



IBM Systems and Technology Group University 2005

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# Competing Against Microsoft and Oracle With i5/OS and DB2

Course #: i15

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## Objectives

- **Understand how to position DB2 capabilities and strategy to ensure it can be an ADVANTAGE to an eServer i5 sale and NOT an inhibitor**
  - Learn how to overcome database centric objections
- **Understand what IBM DB2 Sales force (and others) are selling to YOUR customers, how to map that to iSeries capabilities and identify new workload opportunities they are uncovering**
- **Learn key selling attributes to move Oracle workloads off of Sun/HP onto AIX on eServer i5 Enable**
- **Learn how to identify new workload opportunities with recent V5R3 DB2 functionality**

## Common Objections

- **“DB2 is not DB2”**
- **“DB2 is proprietary”**
- **“DB2 is great for RPG, but we develop using .NET”**
- **“DB2 is a great OLTP database, but can’t do BI”**
- **“DB2 doesn’t seem to have 3<sup>rd</sup> party tool provider support”**
- **“No one is doing DB2”**
- **“DB2 does not have feature (fill in the blank)”**
- **“DB2 in i5/OS is not strategic to IBM”**

## Other Issues we will cover

- **Benefits of running Oracle on Power5**
  
- **Microsoft's SQLServer Strategy**

## Common Objections

- **“DB2 is not DB2”**

## DB2 UDB Family

- **DB2 Code Bases**
  - DB2 UDB for z/OS V8.1
  - DB2 UDB for iSeries V5R3
  - DB2 UDB for Linux/Unix/Windows V8.2
- **Managing family compatibility**
  - Data Management Steering Committee
  - Data Management Architecture Board
  - SQL Language Council
- **Common design, algorithms, and code sharing where possible**
- **Two Types of Differences**
  - Short term differences based on different release dates and different customer priorities
  - Long term differences based on Operating System differences (Isolated to database configuration and utilities)
- **IBM DB2 UDB Reference**  
<http://www-1.ibm.com/servers/enable/site/db2/db2common.html>

## Tools for DB2 Engines May NOT be equivalent

Example: DB2 Query Patroller for DB2 LUW (Linux/Unix/Windows)

Query Patroller Task	DB2 UDB for iSeries
Give queries submitted by certain users high priority so that these queries run sooner	i5/OS or insure/Resources
Automatically put large queries on hold so that they can be canceled or scheduled to run during off-peak hours	i5/OS (DB2 Query Governor) or insure/Resources
Track and cancel runaway queries	i5/OS (DB2 Query Governor) or insure/Resources
Information about completed queries can be collected and analyzed to determine trends across queries, heavy users, and frequently used tables	i5/OS (DBMonitor) or insure/Resources
Set resource usage policies at the system level and at the user level	i5/OS (CPU, disk limits) or insure/Resources
Generate reports that assist in identifying trends in database usage such as which objects are being accessed, and which individuals or groups of users are the biggest contributors to the workload	i5/OS (iSeries Nav) or insure/Resources
Store query results for future retrieval and reuse, effectively eliminating the need for repetitive query submission	i5/OS Result Set Caching, Materialized Query Tables (V5R3)



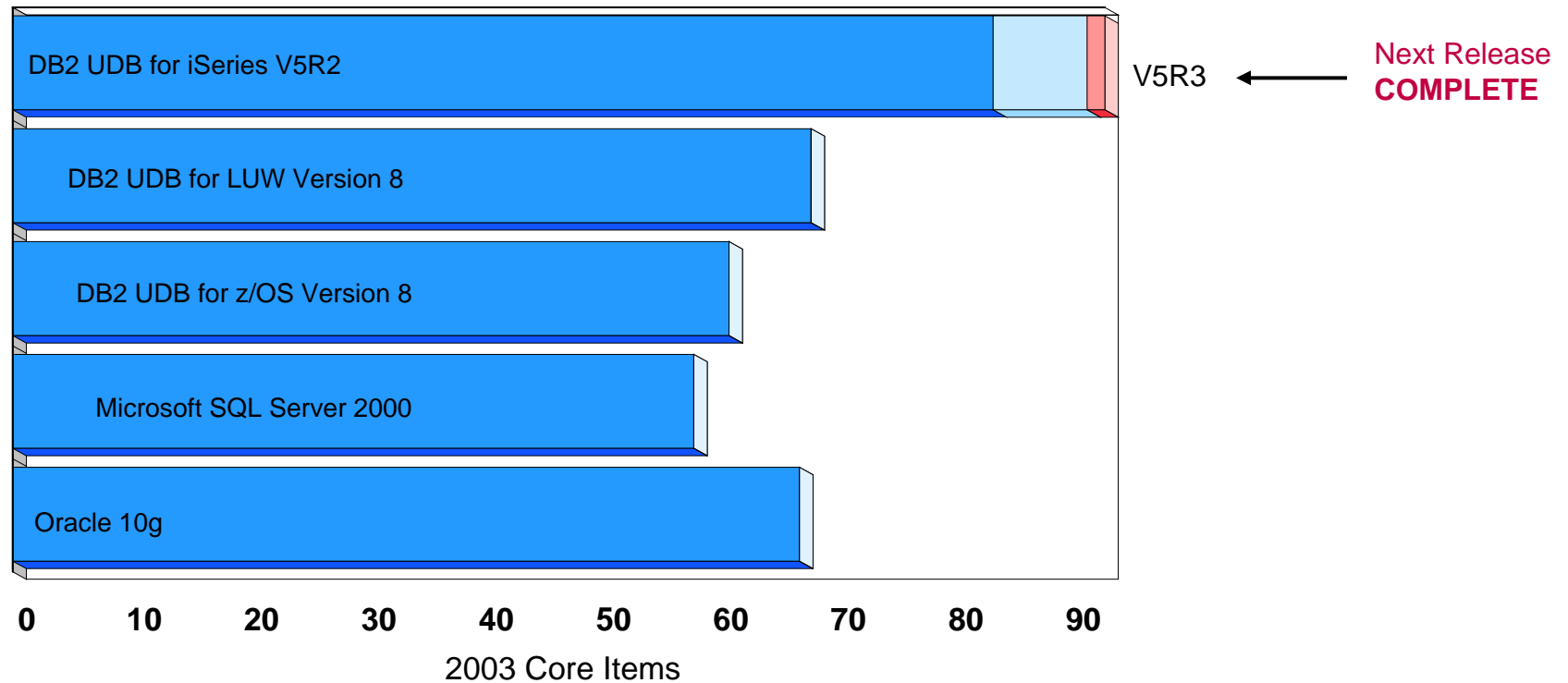
SWG DB2 Products	Description	Linux/AIX on Power5?	i5/OS Equivalent
<b>DB2 UDB V8.2 ("Stinger")</b>	DB2 for Linux/Unix/Windows	Linux and AIX	DB2 UDB for iSeries
<b>DB2 Information Integrator</b>	Heterogeneous Data Access	AIX Only	None (some 3 <sup>rd</sup> party offerings provide proprietary API solutions)
<b>DB2 Connect</b>	Client side drivers and function, .NET plug ins	Linux and AIX	iSeries Access ODBC/JDBC Drivers
<b>DB2 Warehouse Edition</b>	DB2 for LUW Data Warehouse Tools Bundle	AIX today, Linux planned	Partner Products (SPSS, InfoManager, et.al.)
<b>Data Propagator</b>	Data Replication	Built into DB2 LUW	Data Propogator, H/A Vendor solutions
<b>DB2 OLAP (ESSBASE)</b>	Hyperion's ESSBASE – multidimensional database	AIX	SPSS' ESSBASE/400
<b>Intelligent Miner</b>	Data Mining	AIX	SPSS' Clementine
<b>Content Mgr Express 8.3</b>	Image Management	AIX	Planned for mid 2005
<b>Content Mgr Enterprise 8.3</b>	Image Management	AIX	SOD
<b>Query Patroller</b>	Query Analysis Tools	Linux and AIX	iSeries Nav + Centerfield Technologies products
<b>Cube Views</b>	Relational OLAP	AIX today, Linux planned	3 <sup>rd</sup> Party BI Vendors
DB2 Engine Functions	DB2 V5R3	DB2 V8.2	DB2 V5R3
<b>Materialized Qry Tbls</b>	Optimizer aware summary tables	Built into DB2 LUW	V5R3 PTF – 1Q '04
<b>.NET Plug Ins</b>	DB2 Wizards for Visual Studio	Built into DB2 LUW	DB2 Connect
<b>Federated Database</b>	Distributed Database	Built into DB2 LUW	Requires DB2 Connect

## Common Objections

- **“DB2 is not DB2”**
- **“DB2 is proprietary”**

# SQL (Structured Query Language) is to database programming As Java is to application programming

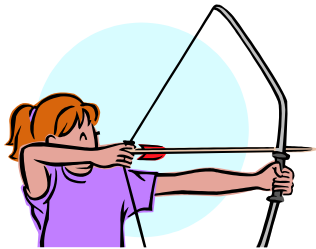
## DB2 UDB for iSeries Conformance to core SQL Standard



