

IBM Software Group

DB2 Universal Database Express

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DB2. Information Management Software



@business on demand software



Frequently Asked Questions

- What is DB2 UDB Express?
- What is the difference between DB2 UDB Express and DB2 UDB Workgroup?
- How much does it cost?
- What is the difference between named and concurrent users?
- What support is available for DB2 UDB Express?
- Is there a community for DB2 UDB Express?
- Can I embed DB2 UDB Express in my application?
- Can I upgrade from Express to Workgroup or ESE if my application grows?
- Can I get a trial version of DB2 UDB Express?
- Is there a developer's edition of DB2 UDB Express?
- What does it take to administer and manage DB2 UDB Express once it has been installed? Are there any tools available to help me?
- How easy is it to use DB2 UDB Express with MS Visual Studio?
- Is there support available to help me port my existing application to DB2 UDB Express from my current database?
- How do I buy DB2 UDB Express?
- Can I automate the initial setup and ongoing maintenance of DB2 UDB Express?



DB2 UDB Express – Low Cost Entry Point into DB2

- Easy to install and deploy: Faster time to value
- Affordable
- Avoids customer lock in with a vendor
- Scalable on Demand
- Protects your existing investment
- Development environment integration
- <\$600 entry point</p>
- Top 5 Reasons to Buy Over Competition:
 - 1. Best price and TCO
 - Better Support (Skills, availability and cost)
 - Full Function Database
 - Better Partner Programs, ability for partners to make money, and we do not compete with our partners
 - Open Standards and platforms (Linux)

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10 User Example	IBM DB2 UDB Express	Oracle SE One	MS SQL Standard Edition						
License Policy	per user (max. 2 CPUs)	per user (max. 2 CPUs)	per user (max. 4 CPUs)						
License*	\$499 base + \$990 for 10 users (\$99/user) =\$1489	\$745 base + \$745 for 5 users (\$145/user) = \$1490	\$667 base + \$1460 for 10 users (\$146/user) = \$2127						

^{*}These prices are license only for comparison.



DB2 UDB Express is the Value Leader

Scenario Pricing	IBM DB2 Express**		MSFT SQL Server 2000** ** MSFT has changed prices on May 29, 03	Oracle SE One 10g
1 User		\$598	\$813	\$745
5 Users		\$994	\$1,397	\$745
10 Users		\$1,489	\$2,127	\$1,490
Unlimited Users (per CPU)		\$3,899	\$4,999	\$4,995
Standard Pricing / Assumptions	Express Edition Pricing - \$499* Server Only - \$99* Per User * These are license only prices for reference purposes. The PPA prices will vary due to subscription and support, volume discounts, currency / geo translations etc.		Standard Edition Pricing - \$1489 for 5 Named User CAL pack -\$2249 for 10 Named User CAL pack New additional pricing metric (05/29/03) - \$667 per server - \$146 per user	Standard Edition Pricing - \$145 for Named User (Minimum 5 users per CPU)
Software Maintenance a significant cost factor for total cost of software ownership over five year period(Fixes, Upgrades and telephone support)	25% for first year + 25% for subsequent years on base license fee (consistent across all SWG offerings)		25% on base license fee + telephone support at per incidence basis, provided by MSFT business partners (starts at \$9,000 for ten incidence pack), could be open ended additional cost	22.5% on base license fee
Limitations	Server = Max. 2 (Server	CPUs per	Server = Max. 4 CPUs per Server	Server = Max. 2 CPU per Server

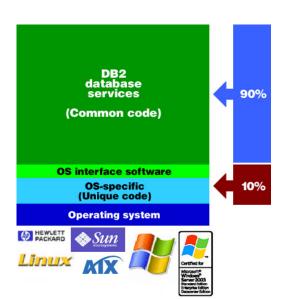


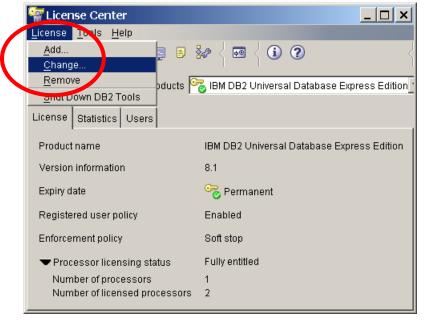


Scalable On Demand

- Same codebase as the rest of DB2 UDB V8.1 for Windows, Linux and Unix
- An application written for any edition of DB2 UDB is transparently portable to another edition on any distributed platform
- As business grows, so can the underlying database
- Just upgrade the license key

