Central Service (CS) support is provided; CS support consists of a graded hierarchy of progressively specialized technical assistance provided at no extra cost; on-site support, charged hourly, is offered to handle problems that cannot be solved through the telephone assistance route.

☐ IBM (S/34) SRJE (SNA Remote Job Entry) Utility

Type ● IBM System/34-to-System/370 SNA/SDLC communications support package.

Host Software Environment ● IBM System/34 SSP.

Host Hardware Environment ● any packaged IBM System/34 computer.

Installation Data ● first installed 1977 ● unknown number of users ● distributed through worldwide network of direct sales and service offices.

Description ● supports SNA/SDLC communications on System/34; supports submission of jobs to an IBM System/370 through VTAM and NCP/VS for processing by RES under OS/VS1, JES2, and POWER/VS under DOS/VS ● complies with SNA architectural requirements of physical unit type 2, transmission services profile 3, and function manager profile 3 as a secondary SDLC station.

Pricing & Support ● price is bundled into cost of IBM System/34 SSP ● local on-site and Central Service (CS) support is provided; CS support consists of a graded hierarchy of progressively specialized technical assistance provided at no extra cost; on-site support, charged hourly, is offered to handle problems that cannot be solved through the telephone assistance route.

☐ IBM (S/1) CPS BSC Support

Type ● BSC communications support utility for IBM Series/1 users.

Host Software Environment ● IBM CPS operating system.

Host Hardware Environment ● any IBM Series/1 packaged system.

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Installation Data ● first installed 1977 ● unknown number of users ● distributed through worldwide network of sales/distribution/ maintenance offices.

Description ● PRPQ ● supports 2074, 2075, and 2093 communications features; capabilities include point-to-point BSC support, transparent read/write level, auto-answer feature, and trace; causes Series/1 to appear as a System/3 to other stations; does not provide remote IPL device/line exercisers, specific device support, and error recovery ● program number is 5799-TAF.

Pricing & Support ● can be acquired for a $120 one-time license fee or for a $5 perpetual monthly lease; ● central service support is bundled into the price of all licensed software; consists of a graded hierarchy of progressively specialized telephone assistance ● technical on-site assistance (charged hourly) is offered to handle problems that cannot be solved through the telephone assistance route.

☐ IBM (S/1) CPS Intelligent Terminal Subsystem

Type ● multiple Series/1-host communications manager; requires CPS BSC Support package.

Host Software Environment ● IBM CPS operating system.

Host Hardware Environment ● any Series/1 computer with 64K bytes of main memory, a 4962 Diskette, a 4978 Display, and a 4974 Printer.

Installation Data ● first installed 1977 ● unknown number of users ● distributed through worldwide network of sales/distribution/ maintenance offices.

Description ● FDP ● supports multiple Series/1 to multiple hosts through BSC lines with 3270 protocol; emulates 3270, most features of the 3277, and screen image function of 3286 Printer ● supports up to 8 4978/4979 Display Stations in any combination, a 4974 Printer, and 2 BSC lines ● program number is 5798-NLG.

Pricing & Support ● license available lease only for a perpetual monthly fee of $126 ● central service support is bundled into the price of all licensed software; consists of a graded hierarchy of progressively specialized telephone assistance ● technical on-site assistance (charged hourly) is offered to handle problems that cannot be solved through the telephone assistance route.

☐ IBM (S/1) CPS RJE

Type ● RJE communications support package for IBM Series/1 systems.

Host Software Environment ● requires CPS (5799-TAA) and CPS BSC Support (5799-TAF) ● operates with DOS/VS POWER HASP IV, and JES2 at the host.

Host Hardware Environment ● any IBM Series/1 packaged system.

Installation Data ● first installed 1977 ● unknown number of users ● distributed through worldwide network of sales/distribution/ maintenance offices.

Description ● supports Series/1-host communications through a subset of 3780 BSC line protocol on point-to-point switched or leased lines ● program number is 5798-NPZ.

Pricing & Support ● license available lease only for a perpetual monthly fee of $29; $121 one-time distribution fee ● central service support is bundled into the price of all licensed software; consists of a graded hierarchy of progressively specialized telephone assistance ● technical on-site assistance (charged hourly) is offered to handle problems that cannot be solved through the telephone assistance route.

☐ IBM (S/1) EDX Communications Facility

Type ● BSC communications utility for IBM Series/1 users.

Host Software Environment ● IBM EDX Basic Supervisor and Emulator Version 2 (5798-NRR), EDX Utilities Version 2 (5798-NRQ), and EDX Program Preparation Facility (5798-NRP); may require Base Program Preparation Facilities for reassembly operations.

Host Hardware Environment ● minimum hardware requirements are IBM Series/1 Model 4952, 4953, or 4955 Processor with 64K bytes of main memory, a 7840 Programmer Console, a 4962 Disk Unit, and a 4964 Diskette.

Installation Data ● first installed 1977 ● unknown number of users ● distributed through worldwide network of sales/distribution/ maintenance offices.

Description ● FDP ● provides BSC facility extensions under EDX Basic Supervisor and Emulator Version 2 (5798-NRR); a limited version of this facility is incorporated into 5719-XS2 (licensed program version of 5798-NRR) through its remote management utility; significant features are 3271 emulation, control of multipoint 3271 Control Units with attached 3277s, 3277 emulation, Series/1-to-Series/1 point-to-point linkages, and supported communications with multiple hosts; related capabilities include storage/queue management, 3270 field-formatting facilities, message handling, and error message logging ● program number is 5798-ZZC.

Pricing & Support ● license available lease only for a perpetual monthly fee of $40; $2,200 one-time license fee ● central service support is bundled into the price of all licensed software; consists of a graded hierarchy of progressively specialized telephone assistance ● technical on-site assistance (charged hourly) is offered to handle problems that cannot be solved through the telephone assistance route.

☐ IBM (S/1) EDX Terminal Communications System

Type ● ASCII terminal interface utility for IBM Series/1 users.

Host Software Environment ● IBM EDX operating system.

Host Hardware Environment ● any IBM Series/1 packaged system.

Installation Data ● first installed 1977 ● unknown number of users ● distributed through worldwide network of sales/distribution/ maintenance offices.

Description ● IUP ● provides duplex terminal interface for ASCII terminals; 3270-type terminal emulation for communicating with TSO and VM/CMS host interactive systems; 4978 display emulation for accessing EDX static screen and roll mode applications; data transmission at up to 9600 bps ● up to 32 ASCII display terminals can be supported ● program number is 5796-RBT.

Pricing & Support ● license available lease only for a perpetual monthly fee of $143; $37 one-time distribution fee ● central service support is bundled into the price of all licensed software; consists of a graded hierarchy of progressively specialized telephone assistance ● technical on-site assistance (charged hourly) is offered to handle problems that cannot be solved through the telephone assistance route.

☐ IBM (S/1) EDX RJE

Type ● RJE support utility for IBM Series/1 users.

Host Software Environment ● IBM EDX operating system.

Host Hardware Environment ● any IBM Series/1 packaged system with 64K bytes of memory.

Installation Data ● first installed 1977 ● unknown number of users ● distributed through worldwide network of sales/distribution/ maintenance offices.

Description ● licensed program ● SNA/RJE operations with host ● program number is 5719-SX2.

Pricing & Support ● can be acquired for a $1,000 one-time license fee or for a $32 perpetual monthly lease; $50 one-time distribution fee ● central service support is bundled into the price of all licensed software; consists of a graded hierarchy of progressively specialized telephone assistance ● technical on-site assistance (charged hourly) is offered to handle problems that cannot be solved through the telephone assistance route.

☐ IBM (S/1) RPS BSC Remote Management Utility

Type ● remote-host linking utility to IBM Series/1 systems.

Communications & Networking
Other Terminal Control Software

Host Software Environment ● IBM RPS operating system; utility resides in and is executed by Series/1.

Installation Data ● first installed 1977 ● unknown number of users ● distributed through worldwide network of sales/distribution/maintenance offices.

Description ● PRPQ ● uses binary synchronous communications with controlling host; programs are Series/1 resident but controlled by instructions from another system ● used by controlling host to issue RPS operator commands to remote Series/1; allows transmitting, receiving, creating, resetting, or deleting Series/1 data set; schedules programs including utilities, storage dumps, and other diagnostic aids for execution ● program number is 5799-TDH.

Pricing & Support ● can be acquired for a $360 one-time license fee or for a $7 perpetual monthly lease; $22 one-time distribution fee ● central service support is bundled into the price of all licensed software; consists of a graded hierarchy of progressively specialized telephone assistance ● technical on-site assistance (charged hourly) is offered to handle problems that cannot be solved through the telephone assistance route.

☐ IBM (S/1) RPS MRJE

Type ● MRJE manager for IBM Series/1 to System/370 operations.

Host Software Environment ● IBM RPS 2 operating system; compatible with HASP II (Version 3, Release 1 or 4), JES2 (OS/VS2), JES3 (OS/VS3), and RSCS (VM/CMS).

Host Hardware Environment ● any IBM System/370 and any Series/1.

Installation Data ● first installed 1977 ● unknown number of users ● distributed through worldwide network of sales/distribution/maintenance offices.

Description ● IUP ● can be used as a standalone module or in conjunction with the Waterloo Interactive Direct Job Entry Terminal System (5796-NQE) to support the Series/1 as a remote intelligent workstation to a System/370 host; supports up to 17 concurrent terminal users; multileaving protocol is HASP ● program number is 5796-NTY.

Pricing & Support ● license available lease only for a perpetual monthly fee of $143 ● central service support is bundled into the price of all licensed software; consists of a graded hierarchy of progressively specialized telephone assistance ● technical on-site assistance (charged hourly) is offered to handle problems that cannot be solved through the telephone assistance route.

☐ IBM (S/1) RPS RJE

Type ● RJE manager for IBM Series/1 to System/370 operations.

Host Software Environment ● IBM RPS operating system (any version) and Program Preparation Subsystem, Version 1, 2, or 3; requires OS/VS2 (SVS or MVS) with JES2 in System/370 hosts.

Host Hardware Environment ● any IBM System/370 and any Series/1 packaged system.

Installation Data ● first installed 1977 ● unknown number of users ● distributed through worldwide network of sales/distribution/maintenance offices.

Description ● PRPQ ● supports RJE operations with a host System/370 under OS/VS2 and equipped with JES2 ● program number is 5799-TDH.

Pricing & Support ● can be acquired for a $360 one-time license fee or for a $6 perpetual monthly lease; $22 one-time distribution fee ● central service support is bundled into the price of all licensed software; consists of a graded hierarchy of progressively specialized telephone assistance ● technical on-site assistance (charged hourly) is offered to handle problems that cannot be solved through the telephone assistance route.

☐ IBM (S/1) SVS/1 (Series/1 Videotex System)

Type ● S/1 videotex support.

Host Software Environment ● IBM EDX (Event Driven Executive) operating system.

Host Hardware Environment ● IBM Series/1 packaged system.

Installation Data ● unavailable.

Description ● provides capabilities to link Series/1 computers with one or more videotex terminals over existing telephone lines ● accommodates up to 24 videotex terminals concurrently with up to 99 security levels ● supports a minimum system of 5,000 frames of information up to a maximum of about 350,000 frames of information ● data entry is accomplished using response-oriented, fill-in-the-blanks frames; unused fields can be skipped for ease of use, with automatic placement in records of times and dates ● electronic mail facility provides for sending messages to one or more users by referencing distribution lists; also provides a message waiting facility to receive messages once a user has signed on the system ● includes a User Program Interface to interface with applications written in COBOL or PL/1; screen displays are in videotex format with color display capabilities using a combination of text and graphics ● program number is 5799-TFN.