- No database vendor today has all the features of Core
- DB2 Universal Database for iSeries already has shipped most of the items

# Why do competitors claim "proprietary"?

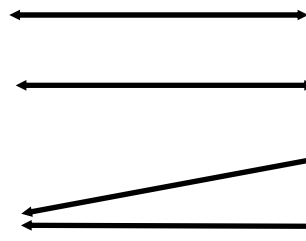
## "Heritage" Objects



Library  
 Physical File  
 Member  
 Logical File

## "SQL" Objects

Schema (Collection)  
 Table  
 Index  
 View



Create Physical File  
 (Data Descr. Specifications)

Access Data with  
 Native HLL I/O

Create DB Object

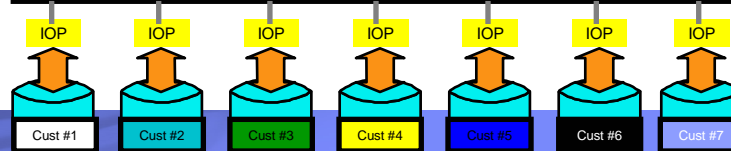
Access DB Object

Create Table (SQL)

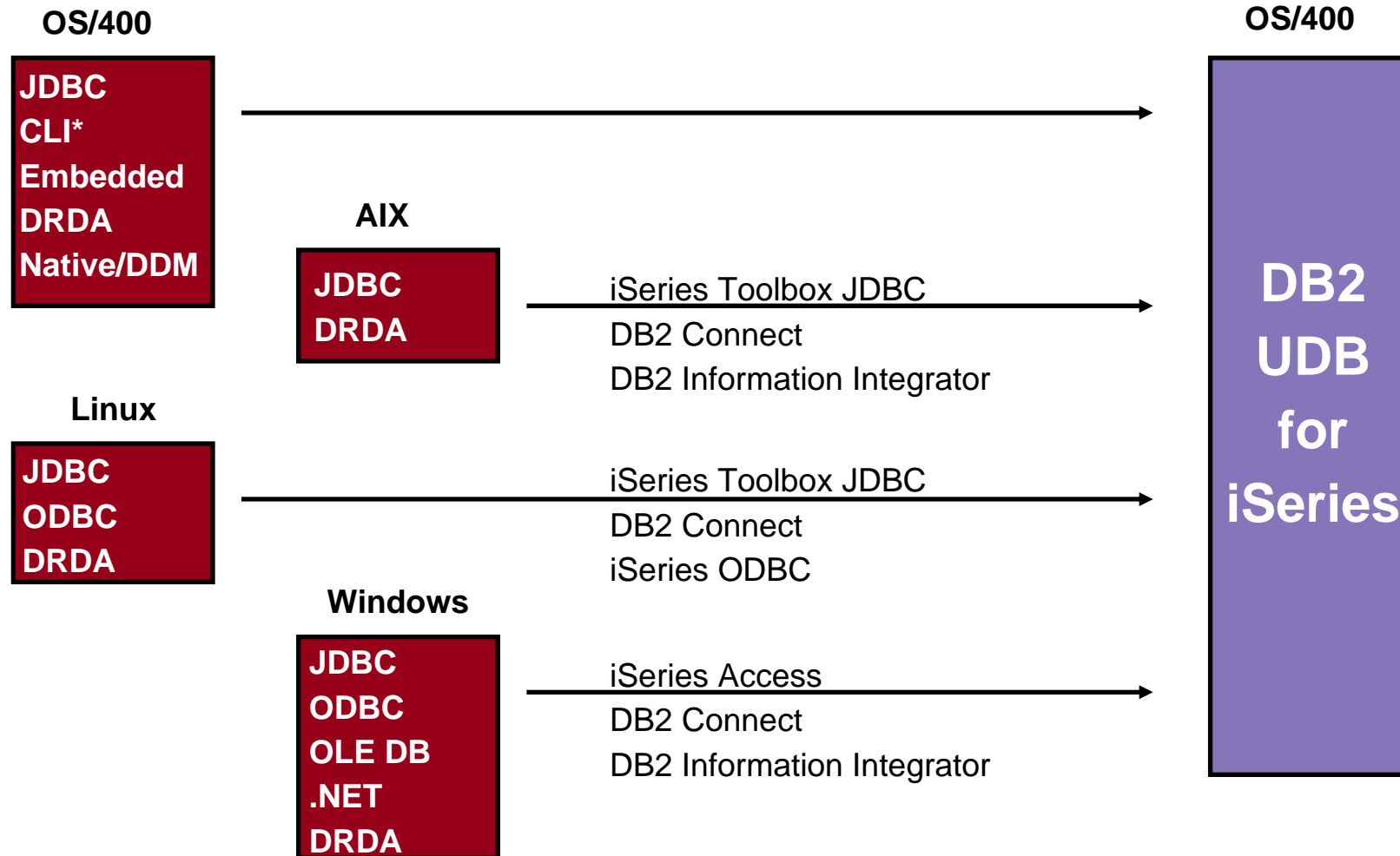
Access Data with  
 an SQL Interface  
 (SQL, ODBC, JDBC,  
 OpenQueryFile)

DB2

64 Bit Power4 RISC  
 Single Level Storage



## DB2 UDB for iSeries as the database server of choice



\* OS/400 PASE only supports CLI

# Migration Toolkit Enhancements

## Migrate Other Databases to DB2 UDB for iSeries

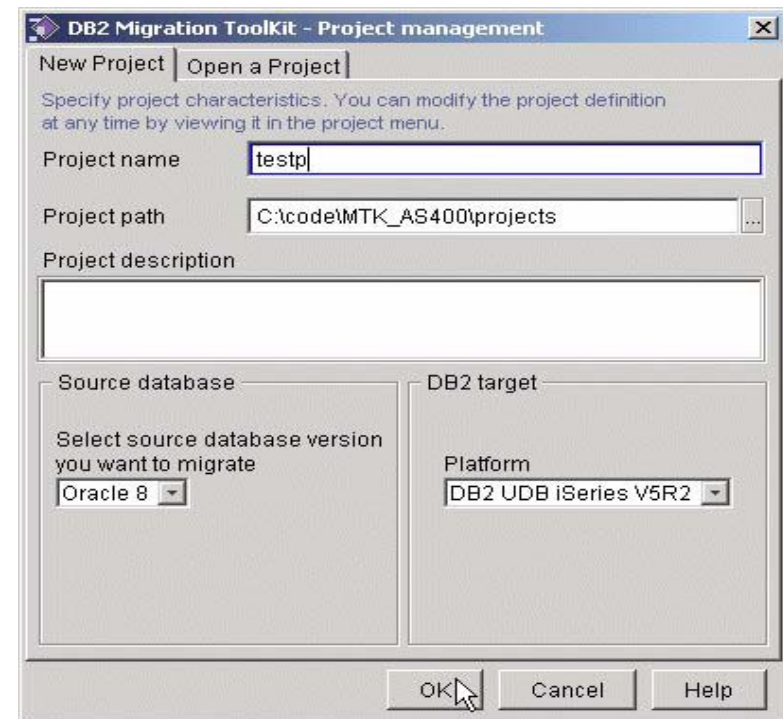
- ➔ No charge
- ➔ Automates the Migration Process
  - Builds SQL DDL from Oracle Meta Data
  - Converts Scripts
  - Migrates Tables, Indexes, Views
  - Handles Data Type differences
  - Converts Procedures, Triggers, Functions