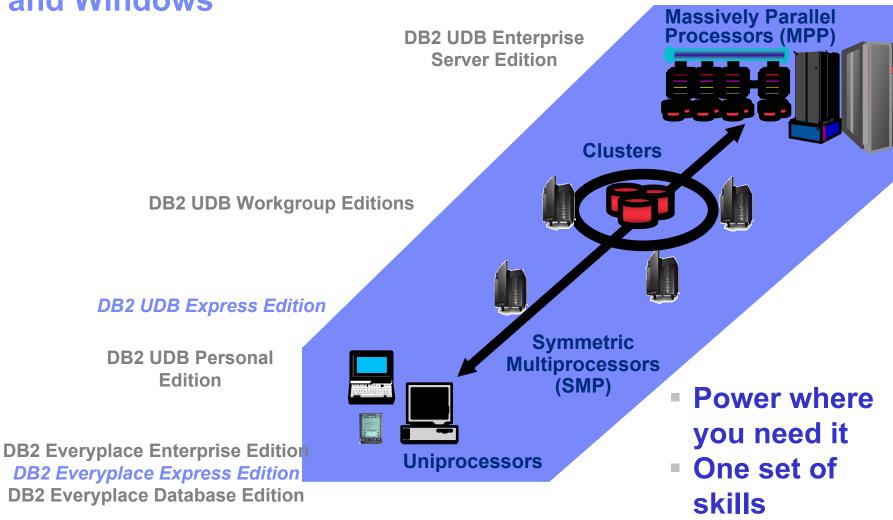
 "...everything works without touching a single line (either code or configuration)." Blair Hankins, Chief Technology Officer, Ascendant Technology, Inc.







DB2 UDB Database Server Offerings for Linux, Unix and Windows





DB2 Express:

- DB2 Express is functionally equivalent to DB2 WSE
- Supports Windows and Linux
- It includes:
 - The same tools and management facilities found in WSE and ESE.
 - The same autonomic capabilities found in WSE and ESE
 - Replication
 - XMI extender
- Like WSE it does not include:
 - Integrated mainframe connectivity (via the DB2 Connect component). However they can coexist and work together
 - Query patroller
 - Support for 64-bit computing
 - Support for DB2 Data Links File Manager
 - Spatial or Audio, Image or Video extenders



DB2 Express Vs DB2 Workgroup

Attribute Category	Attribute	DB2 WorkGroup (WSE)	DB2 Express	Comments
Target Market	Primary Customer Segment	Departments within Enterprises	SMB (>100 & <1000)	
Applications	Туре	Custom or ISV	ISV / OEM primarily, incl. customization by VARs	
Functionality	Code base	Existing	Same as WSE, with install changes	
Routes to Market	Channel	Primarily Direct	Primarily Partner Channel	
	Fulfillment	Passport Advantage (PPA)	PPA and Channel	
Platform	OS Supported	Multiplatform (Linux, UNIX and Windows)	Choice of Linux or Windows (for Intel)	SMB space is primarily Windows & Linux
Naming	Name	Existing, No change,	"Express" naming	
Packaging	Platforms	All supported OSs in one package	Both Windows & Linux OSs in one package	
	Content	Server, Clients, features, complementary products	Server only	Clients code available as electronic download
	NLVs	ships all supported NLVs within single box	All supported NLVs on Windows or Linux CD	
	CDs	Many CDs (60+)	Minimal CDs (4)	
	Package	Shrink wrapped box	Manila envelope	
Pricing	Client / Server - per user model	\$969 (base - server + first user), Additional "Concurrent" user at \$249	\$ 499 (base server only), plus each "named" user at \$99	New named user pricing, to align with typical Partner's business model
	Licensing	Concurrent	Named	
	Other T&Cs	Existing, No change <= 4 CPUs, 32 bits etc.	<= 2 CPUs, 32 bits etc.	
Upgrade Path		==> WSUE ==> ESE	==> WSE/WSUE ==> ESE	Similar