Pricing & Support ● one-time charge license fee of $12,500; eligible for volume license discouting; contact your local IBM representative.

☐ IBM (S/1) Text Routing System

Type ● office systems local remote communications controller for IBM Series/1 users.

Host Software Environment ● IBM Series/1 SCP.

Host Hardware Environment ● any IBM Series/1 packaged system.

Installation Data ● first installed 1977 ● unknown number of users ● distributed through worldwide network of sales/distribution/maintenance offices.

Description ● FDP ● standalone program adapts Series/1 as communications controller for local or remote office systems network ● workstations and communicating terminals include 6640 Document Printer, Magnetic Card II typewriter, and 6670 BSC Information Distributor; supports up to 24 workstations with 5 communications lines; provides interface to a telex network ● electronic store-and-forward systems handles up to 4,000 pages or 30 diskettes of data ● program number is 5798-NZG.

Pricing & Support ● license available lease only for a perpetual monthly fee of $373 ● central service support is bundled into the price of all licensed software; consists of a graded hierarchy of progressively specialized telephone assistance ● technical on-site assistance (charged hourly) is offered to handle problems that cannot be solved through the telephone assistance route.

■ INFORMATICS GENERAL CORPORATION

21031 Ventura Boulevard, Woodland Hills, CA 91364 ● 213-887-9040.

☐ TAPS

Type ● multisystem terminal application development package.

Host Software Environment ● highly portable; supports IBM DOS/VS(E), OS/VS1, OS/VS2(SVS), or OS/VS2(MVS); Prime PRIMOS; DEC RSX11M; Hewlett-Packard MPE; Perkin-Elmer OS32MT; and Harris VULCAN operating systems ● can interface with IBM CICS/VS, VM/CMS, and TSO conversational monitors ● most standard high-level languages, including Pascal, are supported for calling sequences ● has an internal VISAM (Virtual Index Sequential Access Method) file access method.

Host Hardware Environment ● IBM System/370, 3000, 4300, and compatible computers; Prime 50 Series; DEC PDP-11/23 through 11/70; Perkin-Elmer 32-bit Systems; and all Harris minicomputers ● highly modular, modules can require anywhere from 10K bytes to 15K bytes each ● all TAPS files are disk-oriented.

Installation Data ● first installed in 1976; acquired by Informatics in October 1980 ● it is estimated that there are over 800 users of some version of TAPS ● marketed worldwide.

Communications & Networking
Other Terminal Control Software

Description ● operates as a terminal application program tool residing between the operating system and the application program; consists of 4 basic modules that can be integrated into one system or that can be used standalone with existing system modules to form a tailored environment; TAPS/CM is a communications manager responsible for collecting the data transmitted from a terminal and placing it in one of the CM buffers; control is then passed to TAPS/AM, the application manager, which invokes the work area (TWA) to handle the terminal's message; AM also determines the application program(s) that are to handle the transaction, and passes the transaction on; if data management is required, TAPS/DM is responsible for all data manipulation such as inquiry, update, deletion, etc; when data access is required, the appropriate access method is called; DM uses proprietary VISAM for its own data management access method; VISAM interfaces with the disk data sets; it organizes data in direct-access or keyed-access format; any DM function can be substituted by program developer with any other application routine ● other TAPS facilities include a screen painting facility to format the end-user terminal displays, a transaction manager to coordinate screens and programs under user control, a query and reporting language that permits users to perform ad hoc queries of the database and prepare reports, a security system that protects systems applications and data from unauthorized access, and a restart/recovery facility that restores the network or database in case of hardware/software malfunction ● development costs can be reduced as much as 50% over standard implementation methods.

Special Features ● TAPS II for use with DEC and Prime systems; written in Pascal rather than assembler ● TAPS TP-10 micro system and TAPS terminal with portions of TAPS in microcode; TAPS-10 is built on a PDP-11/23 base; offered as a package with the TAPS system.

Pricing & Support ● purchase or lease plans are available; the price of the TAPS product is extremely variable depending on configuration being supported, modules being implemented, and number of copies being acquired; contact vendor for prices ● minimum costs range around $25,000 ● support is included at no extra cost for the first year and can be contracted for additional years.

■ INTERACTIVE SYSTEMS CORPORATION

1212 Seventh Street, Santa Monica, CA 90401 ● 213-450-8363.

☐ CONNECT

Type ● minicomputer interactive remote connect software.

Host Software Environment ● Interactive Systems Corporation IS/1 or IS/1 Workbench operating systems (an enhanced UNIX operating system).

Host Hardware Environment ● DEC PDP-11; Interactive Systems Corporation IDEA Machine.

Installation Data ● first installed 1979 ● unknown number of users ● international distribution.

Description ● provides for interactive remote connections between similar systems ● supports automatic dial-up lines ● other features include: support for line-at-a-time or character-at-a-time transmission; accommodates half- or full-duplex communication; records and inserts carriage returns on output terminal; records conversation transcripts; provides transmission of a file to a remote machine; and supports dedicated as well as Telenet connections.

Pricing & Support ● contact vendor for pricing and support ● source code is available.

☐ FTP (File Transfer Program)

Type ● interactive file transfer program.

Host Software Environment ● Interactive Systems Corporation IS/1 or IS/1 Workbench operating systems; DEC VAX/VMS operating system with Interactive Systems Corporations IS/1 Workbench operating system.

Host Hardware Environment ● DEC PDP-11, VAX-11 system with a DMC11 or an asynchronous serial line interface capable of operating at up to 9600 baud; Interactive Systems Corporation IDEA machine.

Installation Data ● first installed 1979 ● unknown number of users ● international distribution.

Description ● supports the transfer of files between remote and local locations using a dedicated connection between 2 CPUs ● features include: support for copying files from remote/local systems to local/remote systems; listing a remote directory; deleting a remote file; renaming a remote file; and changing the name of a remote file ● supports only dedicated connections.

Pricing & Support ● contact vendor for pricing and support ● source code is available.

☐ INremote/HASP

Type ● IBM HASP, ASP, or JES2 emulation.

Host Software Environment ● Interactive Systems Corporation IS/1 or IS/1 Workbench operating systems with vendor's INcard/HASP software; DEC VAX/VMS operating system with Interactive Systems Corporation INcard/HASP.

Host Hardware Environment ● DEC PDP-11 or VAX-11 system with a modem or modem eliminator capable of operating at up to 19.2K baud; Interactive Systems Corporation IDEA machine with a modem or modem eliminator capable of operating at up to 4800 bps.

Installation Data ● first installed 1979 ● unknown number of users ● international distribution.

Description ● facilities allow users to submit and retrieve jobs from an IBM host system using HASP, ASP, or JES2 multileaving protocol; appears to host as a card reader/punch and line printer remote workstation ● supports multiple RJE hosts either sequentially, using dial-up lines, or simultaneously, when more than one communication line is available ● features include: support for pseudo-simultaneous, bidirectional communications involving several subchannels that can be card input, console input, print output, punch output, and console output; supports automatic translation between ASCII and EBCDIC, with a user option to inhibit transmission of binary files; automatic data compression of repeated characters including blanks; and printer vertical forms control.

Pricing & Support ● contact vendor for pricing and support ● source code is available.

■ INTERACTIVE SYSTEMS, INC

131 Middlesex Turnpike, Burlington, MA 01803 ● 617-273-4420.

☐ SPOCNET (Simultaneous Process Oriented Communication NETwork)

Type ● interprocess communication package.

Host Software Environment ● DEC TOPS-10/20; VAX/VMS.

Host Hardware Environment ● DEC DECsystem 10/20 and VAX.

Installation Data ● first installed 1981 ● 7 installations ● international distribution.

Description ● an interprocess communication package that provides capabilities for 2 or more separately running programs to dynamically exchange information ● consists of a set of subroutine calls which are made from COBOL or FORTRAN application programs; operates in conjunction with the operating system's Inter Process Communication Facility ● SPOCNET can also be used with Interactive System Inc's SCOPE Screen Formatting Utility.

Pricing & Support ● $5,000 one-time fee for license purchase that includes first-year maintenance and documentation ● multicopy discounts are available.

Communications & Networking
Other Terminal Control Software

■ KOLINAR CORPORATION

3064 Scott Boulevard, Santa Clara, CA 95050 ● 408-980-9411.

☐ K3101 (IBM 3270 Terminal Emulator)

Type ● emulator for IBM 3278-2 terminals.

Host Software Environment ● IBM VM/SP.

Host Hardware Environment ● IBM System/370-class mainframe or compatible computer.

Installation Data ● first installed 1980 ● over 50 installations.

Description ● using this program an IBM 3101, or IBM PC emulating a 3101 and dialed to the operating system, appears as a 24-line IBM 3278 Model 2; allows full-screen applications to run without change on an ASCII terminal ● runs as a disconnected virtual machine under VM, permitting up to 256 concurrent users; full PF key support, optimized data streams, and 3270 attribute simulation are featured; standard VM accounting records are produced for each user.

Pricing & Support ● $1,000 one-time license purchase; there is a 30-day free trial, telephone support, and an optional $100 ongoing annual maintenance fee ● source code is supplied.

■ LABYRINTH SYSTEMS, LTD

P.O. Box 99, Great Neck, NY 11022 ● 212-532-3222.

☐ Labyrinth Systems TEL*M

Type ● online retrieval/update utility for Cincom TOTAL users on IBM systems.

Host Software Environment ● IBM OS/VS2(MVS) operating system with CICS/VS and Cincom TOTAL.

Host Hardware Environment ● IBM System/370, 3000, 4300, and compatible computers.

Installation Data ● first installed 1979 ● 68 current users ● international distribution.

Description ● real-time utility program; operates through CRTs under CICS/VS; accesses TOTAL files through TOTAL; system adds records to existing TOTAL data sets, deletes invalid or obsolete records, changes a complete record within a data set or a single byte within a record, reestablishes linkage chains to data sets, validates the structural integrity of any data set, counts data set records, deletes linkages to bad records, finds and selectively displays records, and performs other file maintenance functions; special function screens can be used to initiate searches and to locate fields within records; other features include protection against runaway searches and 2 levels of password protection against unauthorized access; system also dynamically acquires core for maps, tables, and record areas only when needed, and releases core when no longer needed.

Pricing & Support ● $6,500 license purchase price includes first-year maintenance; annual maintenance fee after first year is 15% of prevailing purchase price; lease plan also available, $355 per month; includes maintenance ● installation instructions supplied; no training required.

■ LEXICO ENTERPRISES, INC

System Development Center; 8757 Georgia Avenue, Silver Spring, MD 20910 ● 301-588-0400.

☐ DPG/Link

Type ● communications link programs for the Hewlett-Packard 1000.

Host Software Environment ● HP TESTAID III software; HPL 2.0; and BTL.

Host Hardware Environment ● HP 1000 and HP 9826/36 controller; must have HP-IB cards inserted for Link; 256K-byte memory required.

Installation Data ● first installed 1983 ● 2 users ● international distribution.

Description ● DPG/Link routines are used with the DPG Model 2000 program which in turn operates with the HP TESTAID III to automate the production of broad test patterns for use with the HP 3060A/3062A In-Circuit Test System; DPG creates a program that uses the TESTAID III files and performs all overhead functions needed to execute the test ● DPG/Link programs (Link/1000 and Link/200) on the HP 1000 and HP 9826/36 allow the engineer to enter requests and perform various test functions; Link can identify files that are on floppy disk or on the HP 1000 system; files can be stored on the HP 1000 to backup floppy disks.

Pricing & Support ● one-time license purchase fee of $10,000 includes documentation and 90-day warranty; annual product support service agreements thereafter, vary from $5,000 to $10,000; training courses are offered, contact vendor for cost; source code is not available.

