

#### **IBM Information Management**

## **IDS**



#### Customer References & IDS 11

**Sept 2007** 

Fred Ho, Sr. Technical Product Manager IDS Development







#### The Informix Business



- 2006 license double digit growth YTY
- 100,000 loyal customers world-wide
- IDS is the top selling IM product for SMB
- Over 40% of our business is ISV/OEM
- Popular on non-IBM platforms
  - Informix has superior support on HP, SUN, Linux, Windows platforms





#### IDS - Solution Leader in Mary Industries

#### **Public Sector**

# Electronics \_\_\_\_

#### Telecommunicar.



70% of all routers in Telecom accounts run on Informix

- Civic Administration
- Judicial
- Military
- Law Enforcement
- Education
- National Security
- Tax Administration
- Customs

#### Integrated Applications:

- Text messaging
- Pay-per-View
- Entry Access badges
- Cell phone access
- RFID



eisure

#### Retail

IDS Powers 8 of the topU.S. largest retailers

Extending the Value...

IDS

Games/Sports
TV Networks



#### **Banking and Finance**

**Every VISA transaction**authorization in US goes
through IDS



# ormation On Demand

### IDS and the Retail Industry

IDS powers the world's most exclusive retailers...















































8 out of the top retailers 10 U.S. are powered by Informix 20 out the top 25 supermarkets in the US run Informix





### IDS and the Telecommunications Industry

























70% of all routers in Telecom accounts run on Informix





### IDS and the Public Sector















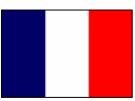
Law Enforcement







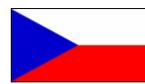








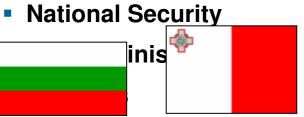














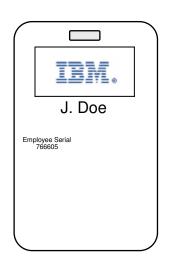








### IDS and the Electronics Industry



- IDS can be found where you least expect it
  - Go into the office
    - IDS validates your access and records your entrance
  - Send a text message to the kids
    - IDS stores and routes your message
  - Place a cell phone call
    - IDS validates your service and grants access
  - Order Pay-per-View
    - IDS validates and bills your account
- The same qualities of IDS that provide a perfect fit for the

















# Information On Demand

### IDS and the Leisure Industry































### IDS and the Banking & Finance Industry



























Bloomberg.com







### IDS Customer References – A Closer Look

- Entertainment/Leisure
  - IMPIRE AG (Germany)
- Retail
  - Walmart (USA)
- Telco
  - Cisco
- Government
  - Ministry of Interior (Thailand)
  - Employment Agency (Germany)















### **Customer References**

Leisure/Entertainment Sector



## **DATABASES**

- Bundesliga Germany 1. & 2.
- Champions League
- World Cup
- European Championship
- German National Team
- Bundesliga Austria















## **DATABASES**



- Sport scientific operational definition
- Online connection between Database / TV-Graphics
- Online multimedia interfaces
- Historical database from 1963 to 1992
- Analytical database from 1992 until today

## sports & facts

## **ACQUISITION**







DIGITAL ANALYSIS additional "observing" of all matches





All data sets are stored in the central IMPIRE database



## **OUTPUT: TV-GRAPHICS**













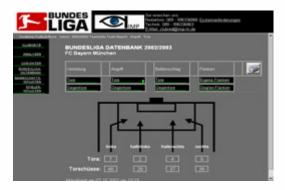






## **OUTPUT: PRODUCTS**



















## **DNS - THE NEW SYSTEM**

- Realtime requirements
  - Acquisition of live data (Scouting)
  - Enhancment of data (Observing)
  - Aggregation of data in statistics
  - Delivery system (Portal, Centerstage)
  - Accounting system



- High availability of all system components
  - Acquisition system
  - Data management
  - Data aggregation
  - Delivery system
  - Hardware
- Looking for an appropriate partner and making the decision

sports & facts

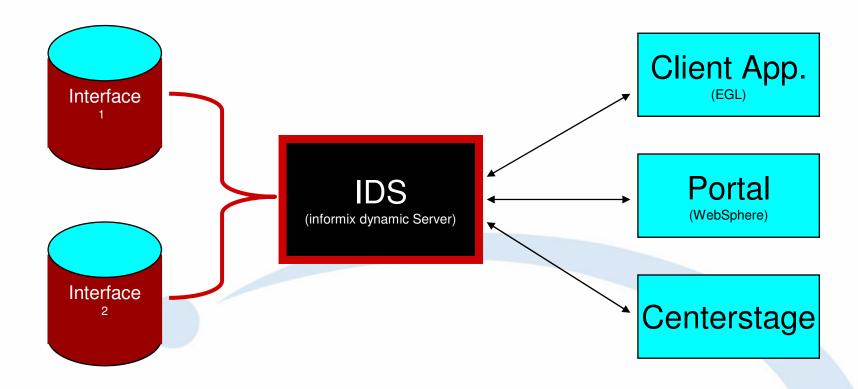
## **INFORMIX DYNAMIC SERVER**

#### And the decision was...

- Informix Dynamic Server
- Internal experience for more than 14 years
- Internal knowledge of the product
- Data protection
- Quickness of the system
- High availablility
- System monitoring
- Replication in more than one way (HDR, ER)
- Direct contact to IBM development department (Munich)
- Datablade technology



## SYSTEM OVERVIEW



sports & facts

## **SUMMARY OF PRODUCTS**

- RAD
- EGL (Web-Frontend Editorial tools)
- WebSphere Portal & Application Server
- AlphaBlox
- CubeViews
- Dataminer
- Information Integrator
- ClearCase
- DB2 / IDS





### **Customer References**

**Retail Sector** 









- Largest multi-national corporation in the world with over \$350 Billion in revenue for 2006
- Wal-Mart is not just in the Retail business
  - One of the world's largest:
    - Insurance claims processing centers
    - Real Estate management systems
    - Case Management (Law)
    - Project Management
    - Bank Card Management
    - Portfolio Management
    - Transportation management system



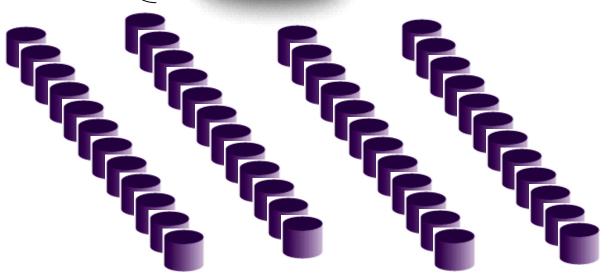
### Current IDS Environment (SMART)



**Store Computing Infrastructure** 



Engine Configuration specified at the Instance level. Takes maximum advantage of IDS configuration capabilities.



