

DATA BASE MANAGEMENT SYSTEMS

SPOTLIGHT

Relational DBMS

COMPANY	PRODUCT	OPERATING SYSTEMS	QUERY LANGUAGES SUPPORTED	VERSION OF SQL	INCLUDES DATA DICTIONARY	ACCESS CONTROL TO WHAT DATA LEVEL	PERMITS ASSIGNMENT OF USER SECURITY RATINGS	BACKUP AND RECOVERY CAPABILITIES	OTHER DATA BASE ADMINISTRATOR CAPABILITIES	APPLICATION DEVELOPMENT TOOLS	OFFERS ENTITY RELATIONSHIP INTEGRITY	OFFERS DOMAIN INTEGRITY	NUMBER OF LICENSES SOLD	PRICE
Acua, Inc. (408) 252-4444	4th Dimension/4-D Runtime	Macintosh	Proprietary	NA	NA	Record	Yes	User implemented	4-D tool to repair, clone, cross reference, rename	Command procedural language with separate editors, screens/form editor, intuitive data base graphical structure editor	No	No	NP	\$695
AD & P, Analysis, Design & Programming (703) 790-9433	Ultra-base	MS-DOS, Unix, Xenix, Primos, CTOS	SQL	Proprietary	Yes	Field, record	Yes	NP	Graphics, word processing, spreadsheet	Built-in code, report generator	Yes	Yes	40,000 +	\$595-\$9,000
Advanced Business Microsystems, Inc. (415) 689-4515	Data Ace	MS-DOS	Proprietary	NA	Yes	Record, field, file	Yes	Backup, restore partial, entire data base	Creates, deletes, modifies files	DML	Yes	Yes	3,000	\$645
Advanced Data Institute, Inc. (916) 381-8334	Aladin	MS-DOS	Proprietary	NA	No	Record	Yes	Import, export, restart	Graphics, statistics, word processing, creates, deletes, modifies files	None	Yes	Yes	1,200	\$269-\$369
Ashton-Tate Corp. (213) 329-6000	Dbase III Plus	PC-DOS, MS-DOS	Proprietary	NA	No	Field	Yes	None	Applications generator, report writer, forms manager	Applications generator	Yes	Yes	1.5 million + (registered packages)	\$695
	Dbase IV (set for July availability)	PC-DOS, MS-DOS, OS/2	Query-by-Example, SQL	IBM SAAI compatible	No	Field	Yes	Full transaction processing; rollback, roll-forward recovery	Report writer, forms manager	4GL, applications generator	Yes	Yes	NA	\$795 or \$1,295 (developer's edition)
Advanced Microsolutions (415) 365-9860	SQL +	HP's Rocky Mountain Basic	SQL	ANSI	No	Record	No	Rollback	None	Command-driven interface, keyboard access	Yes	Yes	150	Starts at \$995
	DBmagic	Rocky Mountain Basic	SQL	ANSI	Yes	Record	No	Rollback	None	None	No	No	100	\$1,495
Amperif Corp. (818) 998-7666	RDM/2	Unisys 1100 Exec	SQL, proprietary	ANSI	No	Data item, value	No	Backup to host or back-end tape	Data base dump/load; user identification, authorization	None	No	No	NP	\$280,000-\$300,000
Applied Data Research, Inc. (201) 874-9000	Datacom/DB	IBM MVS, MVS/XA, VM/CMS, VSE	SQL, proprietary	ANSI	Yes	Field, record, file	Yes	Full backup recovery	Performance monitoring, tuning, data modeling, accounting, data base operations	Ideal, for building, executing on-line, batch data base applications	Yes	No	1,600	\$92,000-\$160,000
Blyth Software, Inc. (415) 871-0222	Omnis III Plus	Macintosh	None	NA	NP	Record	Yes	None	Master password protection, report writer, field generator	4GL, applications generator	Yes	Yes	NP	\$575
	Omnis Quartz	MS-DOS	None	NA	NP	Record	Yes	None	Master password protection, report writer, field generator	4GL, applications generator	Yes	Yes	NP	\$795
Boeing Computer Services, Inc. (206) 865-3660	Boeing Rim	VMS, MVS, VM, NOS	Proprietary	NA	Yes	Field	Yes	Transaction logging, rollback	Report generator, screen formatter	None	No	No	450	\$6,000-\$25,000
Borland International (800) 543-7543	Paradox 2.0	MS-DOS, PC-DOS	Query-by-Example	NA	Yes	Field	Yes	Table recovery	Multicolumn reports; label generation; table, record-locking channels; program editor	Programming language, applications generator	No	Yes	NP	\$725
	Paradox 386	MS-DOS, PC-DOS	Query-by-Example	NA	Yes	Field	Yes	Table recovery	Multicolumn reports; label generation; table, record-locking commands; program editor	Programming language, applications generator	Yes	Yes	NP	\$895