■ MDS QANTEL CORPORATION

4142 Point Eden Way, Hayward, CA 94545 ● 415-887-7777.

☐ BSCDRIV (BiSynchronous Communications DRIVer)

Type ● communications enhancement for control of local/remote bisynchronous communications over 2 channels.

Host Software Environment ● Qantel BEST (Business Executive System for Timesharing) or BEST/AOS (Business Executive System for Timesharing/Advanced Operating System).

Host Hardware Environment ● Qantel 100/200/300 Series packaged system.

Installation Data ● first installed 1980 ● unknown number of users ● distribution through dealer/distributor network.

Description ● local/remote bisynchronous communications module; provides driver with information for interfacing with user programs; driver handles all send/receive data transmissions and user buffer interfacing.

Pricing & Support ● price is bundled into systems hardware cost ● supported through a Qantel user Hot-Line Service; a remote CRT terminal attachment allows Hot-Line study and correction of software problems; corrections can be entered directly or forwarded as an update; available 8:00 AM to 6:00 PM Pacific time, Monday through Friday.

☐ RJE/A

Type ● emulator for IBM System/3 MRJE.

Host Software Environment ● Qantel BEST (Business Executive System for Timesharing) or BEST/AOS (Business Executive System for Timesharing/Advanced Operating System).

Host Hardware Environment ● Qantel 200/300 Series packaged system with 48K bytes of memory, 6251 Communications Controller, and AT&T 201C-type modem.

Installation Data ● first installed 1980 ● unknown number of users ● distribution through dealer distributor network.

Description ● IBM System/3 MRJE emulation provides capabilities for communications with IBM 370/3000/4300 systems ● supports HASP, ASP V2.6 and V3.2, OS/VS1 RES, OS/VS2 JES, and VM/370 RSCS systems software interfaces ● uses synchronous switched or nonswitched line facilities.

Pricing & Support ● price is bundled into system hardware cost ● supported through a Qantel user Hot-Line Service; a remote CRT terminal attachment allows Hot-Line study and correction of software problems; corrections can be entered directly or forwarded as an update; available 8:00 AM to 6:00 PM Pacific time, Monday through Friday.

☐ TTY-43

Type ● emulator for TTY-43 terminal emulator.

Host Software Environment ● Qantel BEST (Business Executive System for Timesharing) or BEST/AOS (Business Executive System for Timesharing/Advanced Operating System).

Host Hardware Environment ● Qantel 200/300 Series packaged system with 6251 Communications Controller.

Communications & Networking
Other Terminal Control Software

Installation Data ● first installed 1980 ● unknown number of users ● distribution through dealer/distributor network.

Description ● TTY 43 terminal emulator operates at 300 bps in half-duplex mode using even parity ASCII ● supports point-to-point, batch, or interactive applications over asynchronous lines.

Pricing & Support ● price is bundled into systems hardware cost ● supported through a Qantel user Hot-Line Service; a remote CRT terminal attachment allows Hot-Line study and correction of software problems; corrections can be entered directly or forwarded as an update; available 8:00 AM to 6:00 PM Pacific time, Monday through Friday.

☐ 2780 DRW

Type ○ emulator for IBM 2780 terminals.

Host Software Environment ● Qantel BEST (Business Executive System for Timesharing) or BEST/AOS (Business Executive System for Timesharing/Advanced Operating System).

Host Hardware Environment ● Qantel 200/300 Series packaged system and 6251 Communications Controller.

Installation Data ● first installed 1980 ● unknown number of users ● distribution through dealer/distributor network.

Description ● supports point-to-point operations in IBM 2780 terminal emulation mode.

Pricing & Support ● price is bundled into systems hardware cost ● supported through a Qantel user Hot-Line Service; a remote CRT terminal attachment allows Hot-Line study and correction of software problems; corrections can be entered directly or forwarded as an update; available 8:00 AM to 6:00 PM Pacific time, Monday through Friday.

☐ 3270 DRW

Type ● emulator for IBM 3270 terminals.

Host Software Environment ● Qantel BEST (Business Executive System for Timesharing) or BEST/AOS (Business Executive System for Timesharing/Advanced Operating System).

Host Hardware Environment ● Qantel 200/300 Series packaged system with 64K bytes of memory, 6251 Communications Controller, and AT&T 201C-type modem.

Installation Data ● first installed 1980 ● unknown number of users ● distribution through dealer/distributor network.

Description ● IBM 3270 terminal emulator supports point-to-point or multipoint, BSC, or SDLC mode operations; emulates stand-alone 3275 terminal or 3271/3274/3276-type clusters ● supports screen sizes of 480, 960, 1920, 2560, or 3440 characters.

Pricing & Support ● price is bundled into system hardware cost ● supported through a Qantel user Hot-Line Service; a remote CRT terminal attachment allows Hot-Line study and correction of software problems; corrections can be entered directly or forwarded as an update; available 8:00 AM to 6:00 PM Pacific time, Monday through Friday.

☐ 3740 DRW

Type ● emulator for IBM 3740 terminals.

Host Software Environment ● Qantel BEST (Business Executive System for Timesharing) or BEST/AOS (Business Executive System for Timesharing/Advanced Operating System).

Host Hardware Environment ● Qantel 200/300 Series packaged system with 6251 Communications Controller.

Installation Data ● first installed 1980 ● unknown number of users ● distribution through dealer/distributor network.

Description ● supports point-to-point bisynchronous communication mode operations in IBM 3740 emulation mode.

Pricing & Support ● price is bundled into system hardware price ● supported through a Qantel user Hot-Line Service; a remote CRT terminal attachment allows Hot-Line study and correction of software problems; corrections can be entered directly or for-

warded as an update; available 8:00 AM to 6:00 PM Pacific time, Monday through Friday.

☐ 3780 DRW

Type ● emulator for IBM 3780 terminals.

Host Software Environment ● Qantel BEST (Business Executive System for Timesharing) or BEST/AOS (Business Executive System for Timesharing/Advanced Operating System).

Host Hardware Environment ● Qantel 200/300 Series packaged system and 6251 Communications Controller.

Installation Data ● first installed 1980 ● unknown number of users ● distribution through dealer/distributor network.

Description ● supports point-to-point operations in IBM 3780 terminal emulation mode.

Pricing & Support ● price is bundled into systems hardware cost ● supported through a Qantel user Hot-Line Service; a remote CRT terminal attachment allows Hot-Line study and correction of software problems; corrections can be entered directly or forwarded as an update; available 8:00 AM to 6:00 PM Pacific time, Monday through Friday.

■ B.I. MOYLE ASSOCIATES, INC

5788 Lincoln Drive, Minneapolis, MN 55436 ● 612-933-2885.

☐ BIMCMPRS

Type ● IBM CICS/VS-3270 data compression facility.

Host Software Environment ● IBM DOS/VSE; OS/VS1, OS/VS2(MVS); requires CICS/VS.

Host Hardware Environment ● IBM System/370, 4300, and compatible computers.

Installation Data ● first installed 1983 ● 50 current users ● international distribution.

Description ● compresses IBM 3270-type terminal output by removing repetitive characters; improves transaction response time by reducing transmission time and also by reducing contention between terminals on the same line; reduction time varies depending on the transmitting application program and data entered by terminal operators ● data compression occurs within the CICS/VS system and is transparent to the user; a CRT transaction is provided to display statistics on compression effectiveness during product use.

Pricing & Support ● $1,600 license purchase price includes first-year maintenance; annual maintenance after first year is $200 ● lease plan available for $80 per month or $800 per year; includes maintenance.

☐ BIMECHO

Type ● IBM 3270 screen duplication and demonstration facility.

Host Software Environment ● IBM DOS/VSE; requires CICS/VS.

Host Hardware Environment ● IBM System/370-class mainframe or compatible computer; 3270 CRTs/printers.

Installation Data ● first installed 1984 ● 6 users ● international distribution.

Description ● IBM 3270 CRT screens can be duplicated on another CRT or to IBM 3270 printers to create hard copy for testing sections ● systems programmers can observe a problem from a remote CRT; demos can be shown on multiple CRTs.

Pricing & Support ● $1,600 license purchase price includes first-year maintenance; $200 annual maintenance after first year ● $800 annual lease or $80 per month rental includes maintenance ● source code is not available.

☐ BIMP 3270

Type ● IBM CICS/VS screen print facility.

Host Software Environment ● IBM DOS/VSE; requires CICS/VS.

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Host Hardware Environment ● IBM System/370, 4300, or compatible computers.

Installation Data ● first installed 1982 ● 40 current users ● international distribution.

Description ● designed to replace or augment the IBM screen image print (SIT parameter PRINT=) facility DFHP3270 ● features include the ability to copy screen images to terminal printers, copy screen images to system printers via the POWER/VSE spooling queue (requires B.I. Moyle BIMSPOON as a prerequisite), route print output from online application programs using BIMSPOON directly to terminal printers; also provides a print function for BIM product BIMMONTR's POWER/VSE display program (DPWR transaction) so that partial queue entries may be copied to terminal or system printers, thus providing an optional combination of selective viewing and printing of output listings (requires BIMSPOON and BIMMONTR) ● primary uses include hard copy of specific screens in production application situations as decided by the terminal operator, documenting application uses problems as depicted on the CRT screen, and for generating sample screen images for application documentation purposes.

Pricing & Support ● $800 license purchase price includes first-year maintenance; annual maintenance after first year is $80 ● lease plan available for $40 per month or $400 per year; includes maintenance.

☐ BIMSPOOL

Type ● terminal printer spooling enhancement for IBM DOS/VS POWER/VS users operating with CICS or SHADOW II.

Host Software Environment ● IBM DOS/VS or DOS/VSE operating system.

Host Hardware Environment ● IBM System/370, 3000, 4300, and compatible computers.

Installation Data ● first installed 1979 ● 500 current users ● international distribution.

Description ● retrieves print output from the batch spooling queue and directs the output to a local or remote 3270-type terminal printer; net gain is the ability to operate in RJE modes with less expensive equipment; a CRT transaction is included for general job control and status checks.

Pricing & Support ● $4,000 license purchase price; no charge first-year maintenance; $500 annual maintenance after first year ● also available $2,000 annual lease or $200 monthly lease; no charge for maintenance on lease plans.

☐ BIMSPOON

Type ● teleprocessing-to-batch-print spooler for IBM DOS/VSE users.

Host Software Environment ● IBM DOS/VS or DOS/VSE operating system with CICS/VS and POWER/VS (E).

Host Hardware Environment ● IBM System/370, 3000, 4300, and compatible computers.

Installation Data ● first installed 1981 ● 50 current users ● international distribution.

Description ● accepts print data from online CICS/VS application programs and causes it to be spooled into the POWER/VS queue; logical printer scheduling mechanism permits multiple online tasks to create batch print job output concurrently; the generated POWER/VS list jobs can be printed on a batch system printer.

Special Feature ● if B.I. Moyle terminal printer spooler (BIMSPOOL) is also used, the generated list jobs can be printed on a 3270 terminal printer.

Pricing & Support ● $920 license purchase price includes first-year maintenance; annual maintenance fee after first year is $115 ● lease plan available, $46 per month or $460 per year; includes maintenance ● installation instructions are supplied; no training required.

☐ BIMSWAP

Type ● IBM 3270 terminal switching facility.

Host Software Environment ● IBM DOS/VSE; requires CICS/VS.

Host Hardware Environment ● IBM System/370, 4300, or compatible computer.

Installation Data ● first installed 1983 ● 20 current users ● international distribution.