Multiple IDS Databases (80+ per store)

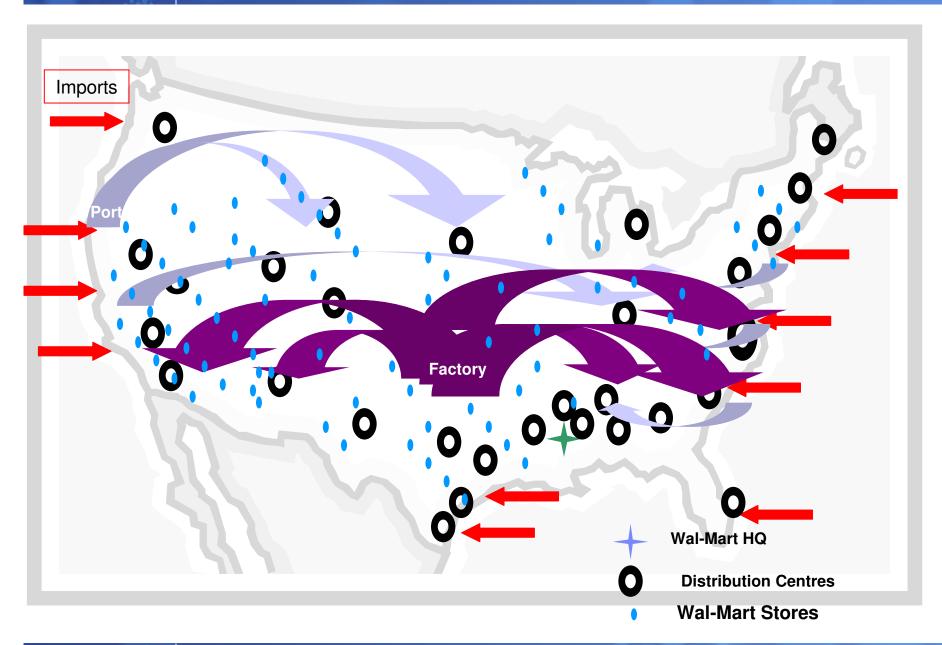
Each Database supports a department or collection of business functions

Databases are cloned in each store (same database for management)



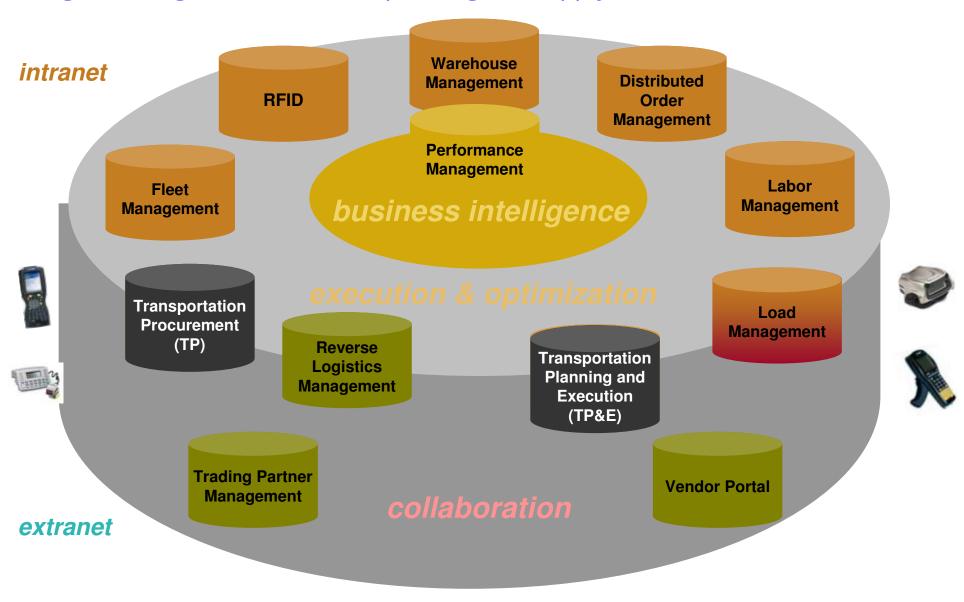








#### Integrated Logistics Solutions spanning the supply chain



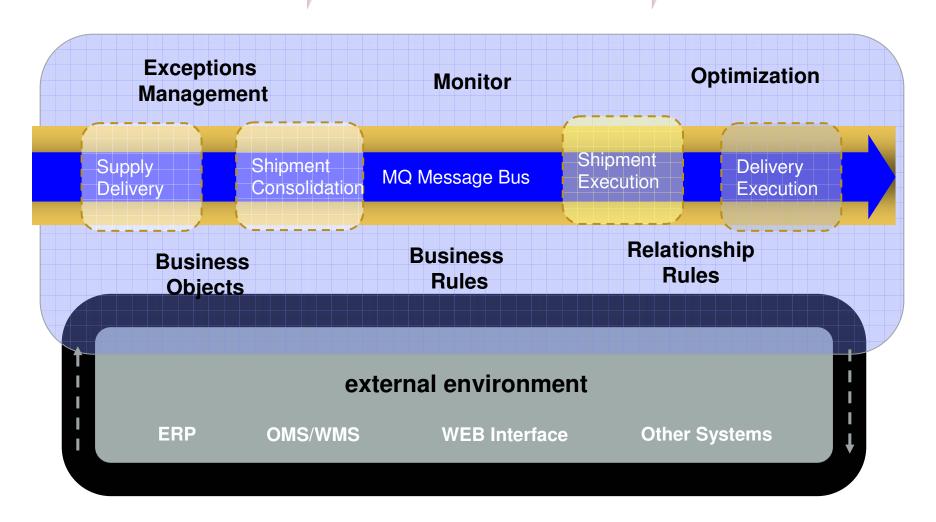


### TP&E: Event Driven Architecture

event capture

event management

event conclusion





### Walmart Availability Report



Walmart Internal DB Management Report shows that, as of Feb. 2007,

- # of Production Informix systems at over 10,000
- Production Informix database at over 160Terabytes
- Enterprise Database Availability at 100%
  - Distribution Center (over 100 systems)
  - Home Office & Imports (over 100 systems)
  - Store & Pharmacy (over 9,800 systems)
- Enterprise Database Availability 30 day average at 99.99898%
- YTD Enterprise Database Availability at 99.99896%