\$99 Per User

One CD

5 minute install

Easy to Use

Autonomic

Development Freedom

Best Price Performance

DB2 UDB Express \$99 per user or \$3899 per processor First class database...outstanding value

DB2 Information Management Software

Want even more?
Stinger technology Preview:
www.ibm.com/DB2/stinger

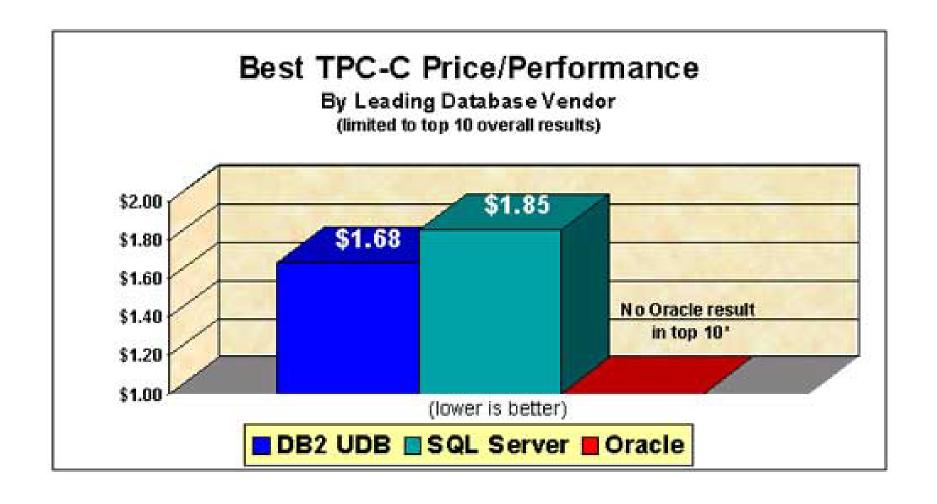


Performance and Scalability Leadership

- Value Best Price Performance DB2 UDB Express
 - ▶ 18,318 Transactions Per Minute
 - ▶ \$1.68 per Transaction
 - Single CPU Intel Xeon machine
 - Best Oracle result was ranked #38 at time of publication in overall price/performance
- Scalability Best Performance
 - ▶ 1,025,486 Transactions Per Minute
 - 32,046 Transactions Per Minute Per CPU
 - ▶ \$5.43 per Transaction
 - ▶ IBM eServer pSeries 690 Model 7040-681



Best Price Performance





Application Development Freedom

- C/C++ (ODBC and Static SQL)
- JDBC and SQLJ
- Borland
- Python
- PHP
- Perl
- .net languages
- OLE-DB
- ADO
- Web Services
- SQL
- MS Office: Excel, Access, Word































http://www7b.software.ibm.com/dmdd/library/techarticle/0206sqlref/0206sqlref.html







Virtual Innovation Center

- Reaction
 - Over 1500 companies registered for DB2 Express
 - Over 95% Service the SMB Market
- Web Based Self Help Model
 - Developer's Edition or License
 - ▶ Enable SMB BPs
 - ▶ On-line, self help and @ no cost
 - No prior membership requirements
 - In cooperation w/ WebSphere & Tivoli
- Education (on-line)
 - ▶ At BP time & place of choice
 - ▶ Technical, Marketing & Sales
 - e-Mentoring
 - Sales Aids, News letters
- Support (on-line)
 - Porting Assistance
 - ▶ 1-on-1 Technical Experts Available
 - ▶ FAQs, White Papers, Case Studies
 - ▶ Hints and Tips, Forums, Discussion Groups