Description ● permits local IBM 3270 CRT and terminal printers running under BTAM to be dynamically switched between multiple CICS/VS partitions in a single CPU; eliminates the need for duplicate (VTAM and BTAM) control unit ports, duplicate cables, and/or mechanical switches ● a typical use would be to detach a terminal from a production CICS/VS partition and attach it to a test CICS/VS application running in another partition, and then switch it back after the test is completed.

Pricing & Support ● $1,800 license purchase price includes first-year maintenance; annual maintenance after first year is $225 ● lease plan available for $90 per month or $900 per year; includes maintenance.

■ NCR/COMTEN INC

2700 Snelling Avenue North, St. Paul, MN 55113 ● 612-638-7777.

☐ Data Link Control (DLC)

Type ● supports Comten DLC-MIM (Memory Interface Module) with multiple protocols.

Host Software Environment ● NCR Comten 3600 System Control Program, Advanced Communications Function/Network Control Program 2 (ACF/NCP 2), and CODEL (assembly language).

Host Hardware Environment ● NCR Comten 3600 Front-End Processor connected to an IBM System/370, 3000, 4300, or compatible computer.

Installation Data ● first installed 1981 ● unknown number of users ● international distribution.

Description ● provides software support for Comten Data Link Control/Memory Interface Module (DLC-MIM) ● supports multiple protocols concurrently, including start/stop, BSC, and SDLC protocols; supports CNS (Communications Networking System) trunking and extended start/stop; also supports intelligent modems such as IBM 386X series and 2 new extended protocol handlers.

Pricing & Support ● this software is bundled in 3600 Front-End Processor hardware charges.

☐ Data Switching System (DSS)

Type ● support for data message switching.

Host Software Environment ● NCR Comten 3600 System Control Software (SCS 63).

Host Hardware Environment ● NCR Comten 3600 Front-End Processor connected to an IBM System/370, 3000, 4300, or compatible computer.

Installation Data ● first installed 1983 ● unknown number of users ● international distribution.

Description ● a family of communication software products that support data message switching, file accessing, and user-defined application processing ● family consists of individually priced packages: Communication Acess Method (CAM), Message Control Program (MCP), and Communications Operating System (COS).

Pricing & Support ● contact local NCR representative for prices and availability.

☐ Emulation Processing (EP)

Type ● IBM 270X and 370X communications controller emulation program.

Host Software Environment ● NCR Comten 3600 System Control Software (SCS 63) and CODEL (assembly language) Release 57 or higher.

Host Hardware Environment ● NCR Comten 3600 Front-End Processor connected to an IBM System/370, 3000, 4300, or compatible computers.

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Installation Data ● first installed 1981 ● unknown number of users ● international distribution.

Description ● allows 3600 to emulate an IBM 270X Transmission Control Unit or an IBM 370X Communications Controller ● completes the data path from the terminal line circuit to the host subchannel address and performs the same data organizational functions as the 270X/370X ● communication lines from terminals are assigned to a host subchannel where each host subchannel is able to support up to 256 communication lines ● provides multiple host support, uses 270X/370X host access methods, and can co-reside with Comten NCP or ACP/NCP as well as the Communications Networking System (CNS) and Data Link Control ● also supports Terminal-Initiated Line Switching (TILS), Site-Initiated Line Switching (SILS), Automatic Baud Rate Detection (ABRD), automatic dialing (DIAL), and Multisubchannel Line Access (MSLA).

Pricing & Support ● this software is bundled in 3600 Front-End Processor hardware charges.

☐ Extended Start/Stop Emulator (SS1)

Type ● asynchronous communication support program.

Host Software Environment ● NCR Comten 3600 System Control Software (SCS 63) and Emulation Processing (EP4) program.

Host Hardware Environment ● NCR Comten 3600 Front-End Processor connected to an IBM System/370, 3000, 4300, or compatible computer.

Installation Data ● first installed 1981 ● unknown number of users ● international distribution.

Description ● allows Comten 3600 Front-End Processor to support asynchronous communications ● supports Terminal-Initiated Line Switching (TILS) and Site-Initiated Line Switching (SILS) ● doesn't support terminals attached to a remote processor and doesn't support Automatic Baud Rate Detection (ABRD).

Pricing & Support ● $891 annual or $81 monthly fee for rental license that includes documentation and maintenance ● source code is available.

☐ Initialization Message Processing & Definition (MPAD)

Type ● creates and sends messages to terminals at logon/logoff.

Host Software Environment ● NCR Comten 3600 System Control Software (SCS 63), Emulation Processing 4 (EP4), and CODEL (assembly language) Release 57.

Host Hardware Environment ● NCR Comten 3600 Front-End Processor connected to an IBM System/370, 3000, 4300, or compatible computers.

Installation Data ● first installed 1981 ● unknown number of users ● international distribution.

Description ● operates under EP4 to create and send messages to terminals at logon/logoff ● it is return broadcast switch character-dependent; line number/identification message follows switch character entry; provides modifiable subchannel assignment messages, and returns a prompt message at terminal connect time.

Pricing & Support ● $363 annual or $33 monthly charge for rental license that includes documentation and maintenance ● source code is available.

■ NCR CORPORATION
1700 Patterson Boulevard, Dayton, OH 45479 ● 513-445-5000.

☐ RBS (Remote Batch Subsystem)

Type ● IBM 2780/3780 terminal emulator.

Host Software Environment ● NCR IMOS V operating system.

Host Hardware Environment ● NCR 9020 Series.

Installation Data ● first installed 1977 ● unknown number of users ● international distribution through local sales/service offices.

Description ● an IBM 2780/3780 terminal emulator supporting binary synchronous communications (BSC) at rates of 2400, 4800,

7200, or 9600 bps; functions with dedicated line or switched telephone network; performs point-to-point communication in half-duplex mode ● does not support all features of 2780/3780, but does support 3780 space compression; 2780 space truncation; terminal identification or circuit assurance; and the transparent EBCDIC option ● supports maximum record transmission sizes of 510 bytes in 3780 mode, 399 bytes in ASCII 2780 mode, and 397 bytes in EBCDIC 2780 mode ● provides ability to save and print communications activity image using Data Capture feature; image includes function and status codes as well as data transmitted.

Pricing & Support ● $3,072 one-time fee for license purchase; $64 monthly fee for rental license; telephone-based service is optional at $6 per month.

■ NIXDORF COMPUTER CORPORATION
168 Middlesex Turnpike, Burlington, MA 01803 ● 617-273-0480.

☐ S811 Batch Communications Utility Package

Type ● synchronous communications controller.

Host Software Environment ● Nixdorf NIROS (multiuser, multiprogramming, operating system).

Host Hardware Environment ● Nixdorf 8870 packaged system.

Installation Data ● first installed 1978 ● unknown number of users ● distributed through worldwide network of direct sales/service offices.

Description ● provides synchronous communications; supports auto/dial answer functions; supports IBM 2770, 2780, 3740, 3770, and 3780 protocols, and communications to 2 different 8870 systems or with another mainframe; works in conjunction with Nixdorf's Programmable Line Controller ● supports one or two communications lines per system.

Pricing & Support ● $2,000 one-time license fee with a negotiated one-time installation charge ● remote software maintenance license price is bundled into fee for NIROS operating system ● separately available remote maintenance service permits Nixdorf technicians to diagnose problems and load corrections into user's systems through communications facilities.

■ ON-LINE SOFTWARE INTERNATIONAL
Fort Lee Executive Park, 2 Executive Drive, Fort Lee, NJ 07024 ● 800-526-0272; in NJ 201-592-0009.

☐ DB/LINK

Type ● IBM System/34/36 link with IBM PC and PC/XT microcomputers.

Host Software Environment ● IBM System/34/36 SSP, File Transfer Utility, RPG II, and ExecuTrieve; PC-DOS 2.0, 5250 emulator or Blue Lynx emulator (local or remote PCs).

Host Hardware Environment ● IBM System/34/36 with 128K memory; IBM PC, PC/XT with 256K memory.

Installation Data ● first installed 1983 ● unknown number of installations ● international distribution.

Description ● with DB/LINK, System/34 and /36 computers with ExecuTrieve software can exchange information with IBM PC or PC/XT microcomputers; DB/LINK can select the exact information desired, consolidating the data from up to 16 files (single or multiple record types) into a single file, and converting that data to ExecuTrieve or BASIC format for use on the PC; the ExecuTrieve Dictionary Program is used to convert packed, binary, and numeric signed fields and characters; 10 levels of security are provided to identify users and the data fields that the user can access; users can have the data transferred immediately or can choose to have the data transferred later; transfer procedures can be saved for reuse; new data can be transferred from the PC to the minicomputer for processing.

Pricing & Support ● $3,500 one-time license fee includes documentation, hot-line support, new releases for the first year, and one copy of the PC retrieval software; additional copies are priced on a sliding scale ● after the first year, annual subscriptions for

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support are available ● training is on a contract basis ● source code is not available.

■ PACIFIC SOFTWARE MANUFACTURING COMPANY

2608 8th Street, Berkeley, CA 94710 ● 415-540-5000.

☐ X.DOT

Type ● source code X.25 interface for packet-switching networks.

Host Software Environment ● most operating systems that support a "C" compiler.

Host Hardware Environment ● most computers capable of running a "C" compiler, with 20K bytes of memory.

Installation Data ● first installed 1981 ● 9 current users ● international distribution.

Description ● portable software interface that connects a computer to public (Telenet, Tymnet, etc) or private packet-switching network using the X.25 standard protocol; implements the full CCITT X.25 protocol according to the published 1980 specification; can be used by a timesharing service, a corporate computer network, or an OEM building a system requiring an X.25 interface ● the package consists of a number of independent processes that are modularized in the sense that they can run on more than 1 processor (for example mainframe and front end) or so that parts of it are replaced by hardware (for example, the Western Digital X.25 frame-level chip); a packet-switching network simulator is also included so that the program can be used to test itself.

Pricing & Support ● one-time perpetual license fee is $30,000.

■ PENNINGTON SYSTEMS INC

65 South Main Street, Building C, Pennington, NJ 08534 ● 609-737-2727.

☐ SCRNIO/11

Type ● screen form library.

Host Software Environment ● DEC RSX-11M, RSX-11M-PLUS, IAS, RT-11 RSTS, or VAX/VMS operating systems.

Host Hardware Environment ● DEC PDP-11 Series and VAX-11 Series systems.

Installation Data ● first installed 1979 ● 90 installations ● international distribution.

Description ● a library of subroutines that provide screen form and field attribute capabilities; includes an interactive, menu-driven screen form editor ● screen forms can consist of background text (such as prompts, headings, and titles) and fields for input and output; fields have processing attributes, such as fixed/variable length, left/right justification, fill character, no-terminator, and no-echo input options; also contains a default value/missing value and error-checking attributes such as mandatory/optional, a mask, a range, or a set of legal values ● application programs can display multiple screen forms on one video terminal; specifics of screen forms, field attributes, and terminal models are isolated from application programs.

Special Features ● VIDIO/11 is an integral part of SCRNIO/11 software.

Pricing & Support ● contact vendor for license and maintenance fees ● training on per-diem basis ● multiple CPU discounts are available ● source code is not available.

☐ VIDIO/11

Type ● library of terminal-independent video I/O.

Host Software Environment ● DEC RSX-11M, RSX-11M-PLUS, IAS, RT-11, RSTS, or VAX/VMS operating systems.

Host Hardware Environment ● DEC PDP-11 Series and VAX-11 Series systems.

Installation Data ● first installed 1979 ● 90 installations ● international distribution.