### V5R3

- ➔ Support for new SQL Function
- ➔ SQL Server
- ➔ Sybase
- ➔ Informix

### ■ Download:

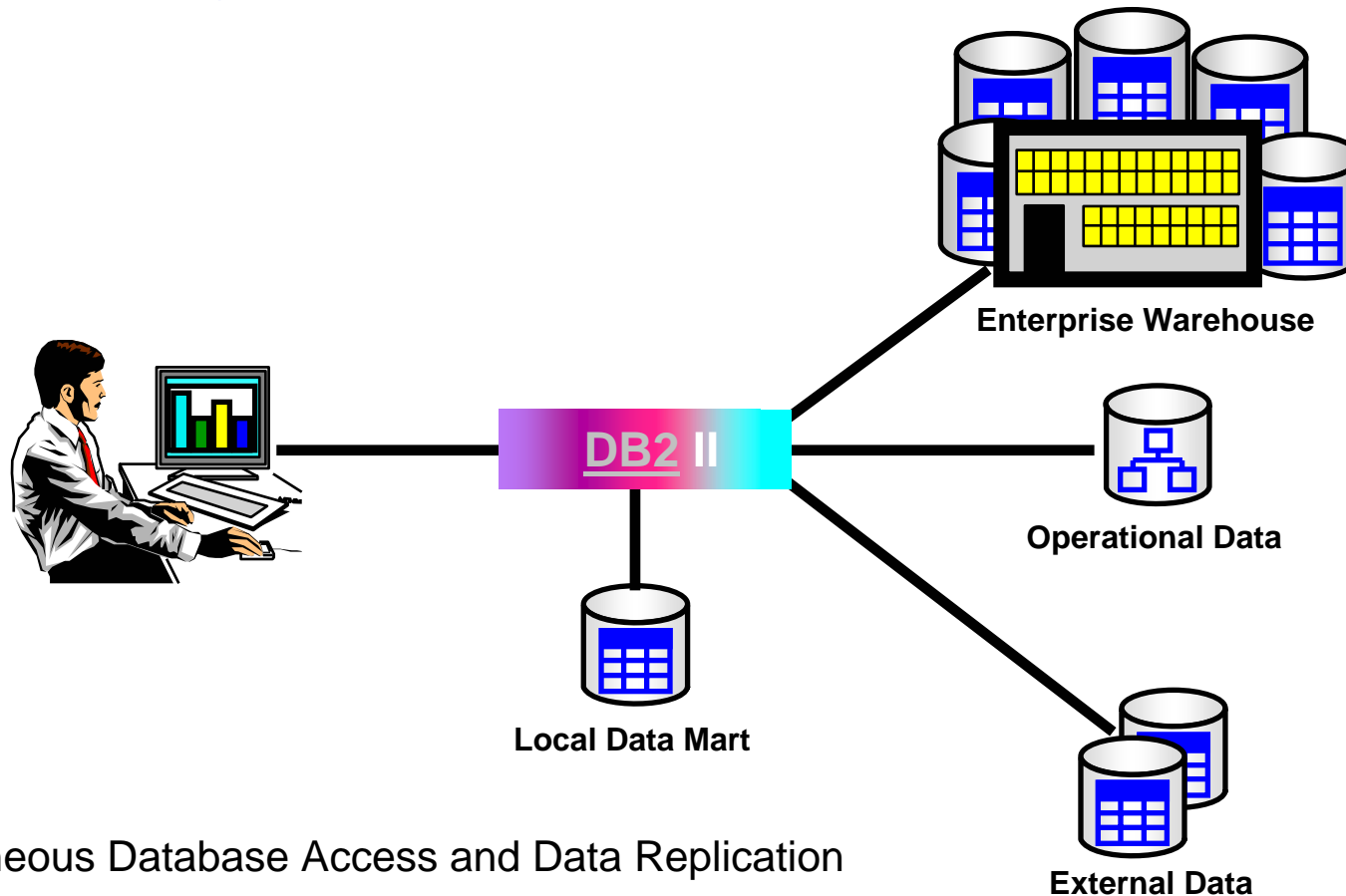
[ibm.com/servers/enable/site/db2/porting.html](http://ibm.com/servers/enable/site/db2/porting.html)



## Custom Technology Center Services **RECOMMENDED**

- Contact Mark Even: [even@us.ibm.com](mailto:even@us.ibm.com)

## Data Integration: DB2 Information Integrator (Passport Advantage Product)



- Heterogeneous Database Access and Data Replication  
read, write, update, insert, delete
- White Paper: <http://www-1.ibm.com/servers/enable/site/education/ibo/record.html?hetdata>

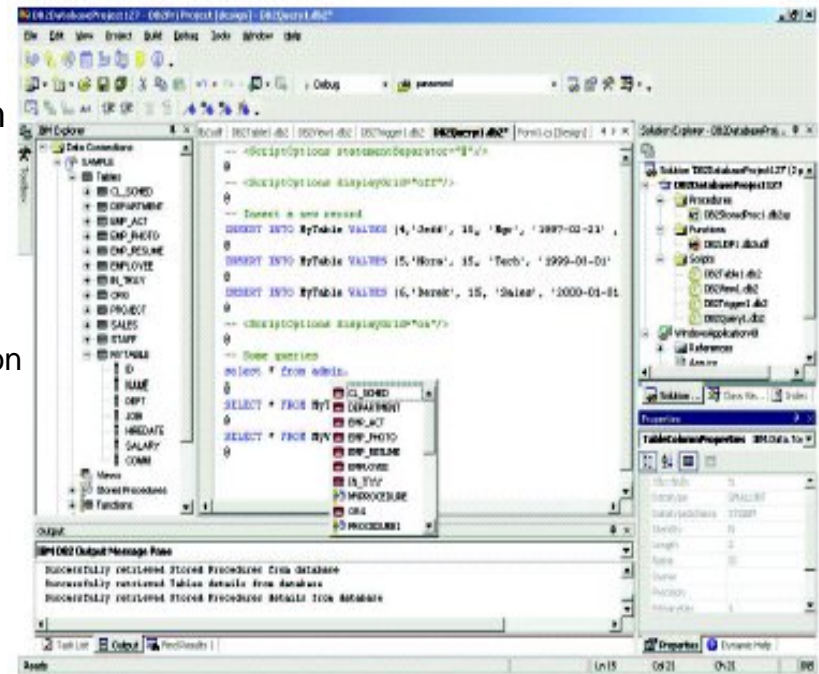
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## .NET Framework Support with DB2 UDB for iSeries

- **DB2 support for .NET**
  - V5R3 .NET Managed Provider
    - No charge iSeries Access family offering
    - Provides programming interfaces into DB2 from .NET application
  - DB2 Connect (Passport Advantage Product)
    - .NET Plug ins
      - Wizards, projects
      - Stored Procedure builder, Triggers, SQL Skeleton Code
- **Other integration offerings**
  - Web Services
  - Business Partner offerings
- **WHITE PAPER:**
  - **DB2 UDB for iSeries and the .NET Framework**
    - [http://www-1.ibm.com/servers/enable/site/education/abstracts/msnet\\_abs.html](http://www-1.ibm.com/servers/enable/site/education/abstracts/msnet_abs.html)

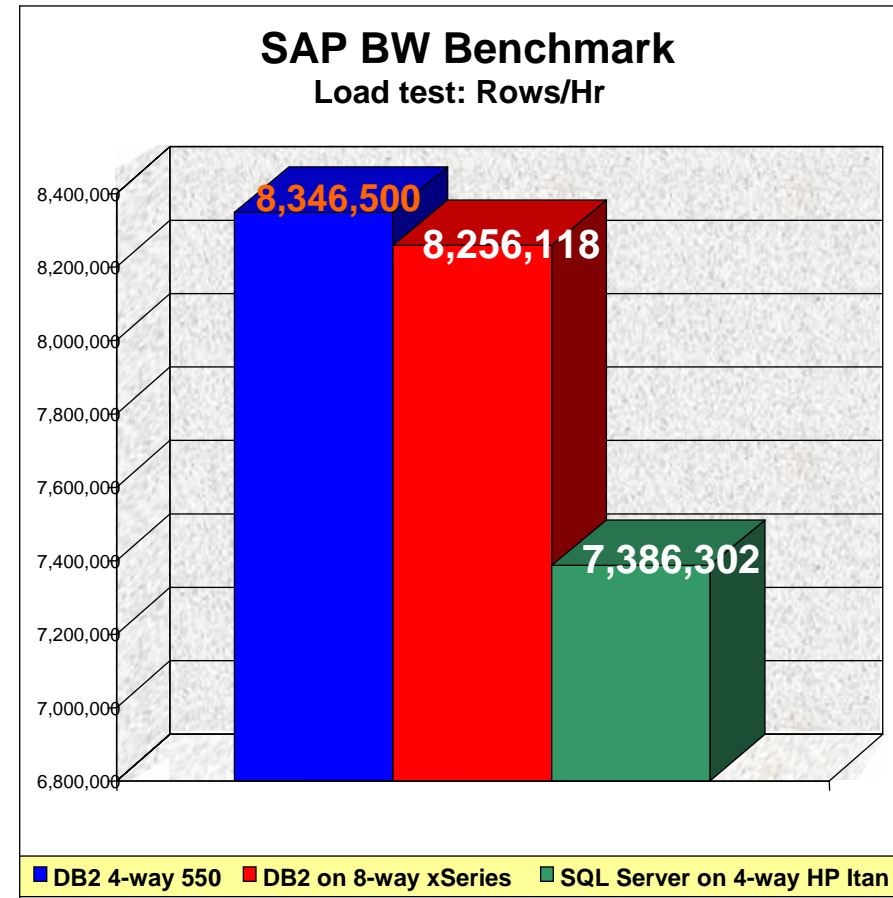


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## DB2 UDB for iSeries sets high water mark for SAP BW

- **SAP Business Information Warehouse Benchmark**
  - SAP's Data Warehouse Solution
- **Proof point about DB2 UDB for iSeries ability to run large scale DW/BI workloads**
  - #1 in four CPU configurations
  - Better than eight CPU DB2/xSeries config
- **V5R3 is a MAJOR release for DW/BI**
  - SQL Query Engine
    - Part of base code in V5R3)
  - Materialized Query Tables (MQTs)
    - Key performance enhancement
  - Star-Join Recognition
  - Result Set Caching
- **DW/BI apps build ongoing revenue stream**
  - Requirement for large amounts of Storage
  - Great workload to also drive H/A
  - A successful warehouse grows and grows