A New Enablement Model for SMB BP's



Migration Workshop

- Designed for BPs
 - Prior PartnerWorld membership required
 - Assumes BP is new to DB2
 - BP brings own application
- Registration: www.developer.ibm.com/spc/events/db2_apps.html
- No charge for the workshop (BPs pays T&L)
- Course highlights
 - ▶ Introduction to DB2 and WebSphere Application Server integration
 - DB2 fundamentals education
 - DDL and data extraction and deployment
 - DB2 SQL procedural language
 - Migrating stored procedures, triggers, and UDFs
- Experience:
 - ▶ In some cases (depending on application complexity), attendees have been able to completely migrate their own application within the 5 day period



Autonomic Manageability

Less Skill, Less Resource, Better System Utilization

DB2 UDB Express

- Provide Automated Expert Advice
 - Configuration and Design Advisor
 - Health Monitor
- "Built-in" Automation
 - Automated Maintenance
 - Optimization, Parallelism and More
- Setup and Configuration
 - Configuration Assistant
 - Numerous Wizards



"We would have needed three times that many DBAs, at least, to run Oracle"

CIO, GetRelevant, BusinessWeek Online (Nov, 01)



Health Monitoring

Why?

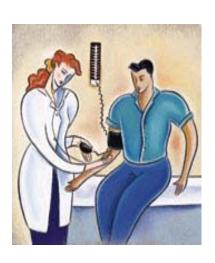
- how do you know if DB2 is running okay, performing well?
- what if you manage to figure out it's "unhealthy", then what?
- too difficult to determine what to monitor and when to monitor it
- need to set up monitors, notification, & resolution mechanisms

Management-by-exception model:

- ▶ DB2 monitors its own health right out of the box
- notifies upon encountering unhealthy conditions: e-mail, page, logs
- advises on severity of condition, and suggests resolutions
- initiates corrective action if required, requested
- Recommend Advisor guides user on how to fix problems (NEW)

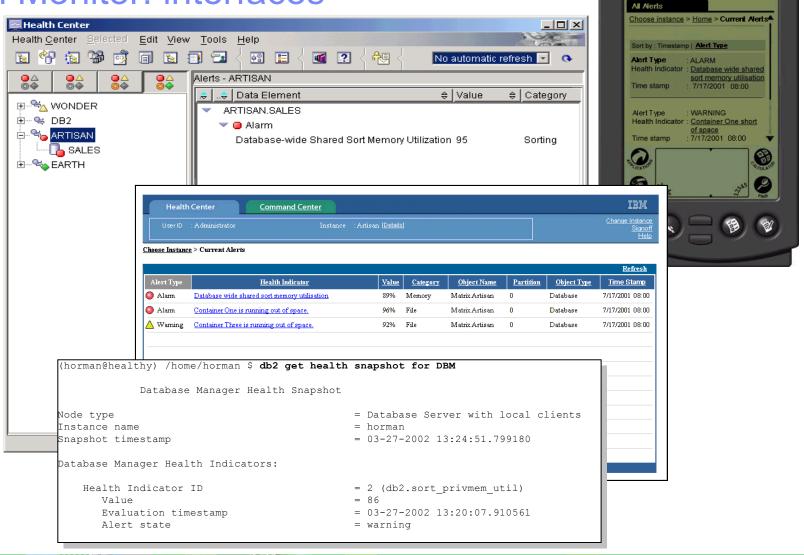
An Up-and-Running Dream!!

install DB2, provide an e-mail or pager address, "db2start"