Brock Software Products, Inc. (815) 459-4210	Brock Keystroke Relational Data base	Macintosh	None	NA	No	File	Yes	Rebuild function, floppy backup	Label, report printing, merge utilities, batch updating	None	No	Yes	Approx. 480	\$49-\$149
Campus America, Inc. (615) 523-9506	Phase DMS-Plus	VAX/VMS, RSTS, PC-DOS, MS-DOS	Proprietary	NA	Yes	Record, field, file	No	None	Report writer, forms, screen generation; labels	Proprietary file access routines	Yes	Yes	420	\$495-\$25,000
Century Analysis, Inc. (415) 680-7800	CFMS	NCR VRX, VRX/E	Proprietary	NA	Yes	Field	Yes	Event rollback	Report writer	Screen generator, interactive file maintenance	Yes	Yes	50	\$8,000-\$40,000
Chang Laboratories, Inc. (800) 972-8800; (800) 831-8080 in Calif.	C.A.T.	Macintosh	Proprietary	NA	No	File	Yes	None	Controls dictionary, design of files, fields	None	Yes	No	12,000	\$399.95
Cincom Systems, Inc. (513) 662-2300	Supra	MVS/SP, MVS/XA, DOS/VSE, VSE/SP, VM/CMS	Proprietary	ANSI (in development)	Yes	Field	Yes	Automatic system, transaction-level recovery	Data base design, generation; interactive relational view development, testing; on-line, batch directory maintenance	4GL (Mantis)	Yes	Yes	350 +	\$77,000-\$499,000
	Ultra	VMS	Proprietary	ANSI (in development)	Yes	Field	Yes	Automatic system, transaction-level recovery	On-line directory maintenance; interactive relational view development, testing; high speed data file maintenance	4GL (Mantis)	Yes	No	300	\$20,000-\$99,000
Cognos (800) 4-COGNOS	Powerhouse	VAX/VMS, DG AOS/VSE	Proprietary	NA	Yes	File, field, record	Yes	Uses backup utilities of RDB/VMS, DG/SQL	Dictionary maintenance, reporting	Proprietary development language	Yes	No	9,000	NP
Command Business Systems, Inc. (800) 223-2842; (714) 259-7531 in Calif.	Structure/4	Primos, VAX/VMS	Proprietary	NA	Yes	Record	Yes	None	Data dictionary, complete data structure listings, report writer	4GL screen generators, maintenance, data generator	Yes	Yes	150	\$16,900-\$26,500
Compuserve Data Technologies (617) 661-9440	System 1032 4GL/DBMS	VAX/VMS	Proprietary	NA	Yes	Record	Yes	True VMS backup journaling, rollback	Not required	System 1032/AF application generator	Yes	Yes	720	\$3,000-\$56,000
Computer Associates International, Inc. (800) 343-4133	CA-Universe	MVS, MVS/XA, DOS/VSE, VM/CMS	SQL, QUEL	ANSI	Yes	Field	Yes	Import, export, restart	Data modeling, statistic monitoring	UMS — includes generator, editor, driver, 4GL	Yes	Yes	300 +	\$84,000-\$238,000
Computer Corporation of America (617) 492-8860	Model 204 DBMS	MVS, MVS/XA, VM/CMS, DOS/VSE	Proprietary	NA	Yes	File, field, record	Yes	Full, transaction backup; system, media recovery	On-line monitoring, tuning, parameterized configuration, file loading	4GL, applications generator, menu-driven prototyping tool	No	No	600	\$30,000-\$200,000
Computer Representatives, Inc. (408) 980-9898	Relate/DB	AOS/VSE, VAX/VMS, MPE	SQL	Proprietary	Yes	File, field, record	Yes	Logging, recovery	Report writer, graphics interface, 4GL, restructuring, reorganizing	Procedural 4GL	No	Yes	600	\$15,000-\$90,000

¹Systems Application Architecture ²Computer-aided systems engineering ³Data base management system ⁴Random-access memory ⁵Artificial intelligence

The companies included in this chart responded to a recent telephone survey conducted by *Computerworld*. When a vendor is unable to provide specific information about its product, this is designated NP (not provided). When a question does not apply to a vendor's product, this is designated NA (not applicable). Further product information is available from the vendors.