[http://www.sap.com/benchmark/bw\\_2\\_tier.htm](http://www.sap.com/benchmark/bw_2_tier.htm)

## DB2 Data Warehouse delivers power for Shell Canada



**Shell Canada Limited is one of the largest integrated petroleum companies in Canada, as well as, the leading manufacturer, distributor and marketer of refined petroleum products.**



*“Shell Canada’s demands on the iSeries platform and DB2 UDB for iSeries will continue to evolve rapidly as we strive for continued success in a challenging business environment. IBM has demonstrated that it understands these requirements and is capable of delivering the solutions required.”*



Kirk Chalk

Senior Staff Systems Analyst

Shell Canada

New References and White Papers available on System Sales and PartnerInfo  
DB2 UDB for iSeries Sales Kit

## Identifying BI Opportunities

- Do you have a funded **Data warehouse/Business Intelligence/Analytical CRM/Corporate Reporting/Budget and Planning ...initiative?**
- Are you looking at any of the following ISV solutions?
  - Hyperion, Microstrategy, Cognos, Business Objects, Informatica, Ascential
- Is IBM Data Management (DB2 Sales) talking to your customer about IBM Software Solutions?
- Is the customer looking at an iSeries H/A solution?
  - Great time to include discussion about BI
- Is your customer asking about SQL or Query Performance Issues with DB2 in i5/OS?

ISV BI Solutions for DB2 UDB for iSeries	iSeries Friendly (i5/OS enabled)	AIX Partition or IXA/IXS	iSeries "un-friendly"
<b>Extract/Transformation/Load</b>	Coglin Mill Rodin SPSS Warehouse Blder IBM DB2 Warehouse Mgr	Informatica Ascential DataStage Bus Objects Data Integrator Ab Initio	Cognos DecisionStream
<b>OLAP (online analytical processing)</b>	SPSS ESSBASE/400 InfoManager Silvon Stratum OCO	Hyperion ESSBASE IBM DB2 OLAP Microstrategy	Cognos Powerplay
<b>Enterprise Reporting</b>	SPSS Query/Rpt Wtr New Gen. Software Advanced Sys. Concepts IBI Webfocus	Hyperion Brio Bus. Objects Crystal Rpts	Cognos ReportNet
<b>Data Replication</b>	IBM Data Propogator Data Mirror	Vision Symbiator Lakeview	IBM Queue Replication (DB2 II)
<b>Query Analysis</b>	iSeries Navigator Centerfield Technologies		IBM Query Patroller
<b>Financial Planning/Budgeting</b>	SPSS/Showcase InfoManager	Hyperion ESSBASE Cognos e-Planning	
<b>Data Mining</b>	SPSS Clementine	IBM Intelligent Miner SAS	Yukon (?)
<b>Bundles</b>	SPSS Strategy InfoManager	IBM DB2 Warehouse Edition	Microsoft SQLServer

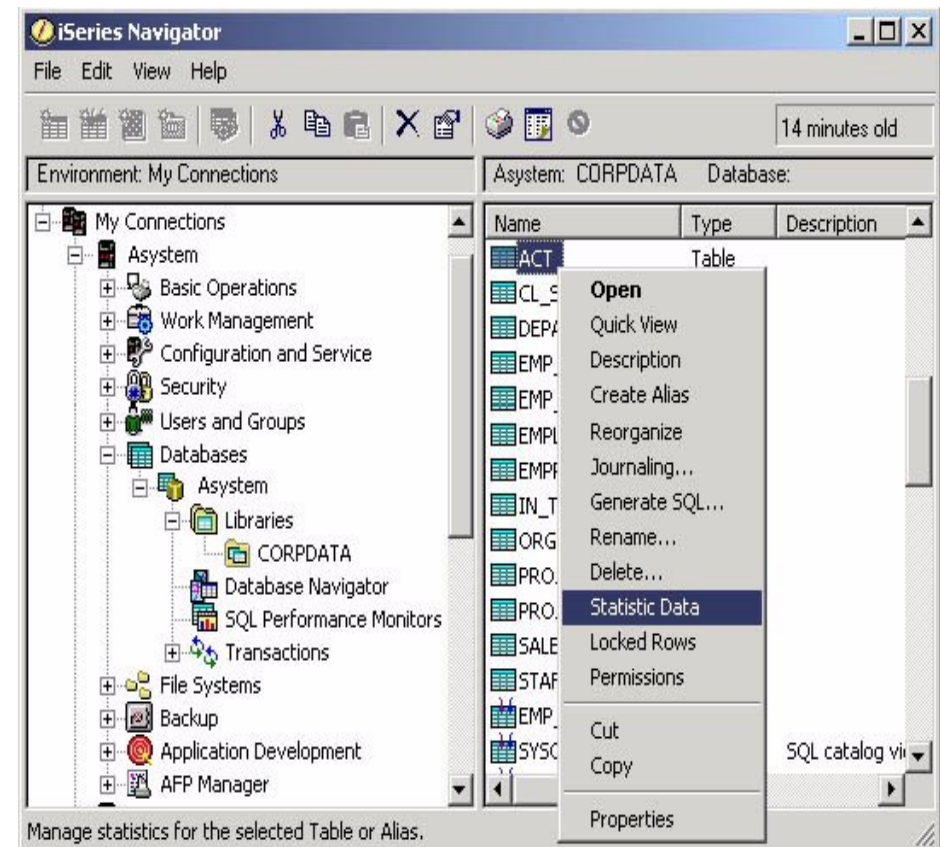
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# iSeries DBA Tooling

- SQL Tuning
  - Enhanced Visual Explain
    - Index Analyzer
    - Better direct advice behind graphical explain functions
    - Print SQL Information (PRTSQLINF)
  - Statistics Engine
    - Stats Collection Management Facility
    - Collect Stats in Background
- Database Relationship Profiling
  - Enhanced Database Navigator
  - More complex data models can be displayed and support for Triggers have been added
- Database Configuration
  - Remote Database Directory
    - Configure DRDA Servers
  - Independent ASP Support
  - Improved Commitment Control Definitions



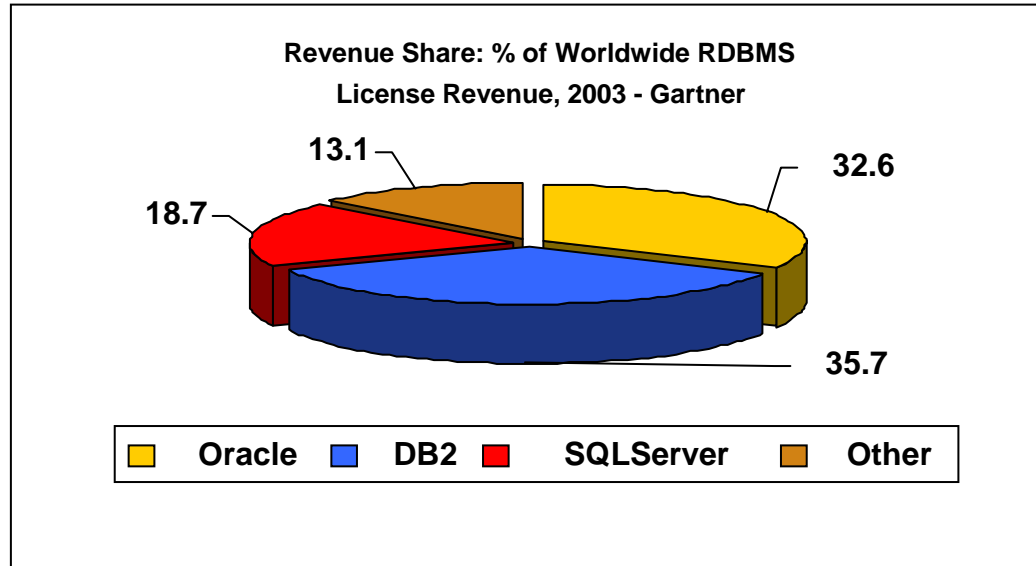
***“The tools alone made the move from SQLServer to DB2 worth it. While SQLServer provides easy to use tools, the depth to really analyze what is happening with SQL based programs was very limited compared to DB2.” - Steve Hester, Senior Development Manager, Merillat Corp.***



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- **“No one is doing DB2”**

# DB2 Universal Database New License Revenue



**“Once again, IBM is the new license revenue market share leader.**

**...Revenue Growth leaders in the DBMS market were IBM and Microsoft, with Oracle lagging behind.**

**...The strong IBM growth was attributed to DB2 on iSeries and zSeries, and in particular efforts to attract ISVs and SMB customers to iSeries.”**

Source: Gartner Dataquest *May 2004 Analysis*

# DB2 UDB for iSeries: Scalability and Performance

***"On June 16, our new i890 crossed a major milestone, it processed over 1,000,000 transactions per hour - For your information, the response time was a flat .14 second and CPU for interactive was around 13%.***

--Tv Chang, Countrywide Funding

***"Our testing shows that DB2 is significantly faster, in some cases up to 400% faster, with the (V5R3) SQL Optimization enhancements."***

-- Mark LaRow, Vice President of Products at MicroStrategy Incorporated.