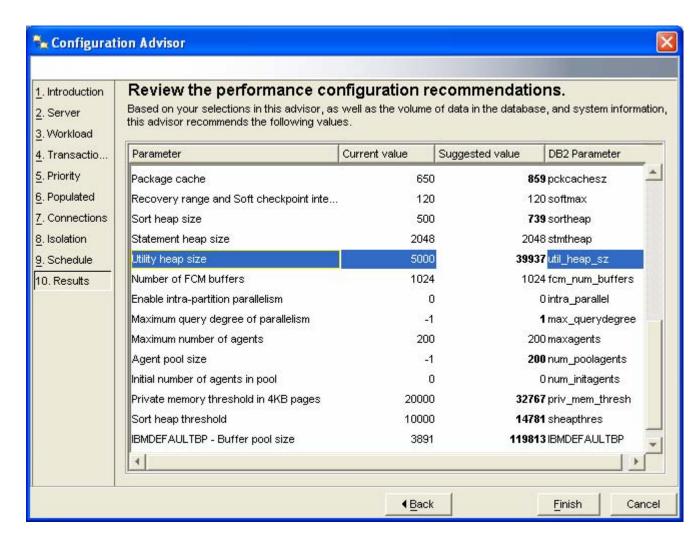
Health Monitor: interfaces





Configuration Advisor

- Recommends database configuration based on environment and type of database.
- Can be embedded as part of the installation





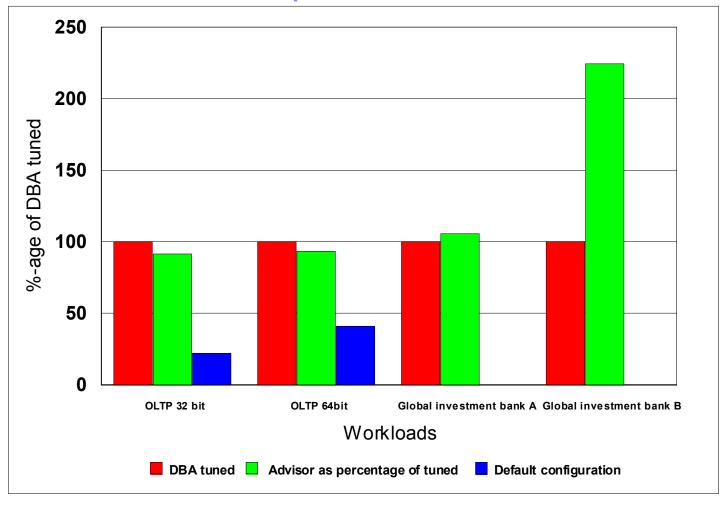
Configuration Advisor: automatic environment detection

- System Information
 - number of physical disks
 - physical memory size (RAM)
 - CPU information
 - number of online CPU
 - number of configured CPU
 - OS features
 - OS type and release (OS2, Windows, NT, Unix etc)
- Database Information
 - size of database
 - number of tables
 - number of indexes
 - number of tablespaces
- Bufferpool Information
 - name, size for each bufferpool
 - number of bufferpools

Selfmanaging
software
senses
its own
execution
environment



Configuration Advisor Experimental Results





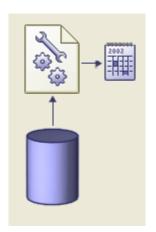
Stinger – Automatic Maintenance



- Define periods of low or no activity for the database
- Choose maintenance activities for DB2 to handle automatically
- Choose people to be notified if automatic maintenance if unsuccessful
- DB2 will determine if maintenance is required
- If it is necessary it will be performed in the next available maintenance window

Database: KOHLMANN - DB2 - SAMPLE

Maintenance: Fully automated



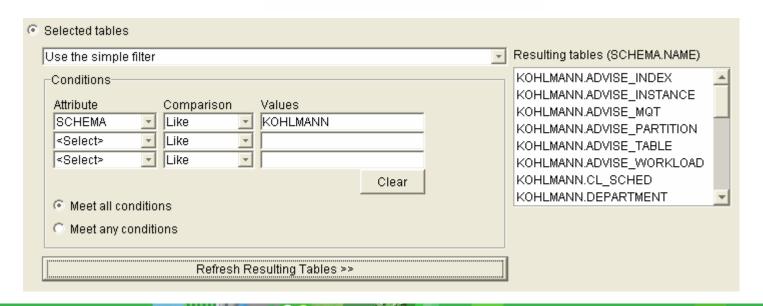


Stinger – Automatic Maintenance Advanced Settings

- Specify backup priorities
- Define Backup location
- Online or offline
- Specify tables for Runstats and Reorg

Configure Settings...