### **Customer References**

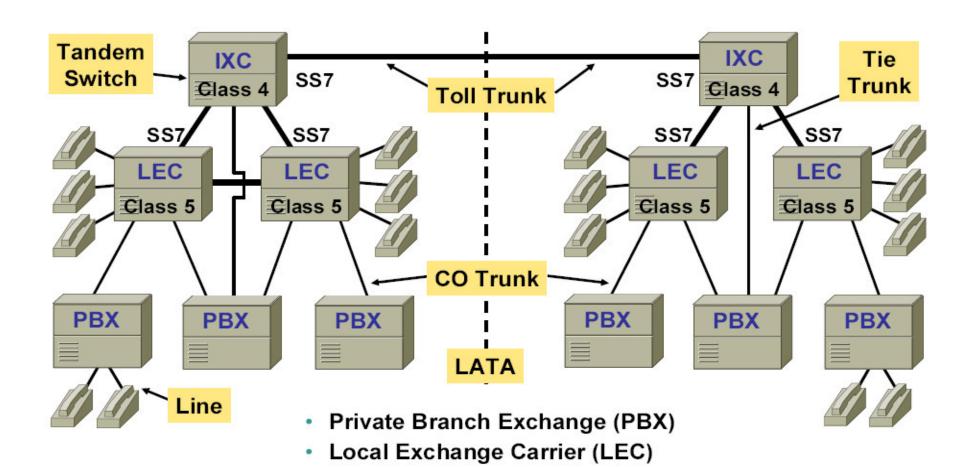
Telco Sector







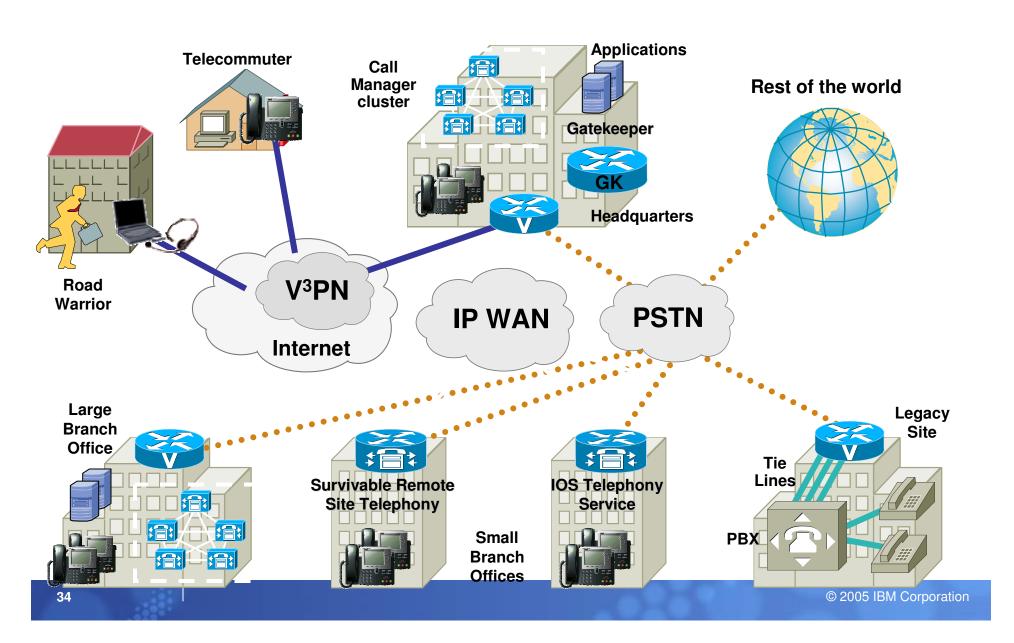
#### Traditional Telecommunication



InterExchange Carrier (IXC)