Description ● a library of subroutines that provides terminal-independent video I/O capabilities which include: the ability to write

to, or read (with protected field) from, a given screen position; clear a line or the whole screen; and set video attributes such as reverse video, blink, and underscore (if supported by the video terminal) ● supports character and field deletes; provides protection for the screen contents from bad input entered by the terminal operator ● other optional capabilities include: no-echo input, no-terminator input, fixed-length and variable-length input, and partial screen scrolling on most terminals ● for the most part application programs need not know what model of video terminal it is communicating with; terminal model is defined at runtime.

Pricing & Support ● contact vendor for license and maintenance fees ● training on per-diem basis ● multiple CPU discounts are available ● source code is not available.

■ PERKIN-ELMER

Computer Systems Division; 2 Crescent Place, Oceanport, NJ 07759 ● 201-870-4500.

☐ Perkin-Elmer 2780/3780 RJE Emulation (OS/32)

Type ● emulator for IBM 2780/3780 RJE terminal.

Host Software Environment ● Perkin-Elmer OS/32 (multi-programming, multiuser operating system).

Host Hardware Environment ● Perkin-Elmer 32-bit processor with 256K bytes of memory, relocation and protection hardware, operator console, interval clock, line frequency clock, and power fail/auto restart.

Installation Data ● first installed 1979 ● unknown number of users ● worldwide distribution through company sales and service offices.

Description ● IBM 2780/3780 emulator supports communications over half-duplex, leased or switched lines, point-to-point, 2-wire, or 4-wire operations at speeds up to 19.2K bps ● supports transmission to and from an IBM 360/370 or Perkin-Elmer processor; includes a special formatting mode for higher throughput rates when transmission is between Perkin-Elmer processors.

Pricing & Support ● $1,800 one-time license fee for 16M-byte disk version; $1,500 for tape version; includes 90-day warranty ● maintenance service provides a regular software bulletin describing software defects and patches or alternatives to resolve the defects; includes Software Change Revision Service and automatic update service; 24-hour service via toll-free 800 number is available at extra cost; annual maintenance fees are based on computer type; other assistance available on a time-and-material basis.

■ POLYGON ASSOCIATES, INC

9 American Industrial, St. Louis, MO 63043 ● 314-576-7709.

☐ Poly-BSC/RJE (Bisynchronous RJE Terminal Emulation)

Type ● personal computer emulation of IBM 2780/3780 RJE stations.

Host Software Environment ● CP/M-86/80 (1.0), CP/M, MS-DOS (2.01) for DEC; MS-DOS for IBM PC.

Host Hardware Environment ● DEC VT180, Rainbow 100, DECmate II; IBM PC with synchronous option; to any IBM mainframe or compatible computer configured to support IBM 2780 or 3780 terminals, or a non-IBM system with 2780/3780 emulation software.

Installation Data ● first installed 1978 ● unknown number of installations.

Description ● supports all standard and most optional 2780/3780 features; card reader formatted data is gotten from the personal computer disk files; punch formatted data may be sent to disk or to an attached printer ● system features menu-driven, user control of configuration parameters; multiple configurations may be saved; multiple files may be transmitted as a single job; sets of file queues may be saved for later use in fully unattended operation; point-to-point and multipoint communications are supported at speeds up to 9600 baud; accumulation of statistics, and optional status logging to disk is available ● communication is half-duplex; full-duplex, to eliminate turnaround delay, is optional; a user-selectable RTS/CTS delay, to allow operation on satellite links with modems having insufficient internal delays, may be used; config-

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urable parameters include: retry limits, WACK and TTD limits, receive and disconnect timeouts, and leading SYN count; EBCDIC communications with ASCII translation is optional.

Pricing & Support ● $500 one-time license purchase includes documentation ● source code is not available.

☐ Poly-BSC/3270 (Bisynchronous Terminal Emulation)

Type ● personal computer emulation of IBM 3270 family of terminal devices.

Host Software Environment ● CP/M-86/80 (1.0) and MS-DOS (2.01) for DEC Rainbow 100, CP/M (2.2) for DECmate II; MS-DOS for IBM PC.

Host Hardware Environment ● DEC Rainbow 100, DECmate II; IBM PC; any IBM mainframe or compatible computer with communications using BSC protocol.

Installation Data ● first installed 1978 ● unknown number of installations.

Description ● BSC/3270 can emulate a single 3270-type controller with one attached display station and one optional printer for data entry, online updating, inquiry, program development, etc ● features include: menu-driven, user control of configuration parameters; saving of multiple configurations; transmission of files as command script files; unattended operation; session logging; and file capture; online HELP and built-in communication diagnostic facilities are included ● menus control the simulated printer, the script file facility, and received data logging; commands are provided for connecting with the remote system or breaking connections; switching between keyboard and file input; enabling/disabling the printer; received data logging; and exiting from the emulator, with/without disconnecting ● display system functions include: EBCDIC communication with translation to/from ASCII at the personal computer console and simulated printer; support of all standard program attention keys, 24 PF keys, and 3 PA keys; and light-pen emulation via a cursor select key.

Pricing & Support ● $500 one-time license purchase includes documentation ● source code is not available.

☐ Poly-COM (Complete Asynchronous Communication Package)

Type ● DEC terminal emulation and file transfer facilities.

Host Software Environment ● CP/M (2.2), CP/M-86/80 (1.0), MS-DOS (2.01), and MS-DOS (1.1).

Host Hardware Environment ● DEC VT180, Rainbow 100, DECmate II; IBM PC.

Installation Data ● first installed 1979 ● unknown number of installations.

Description ● a complete asynchronous communication package for selected personal computers; combines facilities of Poly-XFR program and Poly-TRM/VT program; offered as a total package from a lower price ● see referenced profiles following.

Pricing & Support ● $200 one-time license purchase includes documentation ● source code is not available.

☐ Poly-TRM/VT (Asynchronous Terminal Emulation)

Type ● personal computer emulation of DEC VT102 and VT52 terminals.

Host Software Environment ● CP/M (2.2), MS-DOS (1.1), P/OS (1.0), CP/M-86/80 (1.0).

Host Hardware Environment ● personal computers from Apple, DEC, IBM, Jonos, Osborne, TRS, Televideo, Victor Technologies, Xerox, and others.

Installation Data ● first installed 1979 ● unknown number of installations.

Description ● Poly-TRM allows the use of personal computers as a terminal for asynchronous communications with a wide variety of host computers; supports any printer attached to the personal computer; text files can be sent/received without special software

on the host computer ● menu-driven setup screens allow users to configure a system for a particular computer.

Special Features ● Poly-ReGIS is an optional resident extension to CP/M and MS-DOS operating systems that allows any DEC Rainbow with graphics options and 128K memory to execute and display the ReGIS graphics commands used by DEC's GIGI VT125 and VT240 terminals.

Pricing & Support ● $150 one-time license purchase includes documentation ● source code is not available.

☐ Poly-XFR (Asynchronous File Transfers)

Type ● provides for file transfer of ASCII and binary files between personal computers and minicomputers.

Host Software Environment ● XFR/HOST software: DEC VMS (2.5), RSX-11M (3.2), RSTS/E (7.0), RT-11 (4.0), TOPS-10/-20; personal computer software CP/M (2.2), P/OS (1.5), CP/M-86/80 (1.0), MS-DOS (1.1), ISIS II (4.0), CP/M Softcard ● DOS (3.3) and MDOS (3.0) version for "dumb TTY" only.

Host Hardware Environment ● DEC VAX; PDP-11; DECsystem 10/20; DECmate II; Pro 350, VT180, Rainbow 100; Apple II; IBM PC; Intel series II, III, MDS-800; Jonos Model 2100; Motorola Exerciser; Osborne 1; Televideo 802; TRS-80 Model II; Xerox 820.

Installation Data ● first installed 1979 ● unknown number of installations.

Description ● personal computer version of XFR can be used to communicate with XFR/HOST version to transfer or receive any type of file; these cooperating XFR programs check each transmitted block for errors and retransmit if necessary; communication is via standard asynchronous lines and ports at speeds up to 9600 baud; a "dumb TTY" program is included which allows a terminal to communicate as a dumb, line-oriented terminal.

Pricing & Support ● available as a one-time license purchase; XFR/HOST version is $585 plus additional media cost; XFR/local versions range from $150 to $250 and the media cost is included; all versions include documentation ● source code is not available with the exception of the Generic CP/M version.

■ PRIME COMPUTER INC

Prime Park, Natick, MA 01760 ● 617-655-8000.

☐ Prime RJE GRTS (General Remote Terminal Supervisor)

Type ● emulator for Honeywell General Remote Terminal Supervisor.

Host Software Environment ● Prime PRIMOS (multiprogramming, multiuser, virtual storage operating system).

Host Hardware Environment ● any Prime 50 Series packaged system.

Installation Data ● unknown number of users ● worldwide distribution through company sales and service offices.

Description ● provides Honeywell remote job entry terminal emulation over synchronous communications lines; supports communications with multiple remote sites simultaneously; operates on half-duplex, point-to-point, synchronous communications over dial-up and dedicated lines; supports up to 4 lines per 850, 750, or 550-II ● features include ASCII transmission code, text compression, and split records ● supports communications with Honeywell hosts supporting Honeywell G115 protocol.

Pricing & Support ● $4,500 one-time license fee and $35 monthly maintenance fee, or $900 one-time installation fee and $100 monthly use fee (includes monthly maintenance) ● Software Information Service, included in monthly maintenance, provides a Software Release Bulletin describing performance improvements, ordering information, and prices for revised software ● Technical Action Requests sent to Prime provide means of reporting and correcting software errors ● a separately priced Automatic Update Service provides users copies of software revisions twice a year with applicable documentation; includes 1-day visit by analyst to discuss and commission software.

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☐ **Prime RJE HASP**

Type • emulator for IBM HASP II RJE Workstation.

Host Software Environment • Prime PRIMOS (multi-programming, multiuser, virtual storage operating system).

Host Hardware Environment • any Prime 50 Series packaged system.

Installation Data • unknown number of users • worldwide distribution through company sales and service offices.

Description • provides IBM remote job terminal emulation over synchronous communications lines; supports communications with multiple remote sites simultaneously; operates on half-duplex, point-to-point, synchronous communications over dial-up and dedicated lines; supports 4 lines on 850, 750, or 550-II • features include 400- to 512-character block size, transparent mode, text compression, and automatic sign on; supports 2 input devices (card reader and workstation console) and 3 output devices (card punch, line printer, and workstation console).

Pricing & Support • $5,250 one-time license fee and $40 monthly maintenance fee, or $1,050 one-time installation fee and $115 monthly use fee (includes monthly maintenance) • software information service included in monthly maintenance provides a Software Release Bulletin describing performance improvements, ordering information, and prices for revised software • Technical Action Requests sent to Prime provide means of reporting and correcting software errors • a separately priced Automatic Update Service provides users copies of software revisions twice a year with applicable documentation; includes 1-day visit by analyst to discuss and commission software.

☐ **Prime RJE X80 (Remote Job Entry IBM 2780/3780)**

Type • emulator for IBM 2780 or 3780 Terminal RJE communications.

Host Software Environment • Prime PRIMOS (multi-programming, multiuser, virtual storage operating system).

Host Hardware Environment • any Prime 50 Series packaged system.

Installation Data • unknown number of users • worldwide distribution through company sales and service offices.

Description • provides IBM 2780/3780 remote job entry terminal emulation over synchronous communications lines • supports communications with multiple remote sites simultaneously; operates on half-duplex, point-to-point, synchronous communications over dial-up and dedicated lines; supports 4 lines on 850, 750, or 550-II • features include ASCII/EBCDIC transmission code, automatic sign-on, automatic modem answer, transparent or nontransparent modes, variable length records (400- or 600-character block size on 2780 and 400- to 950-character block size on 3780), and space compression (3780).