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Conceptual Software, Inc. (713) 667-4222	Prodas	MS-DOS, PC-DOS, Unix, VAX/VMS	None	NA	Yes	Field	No	Backup copies of files	Report writing, sorting, statistics, graphics	None	Yes	Yes	600	\$720-\$2,520
Concurrent Computer Corp. (800) 631-2154	Reliance Plus	OS 32	Proprietary	NA	Yes	Field	Yes	Transaction roll-forward, rollback, transaction logging	Monitoring, simulation, report generator	4GL	Yes	Yes	300	\$10,000-\$30,000
Condor Computer Corp. (313) 971-8880	Condor 3 Release 2.20	PC-DOS, MS-DOS	Proprietary	NA	Yes	None	No	Automatic audit trails	Report writer, statistics, full mathematical functions	Creates menus; import, export ASCII files; 4GL	No	No	200,000	\$495
Cosmic, the University of Georgia (404) 542-3265	Rim5	VAX/VMS, Primos, CDC Cyber 170 series NOS, NOS/BE	Proprietary	NA	No	File, field, record	Yes	None	Password protection on files, commands; report writer	Complete source code	Yes	Yes	NA	\$3,000
Cullinet Software, Inc. (800) 561-4555	IDMS/SQL	VAX/VMS	SQL	ANSI	Yes	File, field, record	Yes	On-line dynamic backup, automatic restart	Utilities to load, unload data; define, delete logic file names; check status of journal file; handle unexpected data base terminations	Application generator	Yes	Yes	NA (in beta-testing)	\$1,000-\$196,000
	IDMS/R	MVS/DOS NSE, VM/CMS, Siemens BS2000, Fujitsu MSP for Facom-M line	SQL, proprietary	ANSI	Yes	Field	Yes	Automatic rollback, warm start	Backup, restore; load, unload; rollback, roll-forward	CASE?, expert systems, 4GL, Cobol, Fortran, PL/I, assembler precompilers	Yes	Yes	2,400+	\$104,000-\$390,000
Data Access Corp. (305) 238-0012	Dataflex 2.3	Supports more than 30 operating systems	Proprietary	NA	Yes	Field	No	Reindexing utility (allows user to recreate damaged indexes)	Modifies data dictionary, user-saved queries; modifies, recreates indexes; creates reports; allows for ad hoc queries; reindexes post processing facility	Program editor, compiler, applications generator	No	No	100,000	\$695 (single user), \$1,250 (multiuser), \$1,800 (VAX/VMS, Unix V version)
Data General Corp. (800) DATAGEN	DG/SQL	AOS/VS	SQL	ANSI	Yes	Table, record, field	Yes	Archive backups, undo/redo logging for rollback/roll-forward	Data Definition and System Administrators Utility	Powerhouse (Cognos 4GL), present-interactive query, graphics, report writer	Yes	No	NP	\$1,390-\$17,400
Datasec International, Inc. (203) 374-8000	Dataease	MS-DOS, CTOS, BTOS	Proprietary	NA	Yes	Field, record, file, menu	Yes	Import, export; backup, restore of data base	Assigning user passwords, menus; hardware, configuration set up; printer communications	Applications generator	Yes	Yes	150,000	\$600 (single user), \$700 (multiuser)
DB/Access, Inc. (408) 255-2920	Enhansys	VMS, VM, Tandem Guardian	SQL, proprietary	ANSI	Yes	File	No	Table replacement	File mapping, linkage, menu system	4GL	No	No	40	\$10,000-\$49,000
Dialogue, Inc. (212) 425-2665	Analect/Rim	VAX/VMS, VM/CMS, Primos	Proprietary	NA	Yes	Relation	No	Transaction logging, rollback	Modeling, report writer, graphics, forecasting, statistics	4GL, screen control	No	No	15	\$2,500-\$60,000
Digital Equipment Corp. Contact your local DEC dealer	VAX RDB/VMS (Relational)	VAX/VMS	Information Builders' Focus; Smartstar; Cognos' Powerhouse	ANSI	Yes	Field	Yes	VMS backup for full data base backup; transaction rollback; before/after image journaling with roll-forward, rollback recovery	Statistics, dump, monitor, backup, restore, change, define, convert	Application generator, 4GL, SQL	Yes	Yes	5,500	NP
Empress Software, Inc. (416) 922-1743	Empress with M-Builder	Unix, VMS, MS-DOS	SQL	ANSI	Yes	Record	Yes	Transaction logging, warm restart, backup recovery	Field deleting, modifying, report generator	4GL (M-Builder)	Yes	Yes	3,500	\$1,750-\$100,000