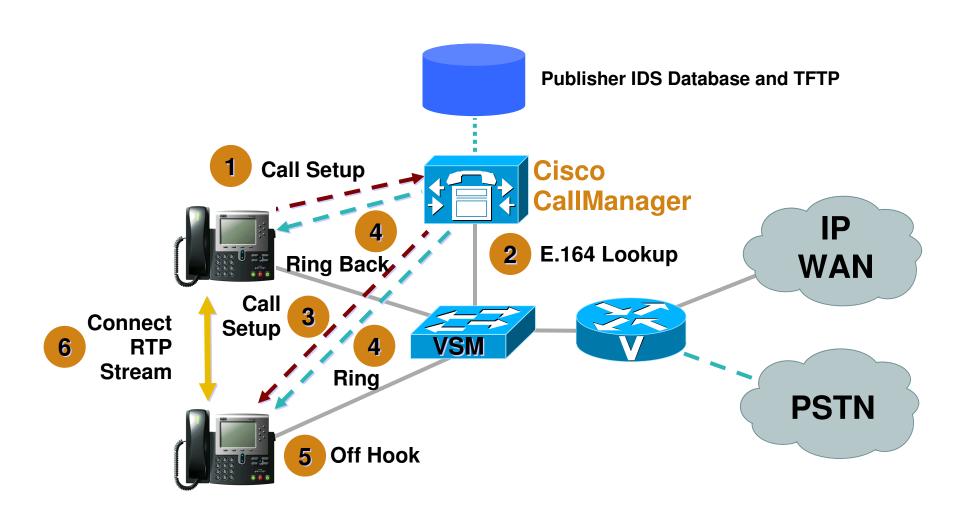


### End-to-end IP Telephony





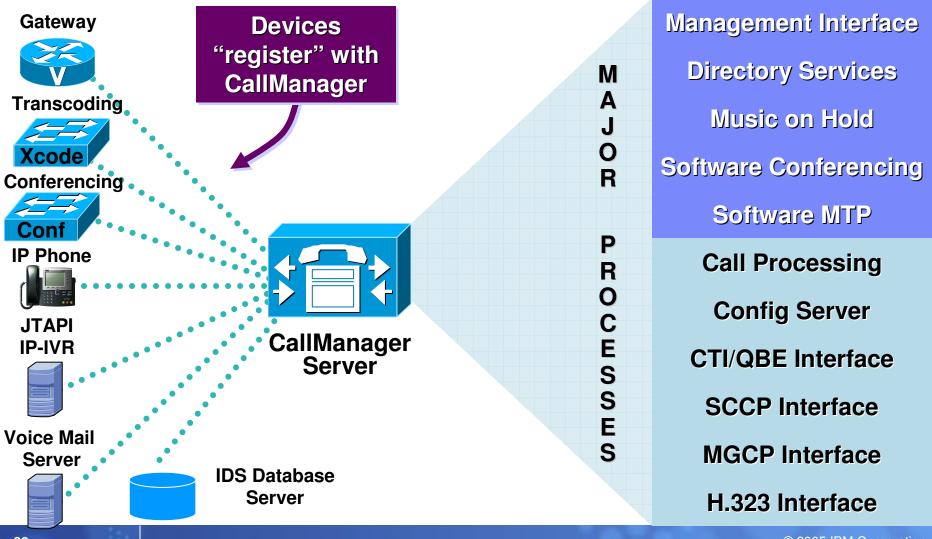
### Signalling: Basic Call Processing



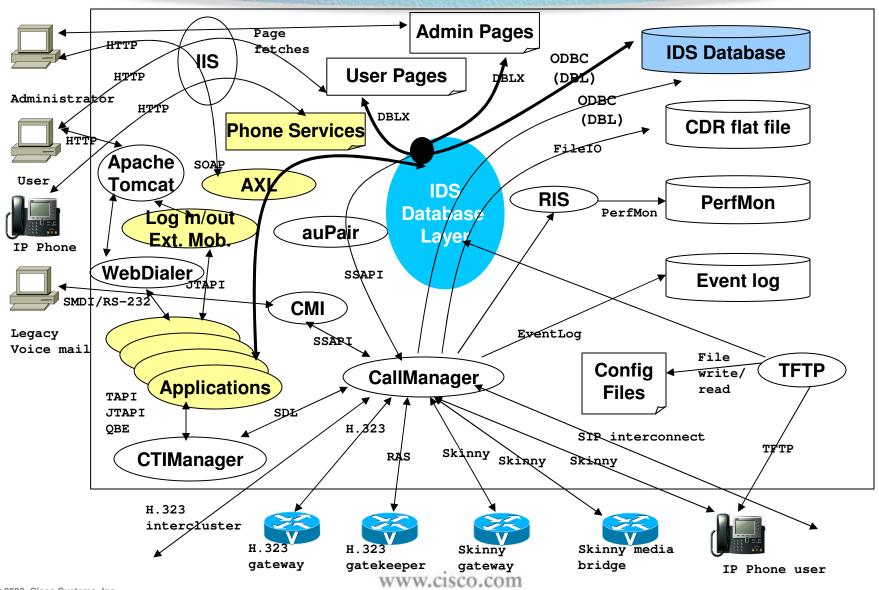
35 © 2005 IBM Corporation



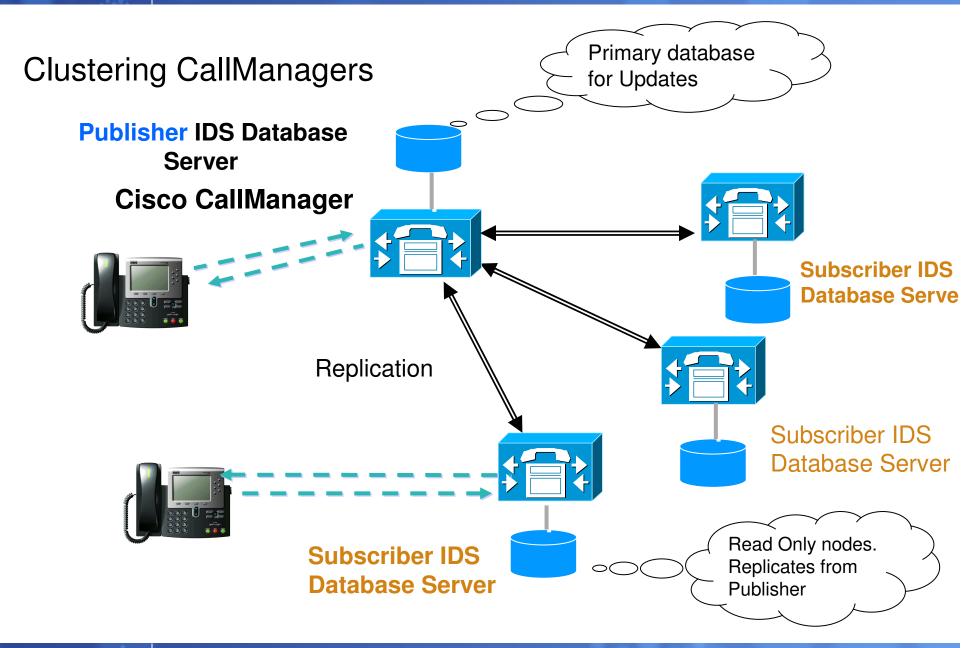
### What is CallManager? What can it do?



# Graphical overview of services









#### Call Manager Database Layer

- Stores complete configuration details of the site, devices, users, clusters etc.
- CallManager tables: 250 tables. 60MB for managing 2500 phones.
- 3 callManager per Clusters 7500 phones.
- All data loads/updates/deletes are on Publisher database
- Application uses ODBC on Linux for database interaction
- Database Features used:
  - Attributes of each telephone, gateway etc., known to CM is stored in the database.
  - Routing Plans are in the database
  - Regular Expression Datablade for pattern matching calling plans
    - Long Distance or Tie-Line? 9-1-408-926-1234 or 8-630-1234
  - Personalized telephone information
  - •Replication. Publisher and Subscriber databases.
  - Trigger Based auditing of all changes to the database





## **Customer References**

**Public Sector** 



# Information On Demand

## Ministry of Interior (Thailand)







## MOI Use of IDS



- IDS database contains the entire population of Thailand.
- MOI systems maintain data on elections, data of birth rates, death rates and population.
  - Two pairs of servers with HDR running on Solaris 9 on WAN
    - (2 Instances 500GB and 200GB).
- There are about 1,000 IDS servers installed on Linux platform country-Wide.
- In-house development application (Esql/Cobol and Esql/C).





### Bundesagentur f ür Arbeit

- Germany's largest service provider of the employee market
- Complex application called A2LL
  - Centralized, country-wide, web-based solution
  - Hosts 40,000 primary users, and 30,000 secondary users
  - Processes all social data and payments
  - Unemployment and insolvency benefits
- Processing requirements
  - 800 OLTP tps, peak 2,500 tps
  - Avg transaction is 5 reads & 3 writes operations
  - 3.5 TB's of data
  - IDS 9.4 with 80 cpus, 120 gigs memory, 94% in memory
  - Disk read rate is 800 mb/sec, write rate is 400 mb/sec
  - Response time in 0.5 secs.