Pricing & Support • $4,500 one-time license fee and $35 monthly maintenance fee, or $900 one-time installation fee and $100 monthly use fee (includes monthly maintenance) • software information service included in monthly maintenance provides a Software Release Bulletin describing performance improvements, ordering information, and prices for revised software • Technical Action Requests sent to Prime provide means of reporting and correcting software errors • a separately priced Automatic Update Service provides users copies of software revisions twice a year with applicable documentation; includes 1-day visit by analyst to discuss and commission software.

☐ **Prime RJE 1004**

Type • emulator for Sperry 1004 Remote Batch Terminal communications.

Host Software Environment • Prime PRIMOS (multi-programming, multiuser, virtual storage operating system).

Host Hardware Environment • any Prime 50 Series packaged system.

Installation Data • unknown number of users • worldwide distribution through company sales and service offices.

Description • provides Sperry remote job entry terminal emulation over synchronous communications lines; supports communications with multiple remote sites simultaneously; operates on half-duplex, point-to-point, synchronous communications over dial-up and dedicated lines; supports up to 4 lines per 850, 750, or 550-II, or 2 lines per 250-II or 150-II • features include XS3 transmission code, space compression, and automatic sign-on; supports communications with Sperry 1100 operating under Exec 8, RMSI.

Pricing & Support • $3,750 one-time license fee and $30 monthly maintenance fee, or $750 one-time installation fee and $85 monthly use fee (includes monthly maintenance) • software information service, included in monthly maintenance, provides a Software Release Bulletin describing performance improvements, ordering information, and prices for revised software • Technical Action Requests sent to Prime provide means of reporting and correcting software errors • a separately priced Automatic Update Service provides users copies of software revisions twice a year with applicable documentation; includes 1-day visit by analyst to discuss and commission software.

☐ **Prime RJE 200 UT**

Type • emulator for CDC 200 User Terminal RJE communications.

Host Software Environment • Prime PRIMOS (multi-programming, multiuser, virtual storage operating system).

Host Hardware Environment • any Prime 50 Series packaged system.

Installation Data • unknown number of users • worldwide distribution through company sales and service offices.

Description • provides CDC remote job entry terminal emulation over synchronous communications lines; supports communications with multiple remote site simultaneously; operates on half-duplex, point-to-point, synchronous communications over dial-up and dedicated lines; supports up to 4 lines per 850, 750, or 550-II • features include external BCD/ASCII transmission codes, text compression, and automatic read command; supports communications with host processors supporting CDC UT Mode 4A protocol.

Pricing & Support • $3,750 one-time license fee and $30 monthly maintenance fee, or $750 one-time installation fee and $85 monthly use fee (includes monthly maintenance) • software information service, included in monthly maintenance, provides a Software Release Bulletin describing performance improvements, ordering information, and prices for revised software • Technical Action Requests sent to Prime provide means of reporting and correcting software errors • a separately priced Automatic Update Service provides users copies of software revisions twice a year with applicable documentation; includes 1-day visit by analyst to discuss and commission software.

☐ **Prime RJE 7020**

Type • emulator for ICL 7020 Remote Batch Terminal communications.

Host Software Environment • Prime PRIMOS (multi-programming, multiuser, virtual storage operating system).

Host Hardware Environment • any Prime 50 Series packaged system.

Installation Data • unknown number of users • worldwide distribution through company sales and service offices.

Description • provides ICL remote job entry terminal emulation over synchronous communications lines; supports communications with multiple remote sites simultaneously; operates on half-duplex, point-to-point, synchronous communications over dial-up and dedicated lines; supports up to 4 lines per 850, 750, or 550-II, or 2 lines per 250-II or 150-II • features include ASCII transmission code and 80-character block size; supports communications with ICL host supporting ICL's Half-Duplex Control protocol.

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Pricing & Support • $3,750 one-time license fee and $30 monthly maintenance fee, or $750 one-time installation fee and $85 monthly use fee (includes monthly maintenance) • Software Information Service included in monthly maintenance provides a Software Release Bulletin describing performance improvements, ordering information, and prices for revised software • Technical Action Requests sent to Prime provide means of reporting and correcting software errors • a separately priced Automatic Update Service provides users copies of software revisions twice a year with applicable documentation; includes 1-day visit by analyst to discuss and commission software.

■ SIS SUNDATA

2 Glenhardie Corporate Center, 1285 Drummers Lane, Wayne, PA 19087 • 215-341-8700.

□ Sun Remote Printing Facility (SRPF)-II

Type • remote printing for IBM MVS users.

Host Software Environment • IBM OS/VS2(MVS); requires ACF/VTAM.

Host Hardware Environment • IBM System/370, 3000, 4300, and compatible computers.

Installation Data • first installed 1981 • 40 current users.

Description • allows for the printing of spooled JES SYSOUT on most IBM 3270-type attached printers; may serve as an alternative to an RJE station (i.e., IBM 3777) when high speed is not necessary; uses standard MVS and JES destination parameters to direct output; output appears as though it has been printed by the JES print/punch processor • major features include printer sharing between SRPF and other applications (IMS, TSO, CICS); output control through special forms and/or class features of JES; the ability for remote operators to utilize CRTs on the same VTAM cluster as remote consoles to control printing; remote operator console commands to start and stop printing, change class and forms setup, and display status; the use of printer keyboards to cancel, restart, and temporarily hold currently active print; optionally specified full length, short, or no banner/separator pages; printer support for matrix printers (IBM 3287) from 80 cps to 120 cps, line printers (IBM 3262) up to 467 lpm, and document-quality printers (IBM 7436); utilization of IBM networking to allow print to be retrieved from systems connected through NJE and/or VM/RSCS; operation in standard SNA environment using dedicated, multidrop, or dial-up modes; utilization of SIS technology along with VTAM, SNA, and SCS features of target printers to improve throughput (i.e., priority handling of CRT, look ahead buffering, compression, pacing, full-duplex line protocol, error handling); SYSLOG audit trace of printer activity; standard JES PSO (Processor SYSOUT, External Writer) Interface; no operating system modification.

Pricing & Support • one-time license purchase price for a single site is $7,500; additional site licenses can be obtained for $6,500 each; a corporate license is available, contact vendor • source code is available.

■ SOFTRON, INC

P.O. Box 27003, Austin, TX 78755-1003 • 512-327-9440.

□ ICM (Interactive Communications Monitor)

Type • computer conferencing using System/34 or /36 computers.

Host Software Environment • IBM SSP.

Host Hardware Environment • IBM System/34 or /36 with 2 or more workstations; program requires 16K bytes of memory.

Installation Data • first installed 1984 • unknown number of installations • international distribution.

Description • allows for interactive conferencing rather than separate send-receive of messages; up to 8 stations can participate; upper/lower case selection by workstation and optional logging to disk for printing is supported; features 20-line display with automatic scrolling and text preparation while receiving messages.

Pricing & Support • $375 one-time license purchase for the first installation; $100 for additional installations; user's manual and telephone support are available at no extra cost; updates to new

version(s) or to a new machine currently costs $20 • source code is not available.

■ SOFTSYSTEMS

311 Mallick Tower, One Summit Avenue, Fort Worth, TX 76102 • 817-877-5070.

□ OLS (Online Security System)

Type • security package for CICS/VS environments.

Host Software Environment • IBM OS/VS2(MVS), DOS/VSE; requires CICS/VS 1.4, 1.4.1, or 1.5 and VSAM; about 14K bytes of CICS/VS main storage is required if all modules are made resident.

Host Hardware Environment • IBM System/370-class mainframe or compatible computer; 3270-type terminals with 1920 character or larger screens.

Installation Data • first installed 1983 • 2 installations.

Description • a security management system for CICS/VS environments; maintains online security information by operator and terminal; security audit trail may be viewed online; security intrusions are reported to designated person(s) monitoring such activities • there are 2 utility programs: one initializes the security files, the other converts an existing CICS, DFHSNT sign-on table into the online operator name file normally used by OLS.

Pricing & Support • one-time license purchase of $1,200 includes documentation and first-year maintenance; thereafter, maintenance costs $120 per year; telephone assistance support is available to resolve problems; a 30-day trial period is provided • source code is not available.

■ SOFTWARE DYNAMICS

2111 West Crescent Street, Suite G, Anaheim, CA 92801 • 714-635-4760.

□ SDOS/MT

Type • multiterminal version of Software Dynamics SDOS operating system for Motorola 6800/6809 microprocessors.

Host Software Environment • creates own environment.

Host Hardware Environment • operates on Midwest Scientific 6800 systems, Omnibyte 800 and 890 systems, Smoke Signal Broadcasting, Inc's VAR/68 and Chieftan; minimum system requirements are 128K bytes of memory and 80K bytes of disk.

Installation Data • first installed 1980 • 8 current users.

Description • supports up to 8 concurrent local terminal users in applications or development modes; provides each user with up to 60K bytes of work space and accommodates most standard memory mapping technologies; contains a virtual driver facility that supports any CRT type • related SD products are a BASIC compiler, an assembler, a text editor, and a debugger • network option for the sharing and transfer of files among computers.

Pricing & Support • license available purchase only for $1,065 • no charge first-year maintenance; after first year, annual maintenance fee is one-half the prevailing purchase price • source code available for $100 for I/O package interface to hardware.

■ SOFTWORKS, INC

7801 Old Branch Avenue, Clinton, MD 20735 • 301-868-4221.

□ VTF—Virtual Terminal Facility

Type • terminal sharing/switching facility for IBM users.

Host Software Environment • IBM OS/VS1, OS/VS2(SVS), OS/VS2(MVS).

Host Hardware Environment • IBM System/370, 3000, 4300, and compatible computers.

Installation Data • first installed 1978 • 25 current users • international distribution.

Description • permits any local 3270-type terminal to access multiple teleprocessing programs; also permits the terminal to function

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as a secondary console to the operating system; installs as a simple SVC without modification to any existing software; compatible with CICS (all versions) and with most TP monitors usable on IBM systems.

Pricing & Support ● $7,500 purchase price; maintenance included for first year; thereafter 12% of prevailing purchase price annually ● $375 for a monthly lease; $3,500 for 1-year annual lease; $3,000 for 2-year annual lease ● no charge for maintenance with lease plan.

■ **SPERRY CORPORATION**

P.O. Box 500, Blue Bell, PA 19422 ● 215-542-4011.

☐ **CS (Communications Simulator) 1100**

Type ● communications simulator for Sperry Series 1100 systems.

Host Software Environment ● Series 1100 Operating System.

Host Hardware Environment ● any Sperry Series 1100 system.

Installation Data ● the 1100/60 first installed in 1979, the 1100/80 in 1976 ● over 200 systems delivered worldwide as of 1981 ● distributed through a nationwide network of sales/distribution/maintenance offices.

Description ● communications simulator for 1100 Exec for proposed terminals and configurations ● program number is 6207.

Pricing & Support ● available on a rental basis only for a perpetual monthly fee of $150 ● service is included in the monthly software rental charge ● many Series 1100 customer education courses are offered; they can be held at either a Sperry site or the customer site; there is a range of fees.

☐ **PCCS (Processor Common Communications System)**

Type ● application program interface package to the Sperry Series 1100 communication system.

Host Software Environment ● Series 1100 Operating System; requires compiler of application program native language.

Host Hardware Environment ● any Sperry Series 1100 system.

Installation Data ● the 1100/60 first installed in 1979, the 1100/80 in 1976 ● over 200 systems delivered worldwide as of 1981 ● distributed through a nationwide network of sales/distribution/maintenance offices.

Description ● meets ANSI X3.23-1974 COBOL Communications module specifications; links a COBOL or PL/1 message processing program to a communications device ● requires COBOL or PL/1 compiler ● program number is 6159.