***"I was planning to send you a bottle of Champers in about 10 weeks to celebrate the insertion of the 1,000 millionth row into our EPOS\_TXN\_ITM table (the sales fact table)! And the whole thing still performs a real treat!"***

-- Andre Artymuk, Aradia PLC, UK Retailer

***"J.D. Edwards 5 combined with IBM eServer iSeries provides our customers with the flexibility, scale and manageability they need to excel across the entire supply chain. This the first time that JD Edwards has been able to scale beyond 10,000 users."***

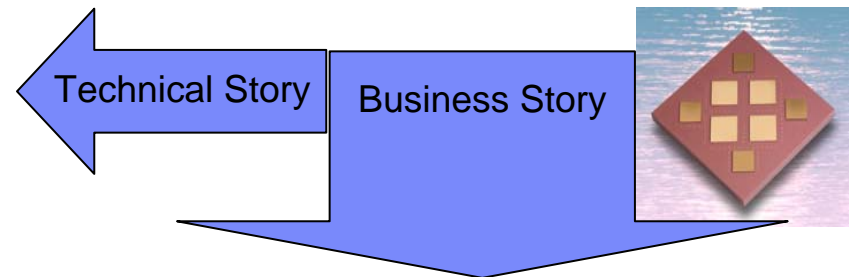
-- Michael Madden, chief technology officer, J.D. Edwards, responding to iSeries achieving the high water benchmark for JDE's One-World scalability benchmark

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## The Power of DB2 UDB for iSeries

Category	DB2 UDB for iSeries	DB2 UDB V8	Oracle 10g	SQLSrv 2000
64 bit	Yes	Yes*	Yes	No
Operating Systems	OS/400	Windows, Linux, Unix, PDAs	Windows, Linux, PDAs	Windows
RPG Native DB I/O	Yes	No	No	No
Java and .NET	Yes	Yes	Yes	Yes
Stored Procedures	Standard SQL	Standard SQL	Proprietary PI/SQL	Proprietary Transact SQL
XML	Yes	Yes	Yes	Yes
Web Services	Yes	Yes	Yes	Yes
DBA Support	Low	Medium	High	Medium
Vertical Scaling	SMP – 64 Way	SMP – 64 Way*	Limited RAC	Limited
Horizontal Scaling	MPP	MPP	RAC	Clustering
SQL 2003 Standard: Core Element Support	98%	73%	72%	62%
EVIs	Yes	No	Partial	No
AST/MQTs	Partial	Yes	Yes	No
Dynamic Resource Allocation Across Partitions	Yes	No	No	No



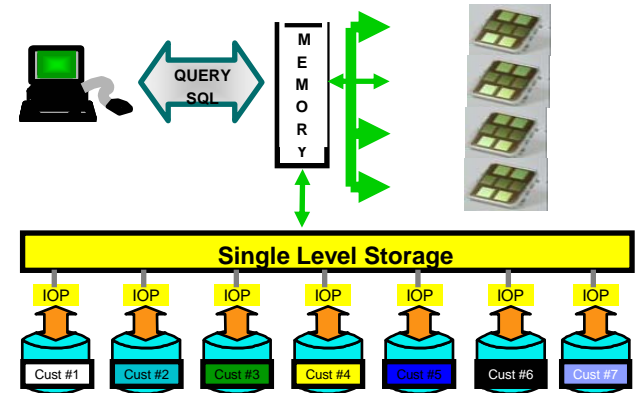
DB2 UDB for iSeries

- **Compelling Price**
  - DB2 Included with OS/400
- **Higher Reliability**
  - Security
  - Availability with simplicity
- **Lower Support Costs**
  - Reduced DBA Costs
  - OS/400 Integration
- **Scale with Ease**
  - Vertical scaling
  - On/Off Capacity Upgrade on Demand
  - Technology transitions without pain
- **Single RDBMS, Multiple IDEs**
  - Native OS/400; Websphere; .NET

# What does DB2 have that NO ONE ELSE has ?

- **Self Configuring**

- No Installation required
- No Tablespace, data partitioning, management of buffers
- No Data Hot Spots
- Automatic leveraging of Virtualization Engine Technologies



- **Self Healing**

- Systems Managed Access Path Protection
- Self Managed Database Logging
- Auto Index Rebalancing
- Database Locking Issues

- **Self Tuning**

- Auto Tuner, Sophisticated Cost Based Query Optimizer
- Automatic Index Advisor, Auto Stats Collection

- **Self Protecting**

- Object Based Kernel in OS/400
- Refer to "Virus got you down?"
- <http://skyviewpartners.com/java-skyviewp/pdf/Virus-Got-You-Down.pdf>



- "DB2 UDB for iSeries: Autonomic Computing FAQs"
- SystemSales and PartnerInfo – DB2 UDB for iSeries Sales Kit

## Ease of Database Management

<b>Typical DBA Tasks</b>	<b>DB2 UDB for iSeries</b>
Manage DASD Space Allocation	Automated
Review Table Space Allocations & Extents	Automated
Review & Balance Indexes	Automated
Application Rebinding	Automated
Maintain Database Integrity	Automated
Update Database Statistics	Automated
Synchronized OS & DB User Security	Automated
Reload Data for Hardware & Software Upgrades	Automated
Load Data into Data Base	Parallel Data Import/Export
Build and Manage DB Backup & Recovery	iSeries Navigator
Create & Review Indexes for Tables	iSeries Navigator
Performance Analysis & Tuning (DB & System)	iSeries Navigator
Create and Maintain DB Schema	iSeries Navigator & 3rd Party Tools (ERwin, PowerDesigner, Embarcadero, etc.)
Automated DB Performance Profiling	insure/SQL
Advanced DB Performance Analysis & Tuning	iSeries Navigator - insure/SQL
Data Replication & Consolidation	Multiple IBM & 3rd Party Products

## Other Issues we will cover

- **Benefits of running Oracle on Power5**
  
- **Microsoft's SQLServer Strategy**



# Oracle's Four Key Products for AIX on iSeries

## ▪ Oracle11i E-Business Suite

- Full Suite
- E-Business Suite for SMB
  - Subset of full suite
  - Lower price points for under 50 named users

## ▪ Oracle10g & 10g RAC (Real Application Cluster) Database

- Standard Edition One
  - 10g for SMB
    - Load and Go
    - Portal application and development tools
    - No RAC
- Standard Edition
- Enterprise Edition
  - ASM – Automated Stg Manager – single level store like function
  - AWLM – Capacity on Demand like offering

## ▪ Oracle Application Server 10g

- Websphere AS equivalent
- Application Server for SMG
  - Includes out of the box Portal application and development tools

## ▪ Oracle Collaboration Suite

- Domino equivalent

<http://www.oracle.com/technology/products/database/oracle10g/index.html>

# Oracle Opportunities

## Processor Equivalency

- **Oracle Migrations**

- I/T Simplification
- Reduce # of processors required for similar workloads
  - Significant reduction in Oracle licensing/support costs
  - Reference: Greif