# Information On Demand

# **Customer Reference Summary**

- Nearly every IDS customer is a reference customer
- Industry proven OLTP performance, reliability and high availability
- Low cost of administration & maintenance
- Translates to lowest Total Cost of Ownership for Enterprise databases in the industry







# IDS 11 - Cheetah





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## Introducing IDS 11

Off and running!!!

- Closed Beta began in October 2006
- Open Beta 'Test Run' started February 14, 2007
- Announced June 12, 2007
- General Availability (IDS, Spatial, JDBC) July 30, 2007
- Electronic delivery: IDS Windows 64 bit & Geodetic 3.12 –
   August 15, 2007

"As a participant of the 'Cheetah' closed beta program, we are impressed with the new capabilities that IDS will offer. Specially, the high reliability and superb transaction throughput really appealed to us. With the development of 'Cheetah', IBM makes it clear that IDS continues to be a key strategic product in its portfolio."

-- Markus Holzbauer, senior database administrator for ProSiebenSat.1 Produktion



#### IDS 11 in Action

#### **Informix Dynamic Server 11 "Cheetah"**

- Closed Beta in progress since October 2006
- Open Beta 'Test Run' in progress since February 14, 2007 Over 10,000 downloads!

"As a participant of the 'Cheetah' closed beta program, we are impressed with the new capabilities that IDS will offer. Specially, the high reliability and superb transaction throughput really appealed to us. With the development of 'Cheetah', IBM makes it clear that IDS continues to be a key strategic product in its portfolio."

-- Markus Holzbauer, senior database administrator for ProSiebenSat.1 Produktion

For more quotes visit the Cheetah launch page http://ibm.com/informix/new



#### IDS 11 in the Press – from our Open Beta Announcement

- Computerworld (IDG News Service): IBM releases Informix beta, preps Linux bundle
- InfoWorld: IBM sets Cheetah into beta
- LinuxWorld: IBM releases Informix beta, preps Linux bundle
- TechWorld: IBM launches Informix beta and promises Linux bundle
- Database Journal: IBM, AMD and Novell Team on Linux Offering for Informix Dynamic Server
- Red Herring: IBM Advances Linux Integration
- LinuxPlanet: IBM Launches Open Client for Cross-Platform Desktops, Plus Linux Servers for SMBs
- Assodigitale (Italy): IBM, AMD and Novell Team on Linux Offering for Informix Dynamic Server
- InformationWeek: IBM, Novell, AMD Team up on Informix Package
- Dow Jones Newswires:
  - IBM, Advanced Micro, Novell To Build Integrated Linux Offering
  - IBM's 'Cheetah' Data Server Set For Release This Year
  - IBM's 'Cheetah' Data Server Begins Open Beta Testing
  - IBM/AMD/Novell Pdt To Be Built Around IBM's 'Cheetah' Server
  - IBM, AMD, Novell To Develop Integrated Linux Pdt >IBM
  - IBM, AMD And Novell Team On Linux Offering For Informix Dynamic Server
- EBizQ: IBM Teams with AMD and Novell to Create Integrated Linux Offering
- Bloomberg: \*IBM, AMD, NOVELL OFFERING BUILT AROUND INFORMIX DYNAMIC SERVER
- KGO-AM 810 (ABC) San Francisco: Evening Drive Time: IBM, AMD and Novel will work to build an integrated Linux server.



#### IDS 11 Launch in the Press – 12 June!

- This release should signal Informix partners that IBM is serious about continuing to build on the Informix database technology it acquired six years ago. -- CRN
- IDS 11's biggest advantage is simplified administration, according to Jasmine Noel, an analyst with Ptak, Noel & Associates LLC. -- eWEEK
- "Also, some of the bleeding-edge creators of information-based applications are not traditional application developers, they are business analysts with spreadsheets connected to a wide array of Web-services-enabled data sources," Noel said. "So if that mode of [application] development [and] usage becomes a norm and Cheetah can deliver blow-your-socks-off performance [and] availability to these business analysts...then Oracle has something to worry about." eWEEK
- IDS 11 comes less than a year after IBM launched its DB2 9 Viper software to fortify its fight versus Microsoft SQL Server 2005 and Oracle 10g in the multi-billion-dollar market. -- **internetnews.com**



#### Cheetah in the Press





## Information On Demand with IDS

- IDS is a strategic member of the IM portfolio that meets a spectrum of data serving needs
- 2 IDS is the optimal data server for integrated relational OLTP environments
- 3 IDS continues its rich history of technology innovation
- IDS is growing faster than the data server market



#### IBM's positioning of IDS

#### Capitalize on its strengths

#### On line Transaction Processing

V.11 - new features increase the performance of IDS for OLTP.

#### Integrated Solutions

IDS is IBM's leading data server for industrial-strength integrated solutions.

#### Small & Medium Businesses

Low DBA requirements are a strong selling point. Express and Workgroup Editions available.

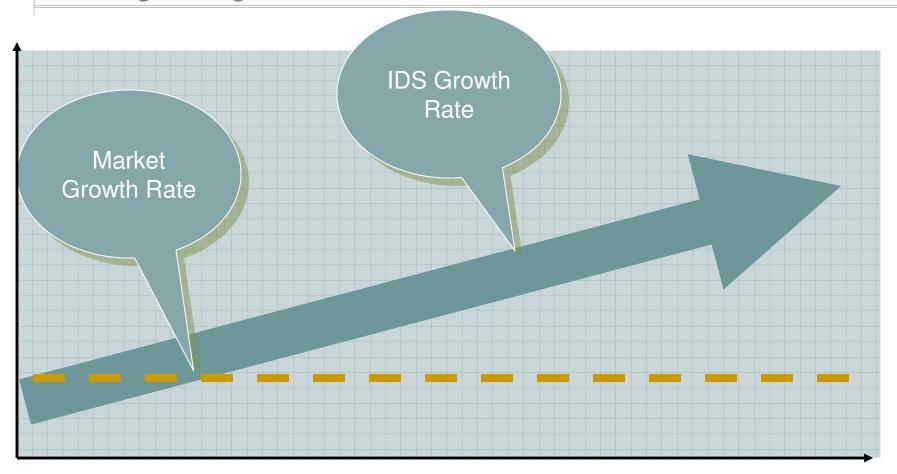
#### Key Industries

IDS has significant market presence within key industries including Telco, Government, Retail & Banking

IDS is a "lead-with" data server for ANY OLTP oppty



Strong IDS Growth IDS is growing faster than the data server market



# IDS: Then, now, and what's to come

#### Business Continuity with Security & Performance IDS 11 "Cheetah" 2007

Continuous
Availability &
Scalability
2008

Dynamic Enterprise
OLTP
Data Server
Vnext\*

- **IDS 10**
- High Availability enhancements
- Significant security and encryption enhancements, LBAC and Common Criteria certification
- Enhanced spatial & geodetic web-services for location-based services
- Further reduction in TCO with improved administration functions,
- Advance application development, XML & SOA
- Enhanced solutions integration, Admin API, customizable footprint

- High power scalability and availability solutions
- Enhanced data encryption
- More advanced application development
- Integrated servers administration
- SOA enabled 4GL

- Enhanced enterprise data management
- Dynamic provisioning
- Performance enhancement
- Additional security management
- Enhanced administration functions
- Data Compression\* Subject to change

- Fastest, mostavailable Informix OLTP engine ever
- Continuous advances to solidify market position
- IDS Express
- PHP driver
- Baan benchmarks



# Every Business Needs to Be Resilient

Resilient

Business Continuity for Business Survival

"In some industries, downtime costs can amount up to 16% of revenue."