Pricing & Support ● available on a rental basis only for a perpetual monthly fee of $126 ● service is included in the monthly software rental charge ● customer education for this program product is offered at either a Sperry site or the customer site; there is a fee for the course work.

☐ **RPS-1100 (Remote Processing System)**

Type ● database remote access program for end users of Sperry Series 1100 systems.

Host Software Environment ● Series 1100 operating system; requires Data Management System (DMS-1100).

Host Hardware Environment ● any Sperry Series 1100 system.

Installation Data ● the 1100/60 first installed in 1979, the 1100/80 in 1976 ● over 200 systems delivered worldwide as of 1981 ● distributed through a nationwide network of sales/distribution/maintenance offices.

Description ● provides access to DMS-1100 database structures via a Uniscope 100 or 200 display terminal; file access commands, computational ability, and report generation ability are all provided with RPS-1100 through a self-prompting, Tutorial Processor system control language ● program number is 6156.

Pricing & Support ● available on a rental basis only for a perpetual monthly fee of $252 ● service is included in the monthly software rental charge ● customer education for this program product

is offered at either a Sperry site or the customer site; there is a fee for the course work.

☐ **TSS (Terminal Security System)**

Type ● terminal security manager for Sperry Series 1100 systems.

Host Software Environment ● Series 1100 Operating System.

Host Hardware Environment ● any Sperry Series 1100 system.

Installation Data ● the 1100/60 first installed in 1979, the 1100/80 in 1976 ● over 200 systems delivered worldwide as of 1981 ● distributed through a nationwide network of sales/distribution/maintenance offices.

Description ● allows the installation manager and other authorized individuals to create and maintain USER IDs and passwords; enables the master user to designate submasters who have control over designated items ● program number is 6163.

Pricing & Support ● available on a rental basis only for a perpetual monthly fee of $189 ● service is included in the monthly software rental charge ● customer education for this program product is offered at either a Sperry site or the customer site; there is a fee for the course work.

☐ **UNIDAS*MESSAGE**

Type ● message switching for Sperry 1100 Series.

Host Software Environment ● Sperry OS 1100.

Host Hardware Environment ● Sperry 1100.

Installation Data ● first installed 1983 ● unknown number of users ● international distribution.

Description ● standalone message switching facility that provides station-to-station capabilities, group messages, general broadcast messages, and free-form message text; messages are sent by simply initiating the system and entering the free-form message text; recipients are notified of a pending message by the MESSAGE WAITING indicator on their CRT ● messages displayed on a CRT may be printed on an attached CRT printer; messages may also be routed to standalone remote printers in the network.

Pricing & Support ● available on a rental basis only for a monthly fee of $660 ● service is included in the rental charge ● source code is available.

■ **STANDARD SOFTWARE CORP**

10200 Willow Creek Road, San Diego, CA 92131 ● 619-578-3960.

☐ **DIALOGUE (Interactive Management System)**

Type ● total terminal support system.

Host Software Environment ● DEC VAX VMS; Tandem Guardian.

Host Hardware Environment ● DEC VAX; Tandem.

Installation Data ● first installed 1980 ● 20 installations ● international distribution.

Description ● DIALOGUE reportedly supports all terminal types including word processors, graphics terminals, personal computers, block mode and forms devices, light-pens, OCR wands, touch sensitive inputs, etc; forms definition is provided via free format, English-like statements that specify fields, edit checks, data types, groups, and titles; boxes, display enhancements, colors, and other features can be generated automatically depending on the terminal type, size, or shape of the screen ● a subroutine interface allows defined forms to be accessed from user applications in any computer supported programming language; whatever the terminal type, DIALOGUE shields the mode of interaction from the application; forms are automatically positioned for all screen sizes; sophisticated terminals may display inverse video, and accommodate blinking, dimming, underlining, security messages, and coloring; character mode and block mode screens are supported; in multipage terminals, forms are stored in the terminal's memory ● a typewriter interface supports hardcopy, portable, and dumb terminals; user commands allow previously entered fields to be modified; the input sequence of fields can be rearranged by different departments to match their particular paper

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forms; multiple form libraries make it possible to support multiple languages (English, French, Spanish, etc) ● in a timesharing environment DIALOGUE is accessed through a subroutine library; forms are developed and stored in edit files, and applications are written to reference the edit files; these applications can be moved to the transaction processing environment without change.

Special Features ● DIALOGUE can be integrated with other SSC products: DIALMENU for security and menu generation, DIALFILE file creation and maintenance utility, and DIALTERM to convert a personal computer into a terminal.

Pricing & Support ● $12,500 to $38,000 one-time license purchase price plus 1% of the sales price per month for maintenance; $1,000 to $1,750 per month rental includes maintenance; documentation is included ● training costs $1,500 plus expenses ● source code is not available.

■ SUPERSOFT, INC
P.O. Box 1628, Champaign, IL 61820 ● 217-359-2112.

□ TERM II

Type ● computer-to-computer local communications link for CP/M users.

Host Software Environment ● CP/M operating system.

Host Hardware Environment ● any Zilog Z80 or Intel 8080 microprocessor; requires 32K bytes of memory and RS-232 or other serial I/O port.

Installation Data ● first installed 1978 ● user data unknown.

Description ● local communications control package designed to interconnect microprocessors/microcomputers operating under CP/M or to interface a host into a timesharing system; supports file send/receive modes in ASCII, HEX, and COM; provides error checking, automatic retry, and printer engage/disengage functions; supports terminal mode for intersystem timesharing; also supports advanced modem features.

Pricing & Support ● license available purchase only for $200, which includes manual and 8080 source code ● no maintenance charge.

■ TANDEM COMPUTER INC
19333 Vallco Parkway, Cupertino, CA 95014 ● 408-725-6000.

□ AM3270 Access Method, T16/90X1

Type ● IBM 3270 terminal interface.

Host Software Environment ● Tandem Guardian Operating System.

Host Hardware Environment ● Tandem NonStop, NonStop II packaged system with 6202 bisynchronous controller, ASCII/EBCDIC code conversion, and check character generation and checking feature.

Installation Data ● first installed 1976 ● unknown number of users ● international distribution through direct sales and service offices.

Description ● provides an interface to support up to 255 IBM 3270 terminals and printers attached to a Tandem system ● supports bisynchronous communication lines, where each line supports multiple controllers and each controller can interface with multiple terminals ● includes a Communication Utility Program (CUP) that performs operations associated with lines, networks, and devices; operates in conjunction with the vendor's TR 3271 program (please see referenced profile in this section) to support pass-through access to IBM host system.

Pricing & Support ● $500 one-time fee for license purchase; $20 monthly service charge; maintenance support provides local on-site remedial maintenance and installation of software updates through partitioned operation so as not to interrupt user processing.

□ AM6520 Access Method, T16/90X3

Type ● asynchronous communications support.

Host Software Environment ● Tandem Guardian Operating System.

Host Hardware Environment ● Tandem NonStop or NonStop II packaged system.

Installation Data ● first installed 1976 ● unknown number of users ● international distribution through direct sales and service offices.

Description ● provides support for synchronous communications using Tandem T16/6520 and T1/6524 terminals; operates in multipoint mode.

Pricing & Support ● $500 one-time fee for purchase license; $20 monthly service charge ● maintenance support provides local on-site remedial maintenance and installation of software updates through partitioned operation so as not to interrupt user processing.

□ Exchange Remote Batch Workstation, T16/9004

Type ● IBM workstation emulation for 2780, 3780, and HASP systems.

Host Software Environment ● Tandem Guardian Operating System.

Host Hardware Environment ● Tandem NonStop, NonStop II packaged system.

Installation Data ● first installed 1976 ● unknown number of users ● international distribution through direct sales and service offices.

Description ● this package is designed to support IBM 2780, 3780, and HASP workstation emulation ● it accepts batch input from any media including terminals, magnetic tapes, and disks; supports file transfers between multiple Tandem systems ● operates in conversational, command file, and program modes ● includes command interpreter and server programs.

Pricing & Support ● $500 one-time fee for license purchase; $20 monthly service charge ● maintenance support provides local on-site remedial maintenance and installation of software updates through partitioned operation so as not to interrupt user processing.

□ TR3271/Access Method, T16/90X2

Type ● IBM 3271 Cluster Controller Emulator.

Host Software Environment ● Tandem Guardian Operating System.

Host Hardware Environment ● Tandem NonStop, NonStop II packaged system and Tandem 6202 Byte Synchronous Controller.

Installation Data ● first installed 1976 ● unknown number of users ● international distribution through direct sales and service offices.

Description ● emulator for one or more IBM 3271 Cluster Controllers ● used to connect Tandem processor to an IBM-compatible host; works in conjunction with AM3270 software access method pass-through mode (please see referenced profile in this section); supports terminals connected to Tandem which are accessing IBM-compatible hosts ● supports bisynchronous, multipoint communications.

Pricing & Support ● $1,000 one-time fee for license purchase; $40 monthly service charge ● maintenance support provides local on-site remedial maintenance and installation of software updates through partitioned operation so as not to interrupt user processing.

■ TEXAS INSTRUMENTS INC
P.O. Box 1444, Houston, TX 77001 ● 713-778-6577.

□ Texas Instruments DX10 3270 Interactive Communications (ICS)

Type ● IBM 3271/3277/3284 emulator for remote interactive communications.

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Host Software Environment ● Texas Instruments DX10 (multiuser, multiprogramming, disk operating system).

Host Hardware Environment ● Texas Instruments 990/10 or 990/12 with 128K bytes of memory, and memory mapping.

Installation Data ● first installed 1978 ● unknown number of users ● worldwide distribution through direct company sales and service offices.

Description ● emulates IBM 3271 Control Units, 3277 Display Station/Keyboard, and 3284 Printers providing the ability to communicate interactively with an IBM host; supports 8 display stations and printers operating in a multitasking environment using local Model 911 Video Display Terminals and DX10 supported printers; supports bisynchronous data link control for remote cluster operations over half-/full-duplex nonswitched lines at speeds up to 9600 bps; supports multipoint on the same communications line as IBM 3270 terminals; supports synchronous modems or AT&T Data Set Interface for use with non-Texas Instruments modems (AT&T 201B, C, or 208A compatible).

Pricing & Support ● $1,800 one-time license fee includes documentation; one-year Subscription Support Service costs $700 for modification and updates; the annual cost of Texas Instruments Customer Support Telephone Service is $250.

☐ Texas Instruments 3780/2780 Emulation Communications

Type ● emulates IBM 3780 (2780 for Texas Instruments-to-IBM host communications).

Host Software Environment ● Texas Instruments DX10 (multiuser, multiprogramming, disk operating system), DNOS (multitasking, multiterminal distributed network operating system), or TX5 (memory resident, multitasking executive).

Host Hardware Environment ● Texas Instruments DS 990 Model 4 or larger with 128K bytes of memory, Communications Interface Module, and Synchronous Modem or AT&T Data Set Interface.

Installation Data ● first installed 1978 ● unknown number of users ● worldwide distribution through direct company sales and service offices.

Description ● RJE communications with IBM 360/370 host computers or 990 system with 3780/2780 emulator ● supports data file exchanges between master and slave stations over leased point-to-point or switched telephone lines; serves as satellite and/or central station in distributed processing networks or remote job or batch data entry for host processing ● supports bisynchronous line protocol, using half-duplex mode at speeds up to 9600 bps ● features include space compression/expansion, automatic line turnaround, and device independence; does not support multipoint operations.

Special Features ● different versions are available with/without installation and with/without DX5 runtime packages ● where installation is included with license price, there is no annual support charge.