Exact Systems & Programming Corp. (914) 285-9444	DNA-4	AOS/VS, AOS, RDOs	Proprietary	NA	Yes	Field	Yes	Transaction logging	Defines logical files, maintenance of data dictionary	4GL	Yes	Yes	150	\$1,250-\$36,000
1st Desk Systems, Inc. (800) 522-2286; (617) 533-2203 in Mass.	1stFile	Macintosh	Proprietary	NA	No	NA	NA	None	None	None	Yes	No	20,000	\$95
	1stFile 4.0	Macintosh	Proprietary	NA	No	NA	NA	None	None	Run macro documents created by 1stTeam	Yes	No	500	\$295
	1stTeam	Macintosh	Proprietary	NA	No	Record, file, field	NA	File copy	None	Takes manual repetitive tasks; plays back automatically	Yes	No	20	\$795
Fox Software, Inc. (419) 874-0162	Foxbase +	MS-DOS, PC-DOS, Macintosh	Proprietary	NA	No	Record, field, file	No	None	None	Supports any program written in dBase	Yes	Yes	30,000	\$395
General Data Systems, Inc. (215) 985-1780	GDX	MVS, VSE, MS-DOS, Intel iRMX	Query by form	NA	Yes	Field	Yes	Roll-forward, rollback, warm start	Group deletes, reformat; unload, reload utilities; data dictionary driver; users can create own utilities	Application generator, 4GL	Yes	Yes	15	\$2,500-\$180,000
Henco Software, Inc. (617) 890-8670	Info-DB+	VAX/VMS	Proprietary	NA	Yes	Item	Yes	None	Add/change security classes	4GL	No	Yes	60	\$4,500-\$165,000
Hewlett-Packard Co. Contact local HP sales office	Allbase-HP SQL	HP-UX, MPE	SQL	ANSI	Yes	Field, record	Yes	Roll-forward, recovery, single, dual logging	NP	4GL (HP Today), query/reporting (HP Vuoar)	No	No	NP	NP
Honeywell Bull, Inc. (800) 328-5111 ext. 99	Interel	GCOS 8	SQL, proprietary	ANSI	Yes	Data base, column, row	Yes	Operating system	Bulk load of data utility, model generation, statistical analysis, data extract	Cobol, Infoedge (proprietary tool kit)	No	No	NP	\$8,000-\$14,000 (original license fee)
IBM Contact local IBM sales office	OS/2EE	OS/2	SQL, prompted query	ANSI, SAA	Yes	Data base	Yes	Full, selected backup; restore to state of last backup; load, unload table output; warm restart; commit, rollback functions	Full, selected backup; restore to state of last backup; load, unload table output; table reorganization; import, export between data base manager tables, other OS/2 files; conversion to, from ASCII, WKS, WRK, WRI; update catalog with data base statistics	Report generator, IBM C/2 language	No	Yes	Version 1.0 set for availability in July; Version 1.1 in November	\$795
	DB2	MVS/XA, MVS/370	SQL, QBE	ANSI, SAA	Yes	Field	Yes	On-line full, partial backup; on-line recovery to current time or point-in-time; conditional, point-in-time restart; two-phase commit, recovery, restart with IMS/VS, CICS	On-line load, reorganization; update of DB2 catalog statistics; full-screen support for executing SQL statements; accounting, statistics, service, performance traces; DB2 performance monitor; data base record editor; application directory tables	4GL, application generator, application directory, report writing, query, graphics, data base input, editing, applications	No	Yes	NP	\$93,625-\$149,800 (First license-OTC)
	SQL/DS	VM/IS, VM/SP, VSE, Advanced Function	SQL, QBE	ANSI, SAA	Yes	Field	Yes	On-line data base, log archives; recovery to current time or point-in-time; warm restart; two-phase commit, recovery, restart with CICS, commit, rollback functions	Data load, unload, reorganization; process batch SQL statements; on-line update of SQL/DS catalog statistics; interactive SQL; accounting, rudimentary security audit; problem determination traces; relational design tool, data base record editing	4GL, application directory, report writing, query, graphics, data base input, editing	No	Yes	NP	\$8,700-\$34,800 (First license-OTC)