- **New Oracle Apps**

- e-Business Suite

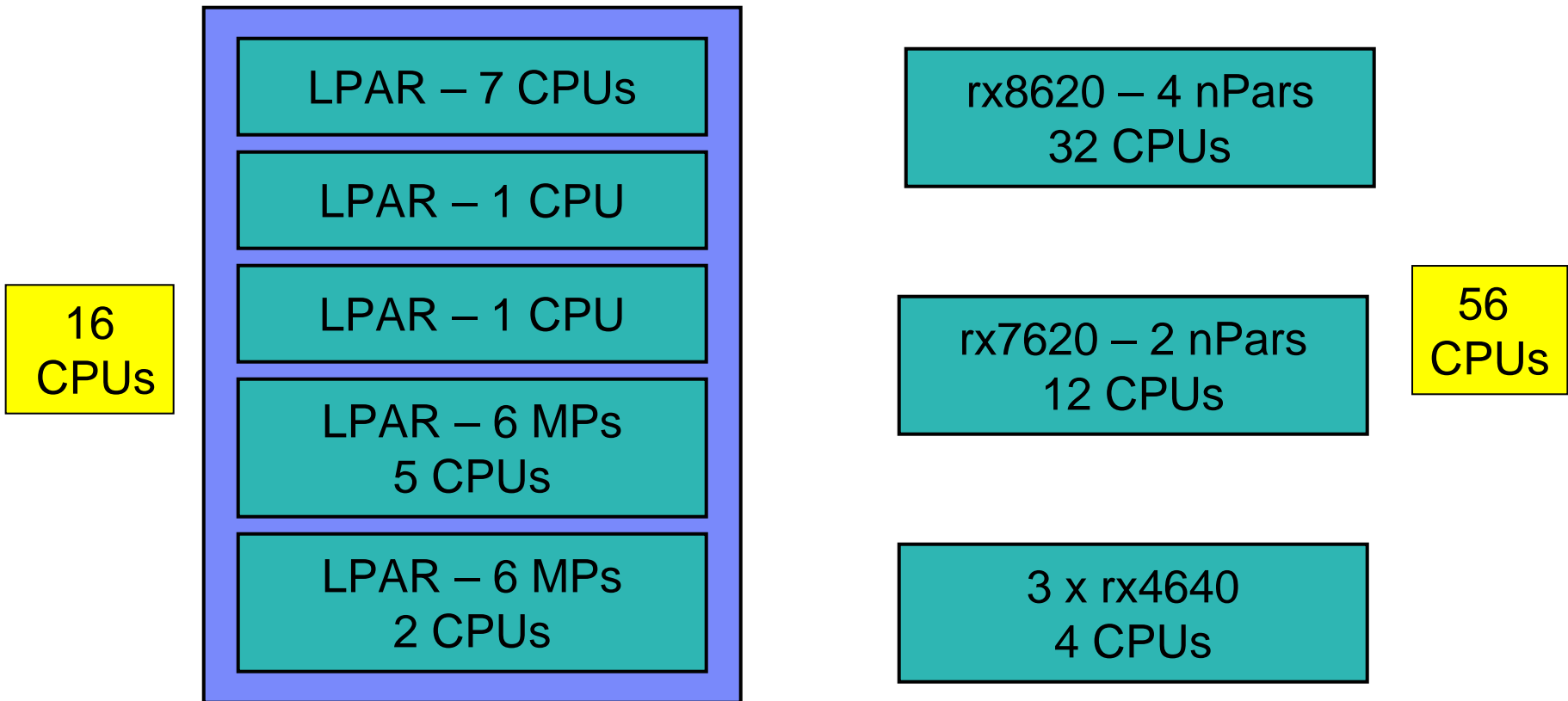
Server	Processor Speeds	# of CPUs	Equivalent # of 1.65 Mhz Power5 CPUs
HP9000	750-875 Mhz	4	1
HP9000	1.5 Ghz	2	1
Sun	400-464 Mhz	8	1
Sun	750-900 Mhz	6	1
Sun UltraSparc IV	1.2 Ghz	4	1

Source: "VALUE PROPOSITION FOR IBM eSERVER p5, Cost/Benefit Case for POWER5 Micro-Partitioning", International Technology Group, 7/2004 and IBM Techline Sizing

# Capacity Utilization: SAP Complex Example

IBMeServer p570 1.65 GHz

HP Integrity 1.5/1.6 GHz



Source: "VALUE PROPOSITION FOR IBM eSERVER p5, Cost/Benefit Case for POWER5 Micro-Partitioning", International Technology Group, 7/2004

Based upon composite data from 42 different companies running SAP, Peoplesoft, Oracle Applications, Websphere in Manufacturing, Energy, Transportation, Financial Services, Business Services, Technology, Process, Retail and Healthcare industries

IBM p520,p550, p570; HP Integrity Superdome, rx8620, rx7620, rx4640; Sun Fire E2900, E4900 and E6900

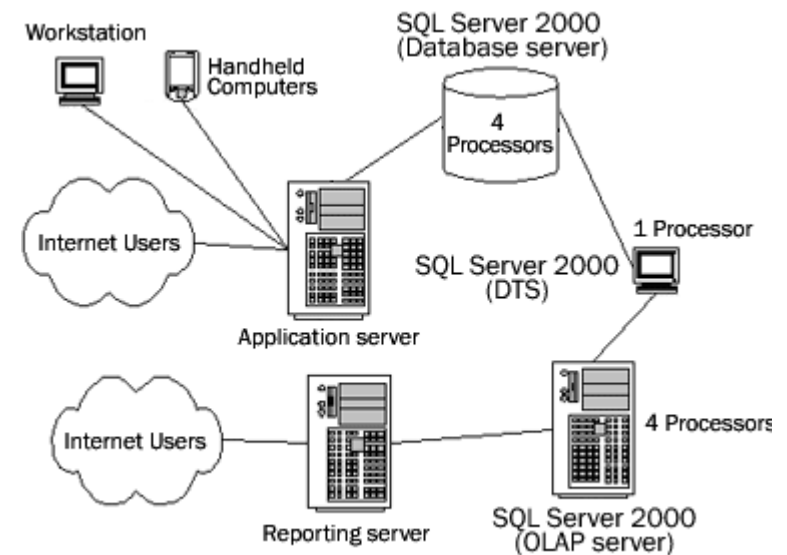
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## Microsoft Database Strategy

- **Leverage strength in desktop to penetrate enterprise**
  - Tight integration with Office
  - Tight integration with Visual Studio
  - Tight integration w/Windows
  - Ride the Intel scale-up wave
- **Commoditize the Business Intelligence market**
  - Everything in the box
  - BI for the masses – focus on end user and developer
- **.NET is the answer.....Now what was the question?**
  - Windows for everything new
    - Windows to be THE repository of everything (Longhorn)
  - .NET to integrate anything you can't eliminate
- **Lead TPC-C Benchmarks**
  - Great Benchmarking

## Microsoft's BI Surround-sound Strategy

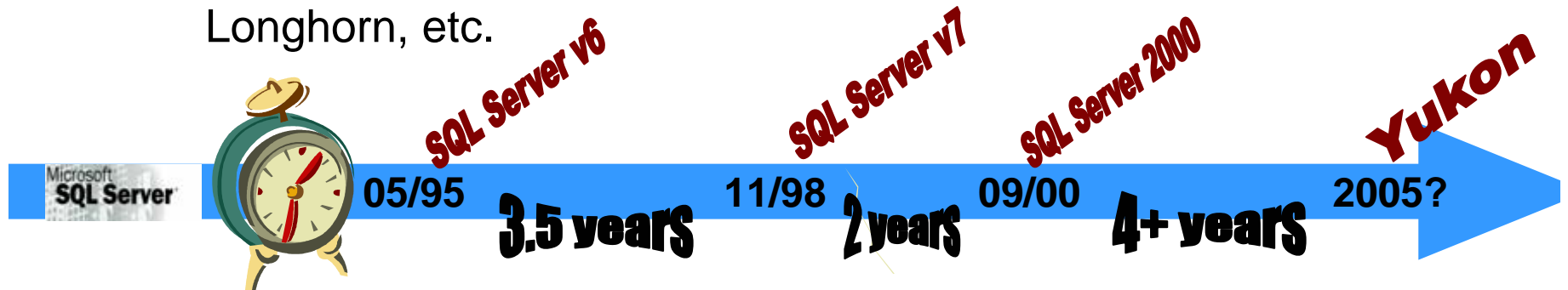
- **MSG: Everything is FREE with SQLServer**
  - DTS – Data Transformation Services
    - Extract data from DB2 into SQLServer
  - Report Writing
    - Use Visual Studio.NET for enterprise reporting solution
  - OLAP Analysis Server
    - Provide slice and dice analytical functions
  - Selling futures
    - Yukon to include Data Mining
- **What is the REALITY?**
  - Five Servers
  - Five Sets of Server Licenses
  - Five Sets of HW/SW/DB Admin
  - Add User Licensing



Reference: How to license Analysis Services Components, posted 5/2003  
<http://www.microsoft.com/sql/howtobuy/analysiservices.asp>

## Why Are Analysts Speaking Out Against Microsoft?

- Software Assurance provides perpetual rights to current versions released during the term of the agreement
  - Did not originally include support and its associated costs
  - 3 year term for eligible upgrades
    - How often does the software come out?
    - Products are already missing their 3-year SA date: Yukon, Longhorn, etc.