Optimize for database recoverability (more frequent backups)				
■ Balance database recoverability with performance				
Optimize for database performance (less frequent backups)				
C <u>C</u> ustomize				
Criteria details				
Maximum time between backups	1 Week			
Maximum log space used between backups	15 MB			



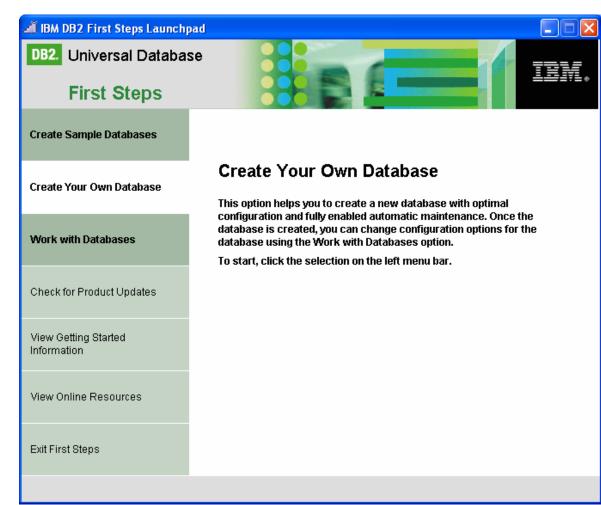




Stinger - Create Your Own Database



- Creates a new database on the disk or directory of your choice
- Assigns disk space for your data
- Configures the new database for performance
- Turns on automatic maintenance
- Configures
 notification by e-mail
 or pager if the
 database needs
 attention

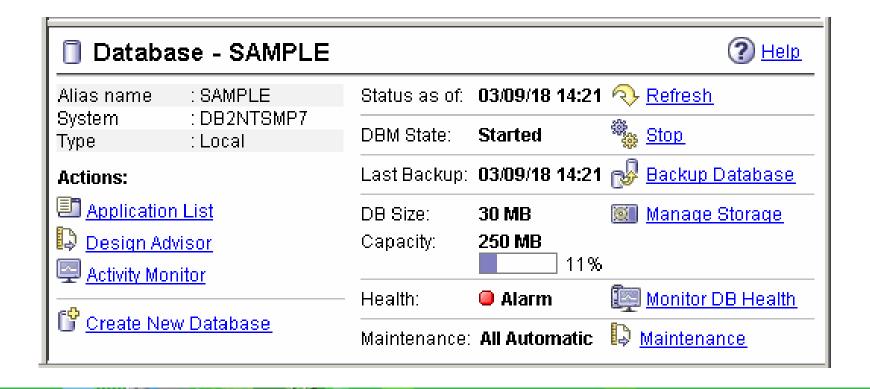




Stinger – Simplified Database Status View



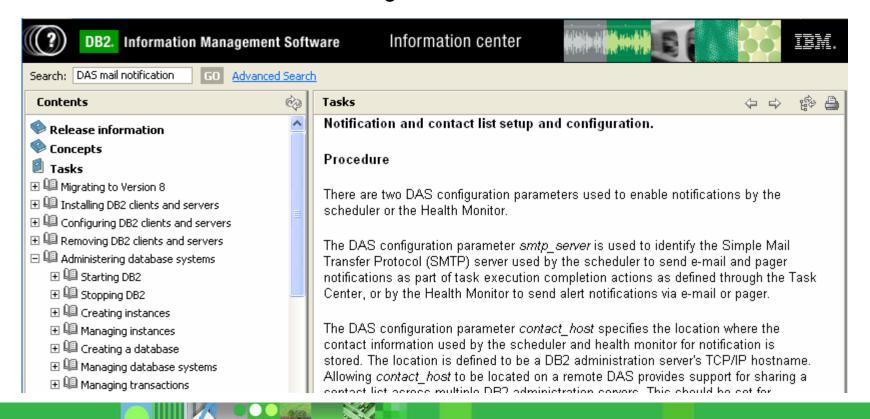
- Integrated status and quick actions
- Simplified Health, Maintenance, Storage and Backup status
- Part of a redesign of the Control Center