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Infocom, Inc. (617) 576-1851	Cornerstone	MS-DOS	None	NA	No	None	No	Backup, restore	Update, change records; report generator	None	Yes	Yes	NP	\$99.95
Information Builders, Inc. (212) 736-4433	Focus	VM, MVS	SQL, proprietary	ANSI	Optional	Field	Yes	Absolute file integrity	Access command control, encryption, password assignment, display control, program accounting	Application generator	Yes	Yes	2,200	\$50,000-\$100,000
Information Dimensions, Inc. (800) DATA MGT	DM	VMS, NOS/VE	Proprietary	NA	Yes	Field	Yes	Backup, restore data base; lists contents of backup sets	Communications control facility; data base dump, extract; report writer; dump, reload; query, manipulation, journal processor; kernel monitor utility; trace record utility	Cobol, Fortran precompilers; form view development module	Yes	Yes	175	\$17,400-\$96,000
Information Resources, Inc. (617) 890-1100	Express	IBM VM; Primos	Proprietary	NA	Yes	File, field, record	Yes	Update command backs up all changes	Data reader, dictionary manipulation	Menu generator; procedural, nonprocedural 4GL	Yes	Yes	175	\$85,000 +
	Express MDB	IBM VM, MVS; Primos; DEC VMS; HP MPE/XL	Proprietary	NA	Yes	File, field, record	Yes	Update command backs up all changes	Data reader, dictionary manipulation	Menu generator; procedural, nonprocedural 4GL	Yes	Yes	10	\$100,000 +
Information Structures, Inc. (303) 293-2911	Base/OE	VMS, RSX	Proprietary	NA	Yes	File	Yes	Operating system backup	File copy, file restructuring	Screen generator, proprietary application programming language	Yes	Yes	30	\$13,500-\$36,000
Informa Software, Inc. (415) 322-4100	Informix SQL, Informix 4GL	Unix, DOS, VMS, OS/2	SQL	ANSI	Yes	Field, field, record	Yes	Transaction logs	Audit trails, index file checker	Forms generator, report generator, ad hoc query capabilities (Informix 4GL can create screens, reports, menus, windows)	No	No	NP	\$795 (Informix-SQL), \$995 (Informix-4GL)
Intelligent Information Systems, Inc. (212) 966-4468	IDS/Destiny	VAX/VMS	Proprietary	NA	Yes	Field, key	Yes	On-line recovery, transaction rollback	Loader to transfer Destiny, RMS files	4GL, symbolic debugger	Yes	No	12	\$3,600-\$40,000
Interactive Software Systems, Inc. (800) 962-8367; (303) 987-1001 in Canada	UDMS	VMS	Proprietary	NA	Yes	Field	Yes	None	Dictionary, extracts, imports, interface to other relational DBMS's; report generator	4GL	Yes	Yes	300+	\$2,500-\$15,300
Interactive Technology, Inc. (503) 644-0111	RDM: The Application Developer	VMS, RSTS/E, RSX, RSX11M+, MicroRSX, TSX+, RT-11, PDS, MS-DOS	Query by form, query by interactive process	NA	Yes	File, field	Yes	NP	Copy, extract, merge, purge, expand, delete, rename, sort, ASCII conversion, Help files	Nonlanguage application developer; create files, forms, reports, data manipulation processes, menus, commands, Help files	No	No	2,000	\$895-\$89,995
Interbase Software Corp. (617) 649-3977	Interbase	VMS; Ultrix; SUN SunOS; Apollo Aegis; Domain/IX	SQL, proprietary	ANSI	Yes	Field	Yes	Backup, recovery utility	Backup, recovery utility	4GL, forms editor, preprocessor	Yes	Yes	800	\$5,000-\$75,000
Landmark Software Systems, Inc. (201) 722-5100	X-ample	VMS	Proprietary	NA	Yes	Field, file, record	Yes	Load, unload; index consistency; failure recovery	Import, export to RMS file structures	Menu, screen, report generators	Yes	Yes	NP	\$20,000-\$60,000
Macon Systems, Inc. (719) 520-1555	ADBMS	MS-DOS	Query-by-Example	NA	Yes	File, field, record	Yes	Internal backup, damaged file recovery	File creation, deletion, update, report generator, statistical analysis	Import file structures	Yes	Yes	6,000	\$99-\$2,500
MDBS, Inc. (800) 344-5832	Knowledgemart/2	PC-DOS, MS-DOS, VMS	SQL	Proprietary	Yes	File, field, record	Yes	NP	NP	Spreadsheet, graphics, text processing, report generator, forms management	No	No	20,000	\$595