Source: "The Costs of Enterprise Downtime: NA Vertical Markets 2005" Information Research

For 32 percent of organizations, just 4 hours of downtime could be fatal.

Source: Continuity Central, "Business Continuity Unwrapped," 2006;

99.999% uptime = 5 minutes down per year "Nearly 30% of companies do not have a disaster plan in place."

Source AT&T, "AT&T 2006 Business Continuity Study". January - May 2006

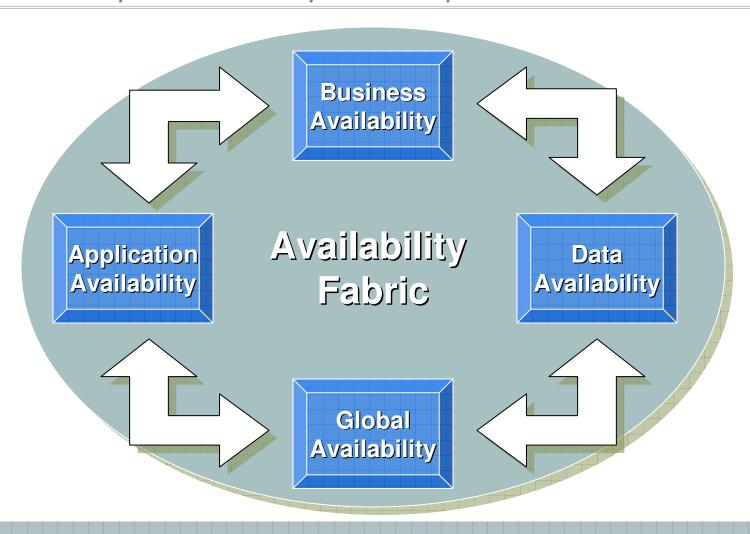
"Companies can expect staff absences up to 40% during a pandemic."

Source: U.S. Homeland Security Council, "National Strategy for Pandemic Influenza", May 2006

Application Segment	Average Cost of Downtime/Hour
Shipping - Distribution	\$28,000 per hour
Tele-Ticket Sales	\$69,000 per hour
Airline Reservations	\$89,000 per hour
Home Shopping	\$113,000 per hour
Pay Per View - Television	\$150,000 per hour
Credit Card Sales	\$2,650,000 per hour
Financial Market	\$6,450,000 per hour
Source: Gir	ga Group

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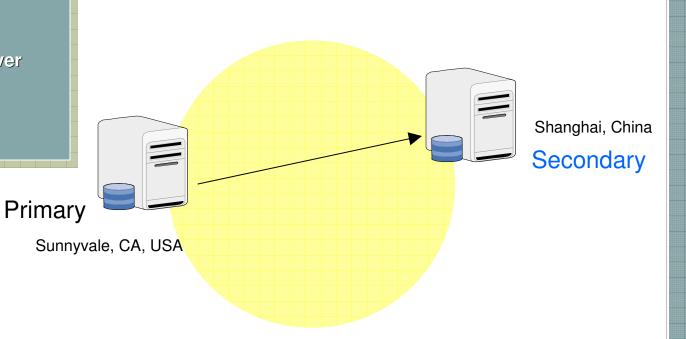




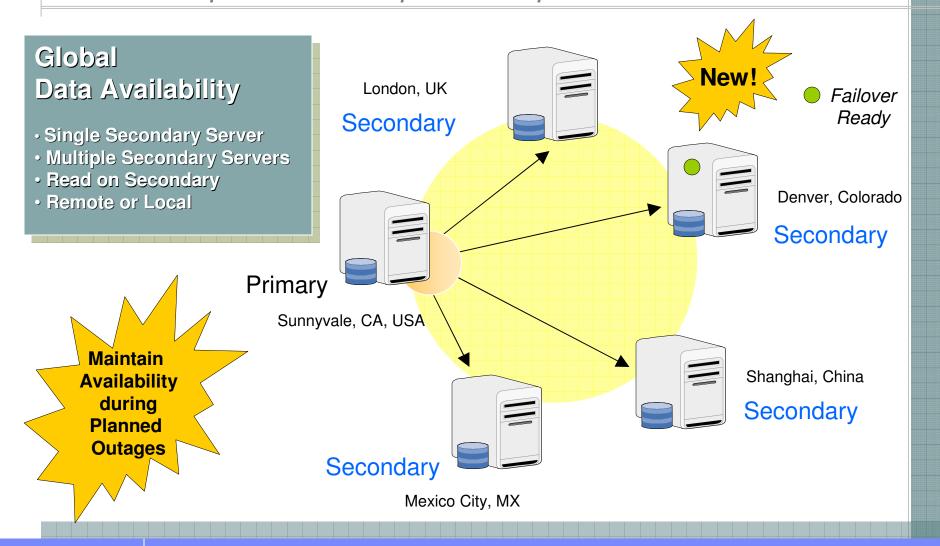
Flexible Capabilities to Span the Spectrum