DB2 Information Center

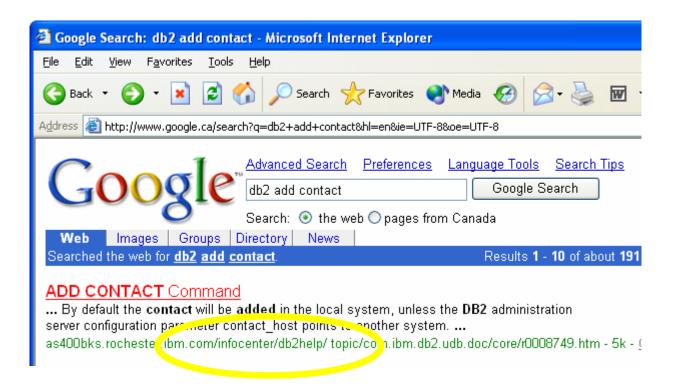
- New Information Center designed for Stinger is available today
- Based on the Eclipse Help System
- publib.boulder.ibm.com/infocenter/db2help
- Will be included with Stinger for intranet installation





Google Support

- Google searches the DB2 UDB Technical Library
- Look for search results from the "/infocenter/"
- Search is also possible through the DB2 News Groups





www.ibm.com/software/data/db2/udb/db2express

DB2 UDB Express Edition for Linux and Windows



DB2 Universal Database Express Edition

The lowest priced full function relational database

IBM DB2 Universal Database Express Edition V8.1

IBM DB2 Universal Database Express Edition is the lowest priced full function relational database. Designed to meet the needs of small and medium businesses, DB2 UDB Express Edition features self-tuning and self-configuring capabilities for ease of manageability, Linux® or Windows® platform choice and support for transparent installation with business partner applications.

Accelerated Time to Value

DB2 UDB Express Edition supports popular integrated development environments, is easy to integrate and administer. It is designed and priced specifically to reduce the total cost of ownership for small and medium-size businesses.

DB2 UDB Express Edition continues to reflect the outstanding price/performance ratio that have helped drive the adoption of IBM's DB2 UDB family by over 400,000 companies and 16,000 IBM Business Partners. DB2 UDB Express Edition is priced to offer the value today's SMB market demands. All from IBM, the



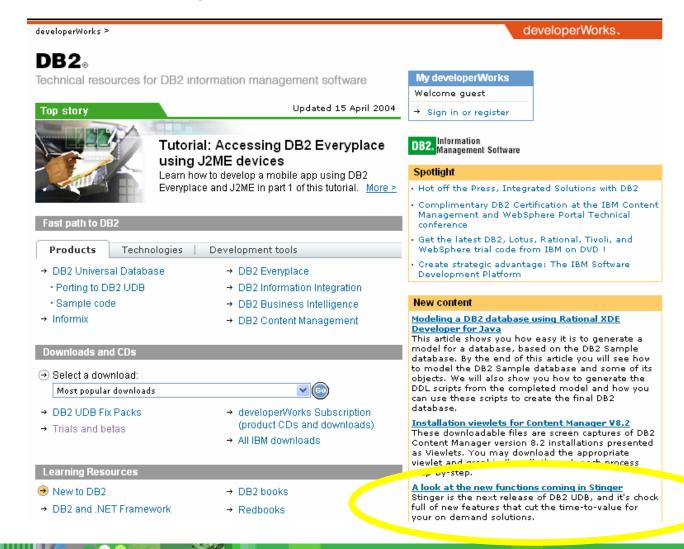


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- → DB2 UDB: New TPC-C Price/Performance Record
- → Try DB2 UDB Express now!
- → DB2 UDB Express Edition V8.1 Spec Sheet
- → DB2 UDB Express Edition, More Details
- → What business partners say about DB2 UDB Express



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