Micromin, Inc. (206) 885-2000	R-Base	DOS	Proprietary, SQL	ANSI	Yes	Table, row, item	Yes	Load, unload, reload, verify integrity of data base	Network administration	Reports, forms, applications generators	Yes	No	NP	\$725-\$2695
	R-Base for OS/2 (available by March 31)	OS/2	Proprietary, SQL	ANSI	Yes	Table, row, item	Yes	Load, unload, reload, verify integrity of data base	Network administration	Report, forms, applications generator	Yes	No	NP	\$895
Nantucket Corp. (213) 390-7923	Clipper	MS-DOS	None	NA	No	File, field, record	Yes	File copy	Create, edit data base files; indexes, views; prototyping	Report, label form generator	No	No	NP	\$695
	McMax	Macintosh	None	NA	No	File, field, record	Yes	Backup, restore programs via programming language	Report, label generator	Report, label generator; resource editor; resource compiler; text editor	No	No	NP	\$295
National Information Systems, Inc. (408) 985-7100	Accent'r	VMS, TOPS 20, 10	Proprietary	NA	Yes	File, record, field	No	Programmable to users' needs	File renaming, programming language, report writer	Built-in programming language, program generators	Yes	Yes	300	\$5,000-\$99,000
Novell, Inc. (512) 346-8380	XQL	MS-DOS, PC-DOS, DOS 3.0, 3.3 LANS	SQL	Partial ANSI standard	Yes	Field	Yes	Proprietary	Proprietary	Proprietary	No	Yes	3,000	\$795
Odesta Corp. (800) 323-5423; (312) 498-5615 in Ill.	Helix VMX	VAX/VMS, Macintosh	Query by form, query by field	NA	Yes	File, field, record	Yes	Logging, autosave, save as, revert to previous save	User permissions; form permissions; validation; submenus; custom, design modes	SQL	Yes	Yes	NP	Starts at \$4,500
	Double Helix II	Macintosh	Proprietary	NA	Yes	File, field, record	Yes	Logging, autosave, save as, revert to previous save	User permissions; form permissions; validation; submenus; custom, design modes	SQL	Yes	Yes	NP	\$595
Online Software Systems, Inc. (800) 642-0177	Ramis Information System	OS, DOS/VSE, VSE/SP2, MVS/TSO, MVS/XA, VM/CMS	Proprietary	NA	Yes	Data base, file, record, field	No	None	Data maintenance; on-line error analysis; full-screen editor to create, modify, validate file descriptions	Structured development language; tool kit for creating, maintaining files; file descriptions; data dictionaries; libraries; procedures, screen, report requests; includes formatted screen manager to build screen-based applications	No	Yes	1,200	\$30,000-\$126,000
	Ramis/PC Workstation	PC-DOS, MS-DOS	Proprietary	NA	Yes	File	No	None	Menu-based transaction processing; automated DOS utilities for directory, file management; encryption, decryption	Integrated development language; screen painting, interface for uploading, downloading; utility for developing relational fileset procedures that run on PC, mainframe	Yes	Yes	3,000+	\$495
Oracle Corp. (800) 345-DBMS	Oracle	MS-DOS, OS/2, Unix, Ultrix, VMS, MVS, AOS, Xenix, VM	SQL	ANSI	Yes	File, field, record, value	Yes	Roll-forward, rollback recovery	Export, import SQL*Loader, monitoring tools	Forms, report, menu generator	Yes	Yes	70,000	Starts at \$199

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Prime Computer, Inc. (617) 855-8000	Prime Information	Primos, Unix, DOS	Proprietary	NA	Yes	Field	No	On-line transaction logging, roll-forward recovery, tape or disk backup	File sizing without tape restore; globally accessed, RAM disk data base; new field addition in real time; real-time index creation	Simple (menu-based development tool), Escape (application code generating, documenting language)	Yes	No	5,000+ (multiuser version), 6,000+ (DOS version)	\$895 (DOS), \$3,000-\$35,000 (multiuser)