#### Global Data Availability

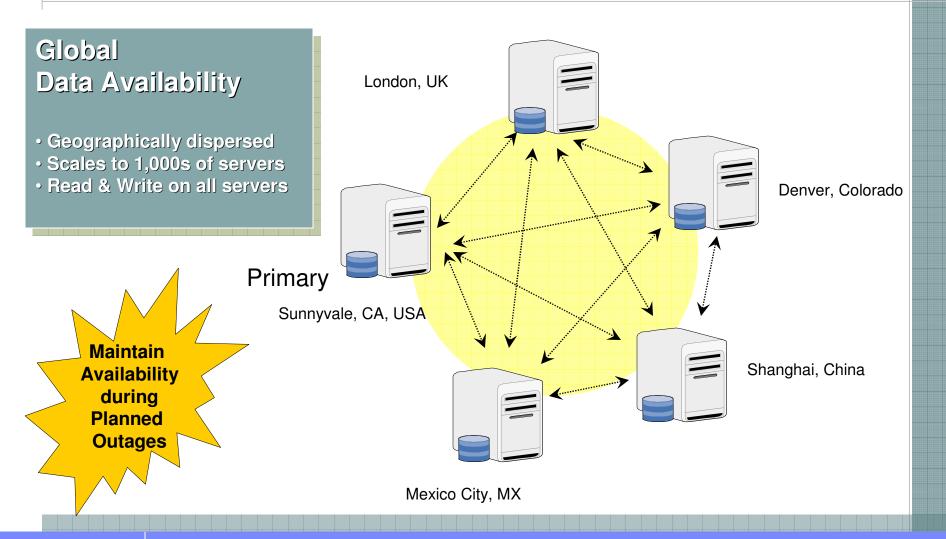
- Single Secondary Server
- Read on Secondary
- · Remote or Local



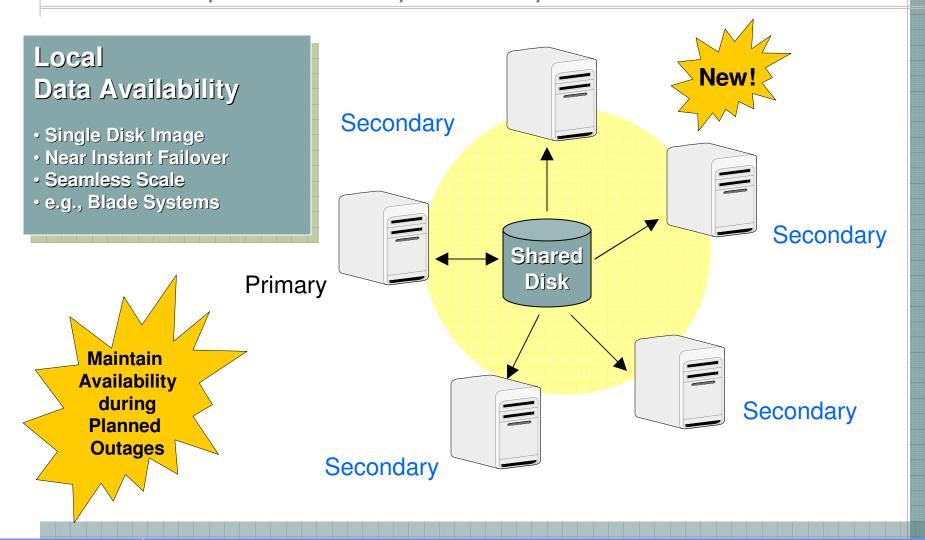
















### **Verizon Experiences Success with IDS**



Estimated 20,000 CPUs
Between 200 and 300 systems
426,000 concurrent sessions (with
142,000 individual users on a single
12 CPU system)

"We saved millions of dollars by migrating the database for our national provider directory from Sybase to IDS."

"IDS is a core solution that helps us maintain 99.98 percent availability. We push it quite a bit because it is a very stable environment and it can handle massive loads very efficiently."

"The innovations of the new Continuous Availability feature of IDS Cheetah will assure Verizon's ability to provide uninterrupted service to our customers, day and night."

- Geoff Poole, Lead Informix Database Administrator, Verizon



# IDS Addresses Information Challenges

Resilient

Agile

Invisible

- Reliable
- Available
- Secure
- Adaptable
- Fast
- Flexible
- Hidden
- Minimal
- Affordable

Peace of mind



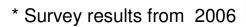
# Legendary Reliability

## Our customers say it all

Resilient

- "This database has never been down except for server OS upgrades"
  - Bob Ungaretti, CTO, Garett Group Inc.
- "Informix IDS has been ... a very solid DBMS"
  - James Xu, Safeway
- "Can't remember the last outage... over 5 years ago"
  - Rich Campbell
- "The last unplanned outage was in 2004 when we had a massive power failure"
  - Lennie Jarratt
- "Can't remember ever having an IDS related outage"
  - Brian Grellinger, Doosan, Infracore America Corp

- "I have clients who have over 500 days of uptime."
  - MM. Financial Software
- "I have worked here for almost 4 years and we have never had an outage"
  - MG, Manufacturing
- "Better with every release."
  - DG, Logistics
- "Been extremely reliable and low maintenance"
  - BG, Construction









## **Advanced Access Control**

Agile

Resilient

Flexibility to implement YOUR security policy

#### Available in IDS Cheetah New



Label-based access control (LBAC)



- Precise access row, column, and cell level
- Flexible security policy options
- Robust security
- Tight control

"86 percent of internal security incidents are perpetrated by a company's most privileged and technical users, such as administrators, outsourcers, consultants, and other power users"

Recent industry study



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Rapid
Response to
Changing Needs

- Hidden
- Minimal
- Affordable



Agile

# Agility for Business Advantage

Rapid response to changing requirements

Adaptable

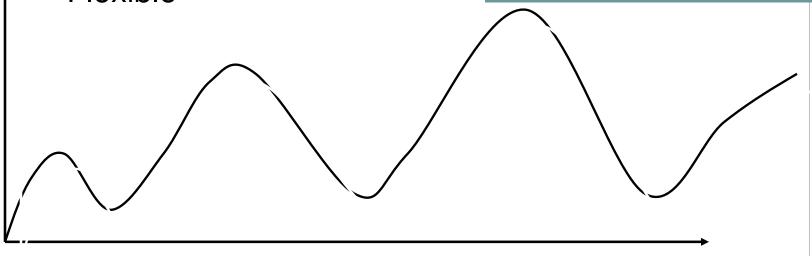
Fast

Flexible



"IDS "Cheetah" provides companies with a powerful, scalable and easy to integrate data server for their business." —Rob Prop, Manager,

Informa Professional Services





### Handle Extreme Workloads

Agile

# Don't blow your budget

- Customer example: Financial brokerage firm
  - Online stock collection
  - < 1 sec lag requirement</p>
  - > 100,000 messages/sec fully committed transactions
  - >5 TB of history kept online
  - Runs on a 4 CPU Linux box!

#### Increased performance with IDS 11:

"...[during beta testing] ... with the current IDS 10, the task takes 415 seconds...Cheetah gets that down to 75 seconds."

- Gillani (ISV)





#### WorldWinner

Agile

Agility drives business for online game company

- 1,600 concurrent games
- 600,000 games per day
- 100 percent increase
- No hardware upgrade
- 20% faster time to market
- Lower cost than alternatives



"Informix Dynamic Server has helped make us the predominant site on the Internet for skill-based game tournaments.