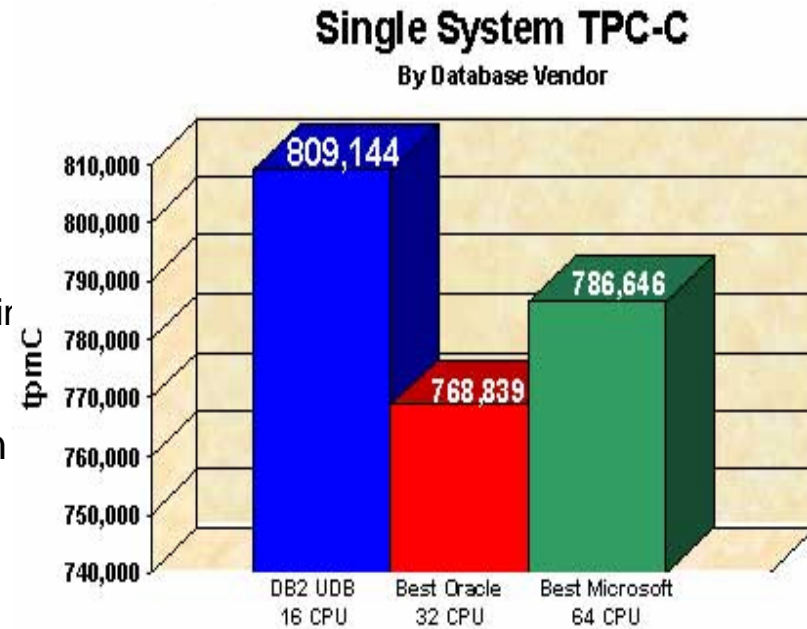


***“Microsoft has a history of charging to support product upgrades that never occur. Microsoft has been charging customers to support SQL Server's upgrade--code-named Yukon--which has been delayed until 2005. That means customers paid twice--once for the initial license, and then again for the right to upgrade. What did they pay for? Vision and promises? For those who paid, let's hope that the ship date doesn't slip again.”***

Source: “Making Customers Miserable, the Microsoft Way.”  
4/2004, <http://news.com.com/2010-1011-5185867.html>

## Microsoft and TPC-C Benchmarks

- **Claimed #1 and #2 spots in TPC-C, but looking under the covers....**
  - Included unrealistic support cost
    - ONE CALL allowed over THREE YEARS ???
    - With realistic support structure, DB2 on Linux grabs #1 spot
  - New benchmark with same version of SQLServer
    - Msoft hasn't released a new database engine in over four years
    - Used 400% more CACHE
  - Used lower cost SQLServer Standard Edition
    - Limited features available
      - No parallelism
      - No Index Views
      - No 64 bit support
      - No H/A or failover capability
  - SQLServer Enterprise Edition is what customers are buying
  - DB2 on distributed platform TPC-C numbers exceed everyone



<http://www.tpc.org/>



# Security

- **Since i5/OS is an object based operating system database objects have the same significant object protection as other objects on the system. The security features include:**
  - Storage for system portions of objects is protected from accidental or unauthorized modification
  - Tagged pointers provide protection for accidental or unauthorized access to storage
  - Objects are digitally signed to prevent unauthorized access or update.
  - Support for the latest 128-bit encryption standards
  - Digital certificate management and SSL for secure communications
  - Kerberos and single sign-on capability using EIM
  - Extensive auditing facilities at several levels
  - Users, Group Users, and System user profiles are all supported
  - Single signon support
  - VPN network support
- **Refer to “Virus got you down?”**

<http://skyviewpartners.com/java-skyviewp/pdf/Virus-Got-You-Down.pdf>

**“I’m not proud... We really haven’t done everything we could to protect our customers... Our products just aren’t engineered for security.”**

Brian Valentine, Senior VP, Microsoft Windows Division

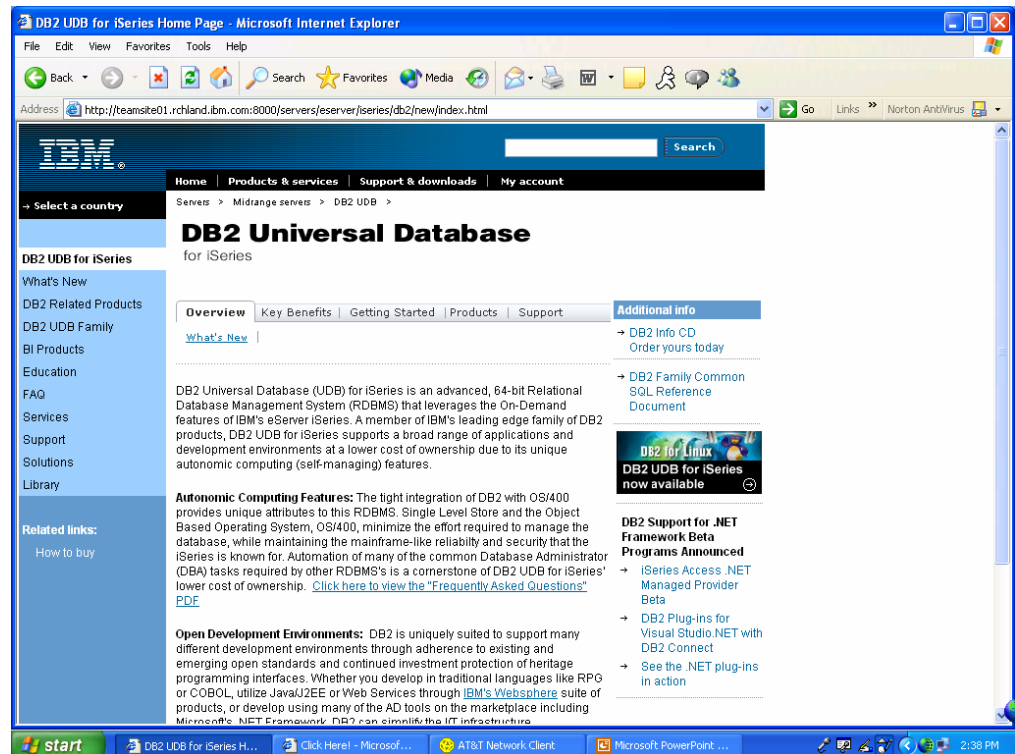
<http://staging.infoworld.com/articles/hn/xml/02/09/05/020905hnmssecure.xml> 9/5/02



## DB2 UDB for iSeries Information Portal

### ■ DB2 UDB for iSeries Web Site

- FAQs
- White Papers
- Product Information
- Demos
- Education
  - Roadmaps
  - Online
- Teraplex Center links



***ibm.com/series/db2***

- **“DB2 is not DB2”**
  - Respond with: DB2 is a family of products
    - DB2 UDB for iSeries FAQ – SystemSales and PartnerInfo
- **“DB2 is proprietary”**
  - Response: DB2 Leads the industry in support of the Core elements in the SQL Standard defined by ANSI ISO
    - DB2 UDB for iSeries FAQ, or presentation material
    - Be PROACTIVE about educating customers on DB2 product directions
- **“DB2 is great for RPG, but we develop using .NET”**
  - Response: Hundreds of customers and ISVs use Microsoft oriented programming languages such as Visual Basic with DB2 as the back end database server
    - V5R3 delivered .NET Managed provider and DB2 Connect support for .NET plug ins
    - Refer to DB2 and .NET White Paper:
- **“DB2 is a great OLTP machine, but can’t do BI”**
  - Response: IBM continues to invest heavily in database technologies to support large database query environments
    - SAP BW Benchmark; References;
- **“DB2 doesn’t seem to have 3<sup>rd</sup> party tool provider support”**
  - Response: (1) DB2’s Autonomic Computing and integration with OS/400 reduce the administration tools required by other DBMS’s; (2) A wealth of 3<sup>rd</sup> party tools are available that cover a broad range of capabilities. Refer to iSeries Tools Network.
- **No one is doing DB2**
  - Response: DB2 and Oracle are effectively neck and neck in market share per the Gartner DataQuest study of new DBMS licenses in 2003 (2004 study will not be done till Q3 2004)
    - DB2 Sales Kit presentations; “What customers say about DB2” on systemsales
- **DB2 does not have feature.....(fill in the blank)**
  - Response: The leading DBMS’s all offer similar functionality, however, DB2 UDB for iSeries leverages the unique architecture of i5/OS and eServer i5. Comparing feature to feature may be an interesting exercise, but won’t say a lot about the major differences in the products. The focus should be on TCO, Reliability, Scalability, Portability, and Flexibility. Refer to SAMPLE PROPOSAL on SystemSales and Partner Info

## Where to go for help

### **Americas CompeteLine**

- ✓ **Provides sizing support, competitive information, and on-site calls:**
  - ✓ Phone: 1-888-426-5525 Option 4
  - ✓ In Latin America call: T/L 445-9700 or (770-835-9700)
  - ✓ e-mail: [compline@us.ibm.com](mailto:compline@us.ibm.com)
  - ✓ Intranet: <http://w3-1.ibm.com/support/americas/competeline.html>
  - ✓ Business Partners must contact Partnerline: 1-800-426-9990

### **Rochester Opportunity Center**

- ✓ **If you're having a problem getting a sale closed**
  - ✓ Need help taking the next step
  - ✓ [RCHIROC@us.ibm.com](mailto:RCHIROC@us.ibm.com)



## **iSeries Technology Center**

- ✓ **Technical Marketing**
- ✓ **Education**
- ✓ **Consulting Services**

### **Oracle Int'l Competency Center**

- ✓ **IBM team devoted to support of Oracle as a key ISV for eServer**
  - ✓ Sizing, benchmark coordination
  - ✓ Sales/Technical Education
  - ✓ White Papers
  - ✓ Linkages to Oracle and Services organizations
  - ✓ Contacts:
    - ✓ <http://w3developer.austin.ibm.com/isv/solutionlink/oracle/contacts/ww.html>