	Prime Oracle	Primos, Unix, MS-DOS	SQL	ANSI	Yes	Field	No	Rollback after image journaling; dynamic or static creation at A/P files; import, export utility	Reorganization, restore capability; Oracle display system to track locking bottlenecks; data loader to load flat files into data bases	ProOracle, PRO*SQL, SQL*Forms, SQL*Plus	Yes	No	500+	\$1,000-\$92,000
Progress Software Corp. (617) 275-4500	Progress	Unix, PC-DOS, VAX/VMS, Xenix, Ultrix, CTOS/ BTOS	Proprietary	ANSI (in development)	Yes	Field, record	Yes	Crash-proof data base engine, before image filing, roll-forward recovery, backup utilities	Data base analysis, index rebuild, I/O analysis	4GL	Yes	Yes	10,000+	\$1,000-\$125,000
Provue Development Corp. (714) 969-2431	Overvue	Macintosh	None	NA	No	None	No	Hard-disk backup	Report writer, charts	None	No	Yes	Approx. 10,000 shipped	\$295
Quodora Corp. (203) 728-6777	QDMS-R	VAX/VMS	Proprietary	NA	Yes	Field	Yes	Error recovery through VMS	Describes data elements (up to 26 attributes), defines relationships between tables, allocates space, report writer	Screen generator, generated data entry; mass change, delete, add; letter generator	Yes	Yes	NP	\$16,000-\$25,000
Relational Technology, Inc. (800) 4-INGRES	Ingres	DOS, VMS, VM/CMS, Unix, MVS	SQL, QUEL	ANSI	Yes	Field, time, data, value range	No	Checkpoint, journaling, rollback, roll-forward	Storage structure modification, data relocation	Ingres (4GL)	Yes	Yes	6,500	\$5,000-\$160,000
Rim Technology, Inc. (206) 451-8144	RTI Rim	Ultrix, VMS, Unix, MS-DOS, NOS/VE, Angus, AOS/VS, Cray COS	Proprietary	NA	Yes	File, record	Yes	None	Removing users, setting user access, recovering deleted file space, recovering deleted rows, repairing damaged file structures	Application interface	Yes	Yes	100	\$700-\$13,000
Ruf Corp. (913) 782-8544	Information Management Processing and Reporting System	VMS, RSTS	Proprietary	NA	Yes	Record	Yes	Transaction logging	Join, merge restructure files; delete records; delete columns; reformat data; add indexes	Data manipulation language	No	Yes	300	\$6,000-\$20,000
Smith, Abbott & Co. (301) 561-8411	Autopro	RSTS/E, VMS, MS-DOS, Novell Netware	Query-by-form	NA	Yes	Field	Yes	Audit trails, change logging	File creation, deletion; data base add, delete, modify; report writer	Screen generator, menu generator, query-by-form	Yes	Yes	200+	\$750-\$15,000
Software AG of North America, Inc. (703) 860-5050	Adabas	VM SP 4, SP 5, DOS, VSE SP 1.3, SP 2.1, SP 3.1, MVS/XA, VSI, VMS, Semia BS2000, Fujitsu OS IV, Hitachi VOS	SQL	Proprietary	Yes	File, field, value	Yes	Save, restore; walk forward, backup functions	Load, unload; compress, decompress; save, restore; define data base; format space; file maintenance; data base maintenance	Editors, screen generators, debugging aids, CASE-aided application life cycle support, SQL-based syntax for 3GLs	Yes	Yes	2,500	\$25,000-\$186,000
The Software Group, Inc. (518) 877-8600	Enable	DOS	None	NA	No	File, field, record	No	Automatic data base backup, restore	Add, edit, display, sort, merge, archive, delete, undelete, destroy, update, copy, browse, report, export, replace, index, graph, rename	Menu generator, procedural language for data base applications	Yes	Yes	NP	\$695
Stone Edge Technologies, Inc. (215) 641-1825	DB Master Version 5 Professional	Apple II PRO DOS	None	NA	Yes	File, field	Yes	None	Report generator, statistics, password settings, data exchange with other file types, data merge, global edit, file restructure	NA	Yes	Yes	NP	\$295
Sun Microsystems, Inc. (415) 960-1300	Sun Unify	Unix	SQL	ANSI	Yes	Field	Yes	Backup, roll-forward recovery	Table statistics, schema access, specify disk layout	NP	Yes	Yes	1,000	\$3,195
	Sun Ingres	Unix	SQL, proprietary	ANSI	Yes	Record	Yes	Rollback, roll-forward recovery	Data base backup to disk or tape; journaling; restore data base after hard, soft crashes; modify data base structures; allowing network access; copy data base	Applications by form, C, Fortran	No	Yes	1,000	\$3,990