We're seeing such extreme performance improvements that our speeds are now serving as a benchmark in the industry."

- Joe Bai, Chief Information Officer, WorldWinner

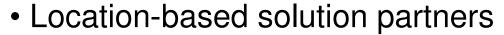


# **Explosion of Location Information**

Agile

IDS location awareness makes GIS and RFID easy

- Application development accelerators
- Web service interface 
   New!
  - OpenGIS standard



- WebSphere RFID solution
- ESRI



"Enterprise use of spatial information, representing geography or location, is one of the largest untapped resources available for bottom-line improvements."

- Robert Frances Group 02/20/2007 (www.rfgonline.com)



# **IDS Application Development**

Agile

Choose your environment and language

- Create applications and Web services with ease
- Superior application development capabilities



- Comprehensive tools
- Application portability























# IDS Addresses Information Challenges

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Efficient
and
Easy



# "Set it and Forget it"

#### Hide IDS inside the solution



- Deploy applications remotely
  - Retail stores, regional offices, etc.
  - No local DBA support
- Near Hands Free Administration
  - Application controls database
  - Remote management
- Affordable and Efficient
  - Do more with less
  - Small footprint (to <100MB)</li>



Germany's largest and most successful television corporation

"The new features of IDS Cheetah will further improve manageability of our information infrastructure and reduce DBA workload by up to 20 percent. As a result, we can continue to manage our environment with just three DBAs, even as our company grows."

Markus Holzbauer, Senior Administrator,
 Media & Production Systems, ProSiebenSat.1 Produktion



#### Administration Free Zone

Invisible

#### IDS Administration made even easier

"We hardly ever use DBA time. The database simply keeps running."

- Nils Myklebust, Milanex

- Administrative tasks within application via SQL
- Administration API
- Scheduler

#### **Customer Survey:\***

- 25% report no DBA time at all
- An Average of 7 minutes per user week

\*Oninit/openpsl Survey 2006

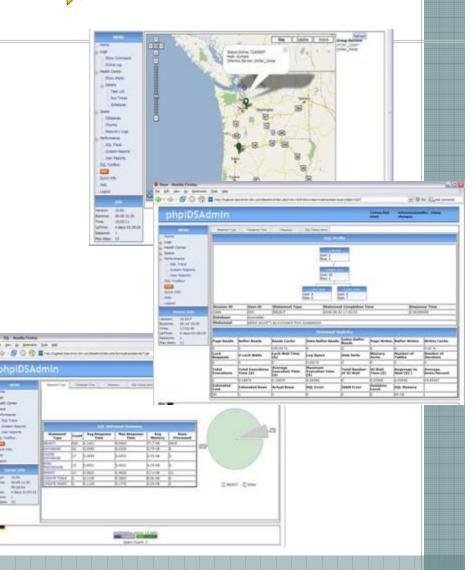


Invisible

OpenAdmin Tool for IDS

Remote GUI Administration

- Web-based administration
- Single Web server
- Monitor all instances
- Graphical, location-based
- Drill down to details





# "Set it and Forget it"

#### Hide IDS inside the solution



- Deploy applications remotely
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Resilient

- Reliable
- Available
- Secure

Peace of mind

Agile

Invisible



Resilient

Agile

Invisible

- •Multiple high availability secondary servers
- Continuous Availability feature
- Backup and Restore to Directory
- Continuous Log Restore for Disaster Recovery
- Parallel Whole System Backup
- •Enterprise Replication Enhancements
- Ordering of dbspaces During Backup and Restore
- •RTO Policy to Manage Server Restart
- •Transform Data During Backup and Restore
- Common Criteria (ISO/IEC 15408)
- Label Based Access Control
- Encrypted Communications for HDR



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Agile

Invisible

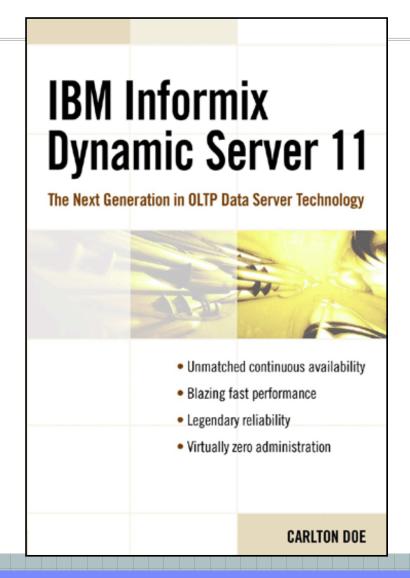
- Non-blocking Checkpoints
- ON-Bar Performance Monitoring
- Monitor and Analyze Recent SQL Statements
- Trigger Enhancements
- Optimistic Concurrency
- •Derived tables in the FROM Clause of Queries
- ·Index Self-Join
- Optimizer Directives in ANSI-Compliant Joined Queries
- Indexable Binary Data Types
- •Enhanced Data Type Support for Distributed Queries
- ·XML Publishing
- ·Basic Text Search
- Web Feature Service for Spatial and Geodetic data
- ·Named Parameters in a Callable Stmt



#### **IDS 11**

#### There's so much more

- Get this \*FREE\* 100+ page IBM publication
- Explains all the major features from a technical and business perspective
- Contact your IBM sales or technical sales representative for your copy





#### Why Upgrade to IDS 11

- Increased Performance
  Achieve 25 40% performance improvement from IDS 7.31 to IDS 11.
- Enhanced Resiliency Achieve 99.999% availability or better!
- Hands Free Administration "Set it up and Forget about it."
- Future Technology IBM Commitment to the future strategic data server of choice for highvolume integrated OLTP
- AffordableDo more with less resources
- Secure Peace of mind to protect data
- Scalable Designed to grow with your business
- Invisible Hidden inside the application



## Informix Dynamic Server

Agile Invisible Resilient

The best data server for providing flexible, highly available, high transaction OLTP data services



### Commitment from the top - Ambuj Goyal

"As an integral element of IBM's data server business, the future for IDS is very bright."

"Our current product plans outline significant technological enhancements through the next five years, consistent with IBM software policy with regard to product strategy roadmaps."

"You can have confidence that new and existing Informix database software investments will retain their strong standards and business relevance moving forward."

"This relevance is highlighted by IBM's support of a growing worldwide ecosystem of Informix application providers, solution providers and resellers."

"I urge you to learn more about IDS 11 and how IBM has improved upon an already innovative data server, offering you the stellar performance, reliability and ease of use your business demands."