IBM Systems and Technology Group University 2005

# Thank You!

Slide subtitle



v 1.0

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## Database Modeling and Design

Rational XDE Data Modeler	<a href="http://www.rational.com">http://www.rational.com</a>
DB2 UDB Extenders for iSeries	<a href="http://www.ibm.com/software/data/db2/extenders/">http://www.ibm.com/software/data/db2/extenders/</a>
ERwin	<a href="http://www3.ca.com/Solutions/Product.asp?ID=260">http://www3.ca.com/Solutions/Product.asp?ID=260</a>
PowerDesigner DataArchitect	<a href="http://www.sybase.com/products/enterprisemodeling/powerdesigner">http://www.sybase.com/products/enterprisemodeling/powerdesigner</a>
ER/Studio	<a href="http://www.embarcadero.com/products/erstudio/index.asp">http://www.embarcadero.com/products/erstudio/index.asp</a>
ERCreator Database Edition and ERCreator Analyzer Edition	<a href="http://www.modelcreator.com/">http://www.modelcreator.com/</a>
Druid	<a href="http://druid.sourceforge.net/">http://druid.sourceforge.net/</a>
DeZign for Databases	<a href="http://www.datanamic.com/dezign">http://www.datanamic.com/dezign</a>
Azzurri Clay	<a href="http://www.azzurri.jp/en/software/clay/index.jsp">http://www.azzurri.jp/en/software/clay/index.jsp</a>
PrimeVision	<a href="http://www.primelogics.com/primevision.htm">http://www.primelogics.com/primevision.htm</a>
DDS-Lite and DDS-Pro	<a href="http://www.dds-lite.com/">http://www.dds-lite.com/</a>
CASE Studio 2	<a href="http://www.casestudio.com/enu/default.aspx">http://www.casestudio.com/enu/default.aspx</a>
QDesigner	<a href="http://www.quest.com/qdesigner/">http://www.quest.com/qdesigner/</a>
DbGen	<a href="http://www.bcdsoftware.com">http://www.bcdsoftware.com</a>
XCase	<a href="http://www.xcase.com/">http://www.xcase.com/</a>
X/Model	<a href="http://www.databorough.com">http://www.databorough.com</a>

## Database Management

Rational XDE Data Modeler	<a href="http://www.rational.com">http://www.rational.com</a>
DB2 UDB Development Center	<a href="http://www.ibm.com/software/data/db2/udb/dc/">http://www.ibm.com/software/data/db2/udb/dc/</a>
DB2 UDB Extenders for iSeries	<a href="http://www.ibm.com/software/data/db2/extenders/">http://www.ibm.com/software/data/db2/extenders/</a>
Websphere Development Studio Client for iSeries (WDS <i>c</i> )	<a href="http://www.ibm.com/software/awdtools/wdt400/">http://www.ibm.com/software/awdtools/wdt400/</a>
Websphere Development Studio for iSeries (WDS)	<a href="http://www.ibm.com/software/awdtools/wds400/">http://www.ibm.com/software/awdtools/wds400/</a>
ERwin	<a href="http://www3.ca.com/Solutions/Product.asp?ID=260">http://www3.ca.com/Solutions/Product.asp?ID=260</a>
PowerDesigner	<a href="http://www.sybase.com/products/enterprisemodeling/powerdesigner">http://www.sybase.com/products/enterprisemodeling/powerdesigner</a>
ER/Studio	<a href="http://www.embarcadero.com/products/erstudio/index.asp">http://www.embarcadero.com/products/erstudio/index.asp</a>
WinSQL	<a href="http://www.synametrics.com/SynametricsWebApp/WinSQL.jsp">http://www.synametrics.com/SynametricsWebApp/WinSQL.jsp</a>
Super*SQL	<a href="http://www.sqlmagic.com/super_sql/">http://www.sqlmagic.com/super_sql/</a>
MIMIX Promoter	<a href="http://www.lakeview.com">http://www.lakeview.com</a>
ReorgWizard <sup>TM</sup> and ARCTOOLS/400 <sup>TM</sup>	<a href="http://www.arctools.com">http://www.arctools.com</a>
Reorganize While Active and Purge and Archive	<a href="http://www.iterainc.com">http://www.iterainc.com</a>
REV ZIP for AS/400	<a href="http://www.revsoft.com/products.php?PID=8&amp;assoc=compr">http://www.revsoft.com/products.php?PID=8&amp;assoc=compr</a>
Application Resource Manager (ARM)	<a href="http://www.outerbay.com/solutions_application.html#iq">http://www.outerbay.com/solutions_application.html#iq</a>
TOTAL400 FILE WORKS	<a href="http://www.gen400.com">http://www.gen400.com</a>
Surveyor/400	<a href="http://www.linomasoftware.com">http://www.linomasoftware.com</a>
Database Assistant for the iSeries	<a href="http://www.epi-software.com">http://www.epi-software.com</a>

## Database Security

<b>DataMirror LiveAudit</b>	<a href="http://www.datamirror.com/products/liveaudit/">http://www.datamirror.com/products/liveaudit/</a>
<b>SafeNet/400 from Kisco</b>	<a href="http://www.kisco.com">http://www.kisco.com</a>
<b>CONTROL-SA</b>	<a href="http://www.bmc.com">http://www.bmc.com</a>
<b>Visual Security Suite</b>	<a href="http://www.softlanding.com">http://www.softlanding.com</a>
<b>BSAFE</b>	<a href="http://www.bsafesolutions.com">http://www.bsafesolutions.com</a>
<b>A la Carte Menu and Security System</b>	<a href="http://www.bugbusters.net">http://www.bugbusters.net</a>
<b>StandGuard</b>	<a href="http://www.bytware.com">http://www.bytware.com</a>
<b>Auditron400 and Security Commander</b>	<a href="http://www.dsscs.com">http://www.dsscs.com</a>
<b>EXTOL Secure</b>	<a href="http://www.extol.com">http://www.extol.com</a>
<b>IT Auditor</b>	<a href="http://www.iterainc.com">http://www.iterainc.com</a>
<b>AllianceAS2 Integrator</b>	<a href="http://www.patowndsend.com">http://www.patowndsend.com</a>
<b>PowerLock</b>	<a href="http://www.powertech.com">http://www.powertech.com</a>
<b>STK Toolkit and Psypher™ Security Suite</b>	<a href="http://www.primefactors.com">http://www.primefactors.com</a>
<b>VISUAL Security Suite</b>	<a href="http://www.tango04.com">http://www.tango04.com</a>
<b>ZMOD Exchange</b>	<a href="http://www.trailblazersystems.com">http://www.trailblazersystems.com</a>
<b>PCSACC/400</b>	<a href="http://www.pcsacc400.com/produkt.htm">http://www.pcsacc400.com/produkt.htm</a>



## Database Performance Monitoring and Tuning

<b>Performance Tools</b>	<a href="http://www.ibm.com/servers/eserver/series/perfmgmt/pt400.htm">http://www.ibm.com/servers/eserver/series/perfmgmt/pt400.htm</a>
<b>PM eServer iSeries</b>	<a href="http://www.ibm.com/servers/eserver/series/pm/index.html">http://www.ibm.com/servers/eserver/series/pm/index.html</a>
<b>iDoctor - Job Watcher</b>	<a href="http://www.ibm.com/servers/eserver/series/perfmgmt/">http://www.ibm.com/servers/eserver/series/perfmgmt/</a>
<b>iDoctor – PEX Analyzer</b>	<a href="http://www.ibm.com/servers/eserver/series/perfmgmt/">http://www.ibm.com/servers/eserver/series/perfmgmt/</a>
<b>DB2 Symmetric Multiprocessing</b>	<a href="http://www.ibm.com/servers/eserver/series/db2/db2sym.htm">http://www.ibm.com/servers/eserver/series/db2/db2sym.htm</a>
<b>DB2 UDB Multisystem</b>	<a href="http://www.ibm.com/servers/eserver/series/db2/db2multi.htm">http://www.ibm.com/servers/eserver/series/db2/db2multi.htm</a>
<b>insure/SQL and insure/Analysis</b>	<a href="http://www.centerfieldtechnology.com/">http://www.centerfieldtechnology.com/</a>
<b>Patrol for iSeries</b>	<a href="http://www.bmc.com">http://www.bmc.com</a>
<b>Robot/AUTOTUNE</b>	<a href="http://www.helpsystems.com">http://www.helpsystems.com</a>
<b>Query and Journal Optimizer and System and Workload Navigator</b>	<a href="http://www.mb-software.com">http://www.mb-software.com</a>
<b>Performance Navigator®</b>	<a href="http://www.mpginc.com">http://www.mpginc.com</a>
<b>Information Builders Resource Analyzer</b>	<a href="http://www.exceldata.com">http://www.exceldata.com</a>
<b>Information Builders Resource Governor</b>	<a href="http://www.ibi.com">http://www.ibi.com</a>



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