Sybase, Inc. (415) 548-4500	Sybase System, Dataserver, Dataobject	VAX/VMS, Sun/Unix, Pyramid OSX (Data-server), VAX/VMS, Ultrix, Sun Unix, Pyramid OSX, PC-DOS (Dataobject), OS/2 (Sybase system in second half of 1988)	SQL	ANSI	Yes	Field	Yes	Physical logging; multiple data base support; controllable guaranteed recovery time; log recovery; bulk copy program; journaling; table generator; monitoring tools; resource control; maintenance tools; consistency checker	Integrity control through stored procedures, configuration management, performance tuning	Proprietary toolbar; Information Builders' Focus; DB Access's AccessStar; Network Innovation's Multiplex; Natural Language, Inc.'s NLI Datalater	Yes	Yes	350	\$1,000-\$150,000
Synercom Technology, Inc. (713) 240-5000	Informap III	VMS	Proprietary	NA	Yes	File	Yes	NA	NA	User creatable	Yes	Yes	160	\$1,500-\$80,000
Tandem Computers, Inc. (408) 725-6000	Nonstop SQL	Guardian (proprietary)	SQL	ANSI	Yes	Record, file	Yes	Transaction monitoring; backup, restore programs	Where-used reporting; performance monitoring; data base conversion; disk compression; disk space analysis	Screen generator; transaction processing monitor	No	No	NP	\$4,000-\$8,000 (initial license fee)
3CI, Inc. (800) 525-2001	Infocent	VMS, AOS/VS, Primos, GCOS 8, OS/2	SQL	Proprietary	Yes	Field	Yes	Checkpointing; autorecovery; logging; journaling file access control; system accounting; file access control	Change data set characteristics, rebuild dataset structures, control security, performance analysis, data base tuning	Macro/4GL builder; forms generator; printed forms; report writer; graphics; import, export utility; 3GL applications library; network module; command prompter; Help facility; load, off-load utilities	Yes	Yes	100+	\$4,900-\$169,000
Unify Corp. (916) 920-5553	Accell IDS	Unix, Xenix, all Unix compatible	SQL	ANSI	Yes	Field	Yes	Transaction logging, data base backup, roll-forward recovery	Security maintenance; data dictionary reports; utilities to maintain executable menus, Help documentation	4GL, windowing interface, applications generator, host language interface	Yes	Yes	50,000	\$2,995-\$126,000
	Unify relational DBMS	DOS, Unix, all Unix compatible	SQL	ANSI	Yes	Field	Yes	Transaction logging, data base pickup, roll-forward recovery	Security maintenance; data dictionary reports; utilities to maintain executable menus, Help documentation	Data entry, query-by-forms, report writer, custom-formatted listings, full-screen editor for screen forms	Yes	Yes	200,000	\$795-\$80,000
Unisys Corp. (215) 542-4187	UDS RDMS 1100	Unisys Series 1100/2200	SQL	ANSI	Yes	File, field, record, table, view	Yes	Duplicated file, audit trail options; optional checksum feature; automatic tape backup	Statistics, performance analysis; automated application recovery; fast dump, load; on-line duplicated file log reconstruction; file placement for performance	SQL integrated with Cobol, Fortran, C compilers; 4GL; Interactive Programming Facility for SQL prototyping, design	Yes	Yes	NP	NP
Wang Laboratories, Inc. (617) 459-5000	Pace	VS	Query-by-Example, SQL	Proprietary	Yes	Field	Yes	Backup at data base, file levels; before-image journaling; rollback, roll-forward recovery	Copy table definitions, control file conversions	Application builder; data dictionary facility to define processing, integrity rules in data dictionary	Yes	Yes	2,000	\$13,000-\$39,000
Wordperfect, Corp. (801) 227-5000	Dataperfect	MS-DOS	None	NA	Yes	File, field	Yes	Regenerates indexes, file copy	Proprietary language used to build or modify a structure	NA	Yes	Yes	NP	\$595