Pricing & Support ● $800 one-time license fee includes documentation; one-year Subscription Support Service is $700 for modifications and updates; the annual cost of Texas Instruments Customer Support Telephone Service is $250.

■ TRAX SOFTWORKS INC

10801 National Boulevard, Suite 205, Los Angeles, CA 90064 ● 213-475-8729.

☐ TSF (Terminal Simulation Facility)

Type ● 3270 terminal emulator for IBM VM/CMS users.

Host Software Environment ● IBM VM/370 operating system with CMS.

Host Hardware Environment ● IBM System/370-class mainframe or compatible computer capable of running VM/CMS; 3705 communication controller or equivalent; all 3270 model terminals.

Installation Data ● first installed 1982 ● over 50 installations ● international distribution.

Description ● with TSF, local or remote IBM 3270 model terminals appear to be a standard ASCII terminal capable of accessing online databases, electronic mail systems, and other computer-based services; information received can be filed on the VM system; VM/CMS files may be sent to remote computer systems with TSF installed; the external system may be half- or full-duplex mode, at 300 or 1200 baud; other line speeds may be supported if available through a communications controller in use; password protection for individual lines and terminals is available; TSF uses intelligent modems to provide dial out capability ● support for non-3270 terminals and a user exit is provided.

Pricing & Support ● the $220 monthly rental fee includes documentation and maintenance support ● source code is not available.

■ UNIQUE INFORMATION SYSTEMS, INC

Suite 1300, 221 North LaSalle Street, Chicago, IL 60601 ● 312-332-2820.

☐ MMS/1

Type ● a share-and-forward message switching system for IBM Series/1 computers operating under EDX.

Host Software Environment ● IBM EDX; supports BASIC and EDL.

Host Hardware Environment ● any IBM Series/1 computer with 128K bytes of memory and 9.3M bytes of disk; requires 4978 or 3101 terminals.

Installation Data ● first installed 1978 ● 25 current users.

Description ● can operate as a standalone switch or as a component in a network of up to 255 switches; accepts messages from Telex, TWX, and DDD commercial lines, from BSC and async computer lines, from disk files, and from remote CRTs; for each incoming message, MMS/1 creates a sequence number, creates a record in the message database and in the log file, and routes the message to the proper transmission queue; faulty messages are assigned to a special queue for manual attention; an auxiliary message entry subsystem supports CRT-based message generation through header prompting and editing facilities; some special features are the capability to broadcast the same message to multiple destinations, to broadcast a message to a predefined group of recipients, to interface with Telex, and to interface with alien switching systems in BSC or async mode; multisource message batching to a single destination is handled automatically, and 2 transmission priority levels are provided; message logging is quite extensive, including time, duration, cost, billing, and other information, and all messages are archived on disk.

Pricing & Support ● from $20,000 to $35,000 license purchase price for smaller version; price increases depending upon number of lines and options ● quantity and OEM discounts available ● no charge first 6 months maintenance; 10% of purchase price annual maintenance fee after first 6 months ● source code available; contact vendor for price.

■ VISICORP

2895 Zanker Road, San Jose, CA 95134 ● 408-946-9000.

☐ VisiTerm

Type ● computer-to-computer communication facility.

Host Software Environment ● Apple DOS 3.3.

Host Hardware Environment ● Apple II, II Plus; requires 48K-byte memory and communications interface.

Installation Data ● first installed 1981 ● unknown number of users ● international distribution.

Description ● communication package that enables Apple II to communicate with larger host computers and other personal computers; provides access to host company computer or other computing services such as timesharing, newswires, stock reports, etc ● package features allow transfer (in either direction) of DIF files, Applesoft or Integer BASIC listings, VisiCalc or Visi-Trend/Plot text files, or any other ASCII text files or binary files over standard phone line; offers emulation of virtually any dumb terminal, redefinition of any key on the keyboard, definition of macros for

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automatic logon, and complete control of character set definition and ASCII character relationship.

Pricing & Support • $300 one-time fee for license purchase includes documentation • source code is not available.

■ VM PERSONAL COMPUTING, INC
475 5th Avenue, Room 411, New York, NY 10017 • 212-686-1450.

□ PLEASE/RELAY

Type • asynchronous communications between IBM VM/CMS mainframes and IBM PCs.

Host Software Environment • IBM VM/CMS/SP running PLEASE • IBM PC or PC/XT with PC-DOS Version 1.0 or later running RELAY Version 1.4 or later.

Host Hardware Environment • IBM System/370-class mainframe or compatible computer operating VM/CMS; a 320K-byte virtual machine is needed • IBM PC with 96K-byte memory; a disk drive, full-duplex modem or Direct Connect to host, and printer adapter are required.

Installation Data • first installed 1983 • over 1,000 installations • international distribution.

Description • PLEASE supports the IBM mainframe-to-micro link for IBM VM/CMS users; provides error detection/correction as well as user-controlled translation of EBCDIC to ASCII files or untranslated binary files; PLEASE and RELAY were designed to be used together for uploading or downloading of information; the PC screen is not tied-up during transmission but is available for other user applications; PLEASE allows many PCs to access and download the same file at the same time; PC floppy or hard disk files may be sent to the mainframe for backup • PLEASE transfers information between VM/CMS hosts via a store-and-forward feature; no mainframe editor is required during upload; a compress option can speed the transmission process for many file types; a whole series of files can be transferred in one operation; user-defined default options for different file types speed transmissions • RELAY enables the IBM PC to link to another IBM PC; it is completely menu-driven; online HELP screens, stored logon routines unique to each telephone number, and auto-dial and auto-answer features of Hayes and other modems are supported; unattended operation is supported for file exchange during off-peak hours; messages between PCs can be exchanged, appearing on a split screen, while files go directly to disk; PCs can simultaneously send, receive, edit, and print, system supports APL special character set; a full-screen editor is featured.

Pricing & Support • license purchase price includes documentation: PLEASE costs $1,495; RELAY is $149 per copy, with a 30% discount when over 5 copies are purchased; registered purchasers of RELAY (those who send in the return registration card) are advised on new developments, and can receive upgrades for a $15 handling fee • source code is not available.

■ WANG LABORATORIES INC
One Industrial Avenue, Lowell, MA 01581 • 617-459-5000.

□ Wang VS 2780/3780 Protocol Emulation

Type • emulator for IBM 2780/3780 terminal.

Host Software Environment • Wang VS/OS (multiprogramming, multiuser, virtual storage operating system).

Host Hardware Environment • any Wang VS Series packaged system.

Installation Data • first installed 1977 • unknown number of users • worldwide distribution through company sales and service offices.

Description • provides capability to emulate IBM 2780/3780 protocol and to communicate with host computers, compatible terminals, and other Wang systems that support these bisynchronous communications protocols • works in conjunction with Wang TC IOPs and supports line speeds up to 9600 bps • product number is 195 2090-X.

Pricing & Support • $1,000 one-time license fee; no charge for monthly maintenance service • monthly maintenance service provides for Customer Engineering services to diagnose, localize, and repair software faults.

□ Wang VS 3270 Emulation

Type • emulator for IBM 3270 Information Display System.

Host Software Environment • Wang VS/OS (multiprogramming, multiuser, virtual storage, operating system).

Host Hardware Environment • any Wang VS Series packaged system.

Installation Data • first installed 1977 • unknown number of users • worldwide distribution through direct company sales and service offices.

Description • emulates IBM 3270 terminals • supports interactive communications with systems using bisynchronous protocols • works in conjunction with Wang TC IOPs, which emulate IBM 3271 cluster controllers, while software emulates IBM 3277 terminals • supports line speeds up to 9600 bps • product number 195 2089-X.

Pricing & Support • $1,500 one-time license fee; no charge for monthly maintenance service • monthly maintenance service provides for Customer Engineering services to diagnose, localize, and repair software faults.

□ Wang VS 3274 Emulation

Type • emulator for the IBM 3274 Information Display System operating in the IBM Systems Network Architecture (SNA) under Synchronous Data Link Control (SDLC) line discipline.

Host Software Environment • Wang OS/VS (multiuser, multi-programming, virtual storage operating system).

Host Hardware Environment • any Wang VS Series packaged system.

Installation Data • available May 1983 • worldwide distribution through direct sales and service offices.

Description • each IBM 3274 emulator supports up to 32 display stations and multiple printers; emulators can be run concurrently • supports inquiry, interactive transaction processing, or data entry operations • supports concurrent COBOL application programs • product number 195 2169-X.

Pricing & Support • $1,500 one-time license fee; no charge for monthly maintenance • monthly maintenance provides for Customer Engineering services to diagnose, localize, and repair software faults.

□ Wang VS 3777 Emulation

Type • emulator for IBM 3777-3 RJE Communications Terminal.

Host Software Environment • Wang VS/OS (multiprogramming, multiuser, virtual storage operating system).

Host Hardware Environment • any Wang VS Series packaged system.

Installation Data • available in March 1983 • worldwide distribution through direct company sales and service offices.

Description • operates in the IBM Systems Network Architecture (SNA) using the multiple logical unit protocol with the Synchronous Data Link Control (SDLC) line discipline • supports up to 6 concurrent data streams to/from host logical units • devices supported include line printers, card readers, card punches, and diskettes • product number 195 2170-X.

Pricing & Support • $1,500 one-time license fee; no charge for monthly maintenance • monthly maintenance provides for Customer Engineering services to diagnose, localize, and repair software faults.

□ Wang 2200 IBM 2780/3780 Emulator

Type • emulator for IBM 2780/3780 protocol.

Communications & Networking
Other Terminal Control Software

Host Software Environment ● Wang DOS (single- and multiuser, diskette-based operating system).

Host Hardware Environment ● any Wang 2200 Series packaged system with 2228B Bisynchronous Communications Controller.

Installation Data ● first installed 1973 ● unknown number of users ● worldwide distribution through direct company sales and service offices.

Description ● emulation software supports IBM 2780/3780 protocol in conjunction with the 2228B Bisynchronous Communications Controller ● product number 195 2057-3/-5.

Pricing & Support ● $100 one-time license fee; no charge for monthly maintenance ● monthly maintenance service provides for Customer Engineering services to diagnose, localize, and repair software faults.

☐ **Wang 2200 3271 BSC Emulation**

Type ● emulator for the IBM 3271 Information Display System.

Host Software Environment ● Wang DOS.

Host Hardware Environment ● any Wang 2200 packaged system with 2228D-8E Communications Controller.

Installation Data ● first installed 1981 ● unknown number of users ● worldwide distribution through direct company sales and service offices.

Description ● emulates IBM 3277 Model 2 terminals and 3288 Model 2 printers; supports up to 9 interactive sessions using bisynchronous protocol; works in conjunction with 2228D-4 Communications Controller, which emulates the IBM 3271 cluster controller, while software emulates 3277 terminals and 3288 printers; supports line speeds up to 9600 bps ● product number 195 2159-3/-5.

Pricing & Support ● one-time license fee is $1,000; no charge for monthly maintenance.

☐ **Wang 2200 3274 Emulation**

Type ● emulator for the IBM 3274 Information Display System operating in the IBM Systems Network Architecture (SNA) under Synchronous Data Link Control (SDLC) line discipline.

Host Software Environment ● Wang DOS.

Host Hardware Environment ● any Wang 2200 packaged system with 2228D-8E Communications Controller.

Installation Data ● available July 1983 ● worldwide distribution through direct company sales and service offices.

Description ● each IBM 3274 emulator supports multiple terminals and printers ● highlights include support for inquiry, interactive transaction processing, and data entry operations ● product number 195 2199-3/-5.

Pricing & Support ● $1,250 one-time license fee; no charge for monthly maintenance.