

DB2. Data Management Software

# IBM Informix Dynamic Server Version 9.40

#### **Highlights**

- The best-performing IBM
  Informix® Dynamic Server (IDS)
  release available, exceeds all
  previous online transaction
  processing (OLTP) performance
  records
- Exceptional scalability to meet the unpredictable challenges of on demand e-business
- Upgrading to IDS 9.40 from any current IDS product is a simple, highly automated task
- Smooth, automated upgrade
- Increased flexibility and compatibility for business partner applications

# Performance and availability for today's continual computing

IDS is a best-of-breed OLTP database for enterprise and workgroup computing. It has always supported very large database systems in demanding operational environments. In Version 9.40, this practice persists with exceptional performance, availability, scalability, security, simplified manageability and support of Business Partner applications. IBM continues longstanding traditions within IBM and Informix of delivering the mission-critical data infrastructure that enterprises need to run their businesses.

IDS 9.40 provides the essential qualities needed for today's always-available, Web-application based OLTP:

**High performance**—With Version 9.40, IDS exceeds its already high OLTP performance by 8 to 15 percent with a more-efficient use of large amounts of memory and even less contention between concurrent users.

Data availability—IDS High Availability
Data Replication (HDR) provides
complete turn-key disaster recovery.
IDS Enterprise Replication (ER)
provides selective replication of data
across multiple geographic locations.
IDS 9.40 enables both methods
to coexist on key nodes within a
worldwide network.

### Scalability for ever-increasing data

With databases getting larger and more concurrent users accessing them, IDS provides much-needed, exceptional scalability. It dynamically adjusts core engine operating parameters without performance degradation. At the same time, its dynamic, scalable architecture uses hardware resources more efficiently to minimize hardware requirements.

The enhanced scalability of IDS 9.40 increases the maximum size of an IDS instance from 4 terabytes to a theoretical 128 petabytes. In addition to improving performance, this scalability enables usage of today's large disk drives and eases administration overhead by significantly reducing the number of chunks that a database administrator (DBA) must manage.

# High performance and reliability for today's alwaysavailable, online transaction processing

#### **Industry-standard security**

IDS has always supported a set of open, industry-standard security mechanisms such as roles, UNIX® password-based authentication and database management system (DBMS) schema authorizations. IDS 9.40 also supports OpenSSL encryption libraries for communication security and Pluggable Authentication Modules (PAMs) for user authentication. These open standards ensure flexibility and maximum security with easier validation and verification. This IDS release also makes Lightweight Directory Access Protocol (LDAP) support much easier.

#### Increasing productivity

IDS has a tradition of providing tools to help a small number of administrators manage a large number of systems. IDS 9.40 continues to reduce the complexity, time, DBA skills and cost associated with database management by eliminating, simplifying and automating many tasks typically associated with an enterprise-class database.

Upgrading to IDS 9.40 from any current IDS product is a simple. highly automated task. Also, the browser-based interface for IDS. Informix System Administrator (ISA), allows all common DBA activities to be administered from anywhere on the network. This interface now supports Informix Storage Manager (ISM), enabling DBAs to edit and configure events and alarms to respond quickly to unexpected events. Automated backup and restore functions offers DBAs highlevel data availability and restoration while eliminating many manual tasks. And new tape utilities help make maximum use of backup media by indicating how much data can be written to a compressing tape drive.

## Flexibility for application development

IBM and IDS 9.40 help Business
Partners improve their profitability,
reduce their risk and deliver bestof-breed solutions to customers.
IDS 9.40 has enhanced support of
industry-standard SQL and continued
support of the latest standards such
as Java™ Database Connectivity
(JDBC), Open Database Connectivity
(ODBC) and OLE DB. In response,
leading packaged-application
vendors have committed to port to
IDS 9.40 within a few months of its
release.

IDS 9.40 also continues to foster application development in a worldwide marketplace. New features support partners in publishing applications in any language and creating multinational applications. It allows changing languages dynamically to truly support multilingual applications.

#### Integration with leading technology

IDS and IBM are a powerful combination. IBM offers complementary data management and software products that integrate with and support IDS including DB2® Information Integrator, WebSphere®, Tivoli® and a variety of IBM tools. IDS 9.40 reflects IBM's ongoing commitment to open standards and leading-edge technology support including Web services, Linux, autonomic computing and on demand e-business.

Features	Benefits
High-performance technology	<ul> <li>Cleaner indexes and improved memory management for more-efficient use of memory and processors.</li> <li>Enhanced buffer priority management for more-efficient use of large amounts of memory for today's 64-bit operating systems.</li> <li>Smarter query optimization including user-defined type costing with new spatial data types</li> <li>Shortened instruction sets for common tasks</li> <li>Reduced contention between concurrent users</li> </ul>
Scalability	Previous limitations are eliminated in IDS 9.40:  Data capacity of a single instance increased from 4 TB to 128 PB  Maximum chunk size increased from 2 GB to 4 TB  Maximum number of chunks increased from 2048 to 32 K  Maximum LVARCHAR size increased from 2 KB to 32 KB  DBMS utility file size limit increased from 2 GB to 17 billion GB
Security	<ul> <li>Secure over-the-wire encryption using the industry-standard OpenSSL encryption libraries</li> <li>Configurable user authentication mechanisms using Pluggable Authentication Modules (PAMs)</li> </ul>
System management	<ul> <li>Informix Storage Manager support in the browser-based ISA</li> <li>Automated backup and restore functions</li> <li>Increased media efficiency by tape-handling utilities</li> <li>More flexible restore options</li> </ul>
Application development	<ul> <li>SQL language enhancements</li> <li>Expanded Unicode support</li> <li>Multiple collation support</li> <li>Silent installation</li> <li>Continued support of IBM Informix 4GL, SQL, ODBC, JDBC, OLE/DB, SQLJ</li> </ul>
Available on	<ul> <li>IBM AIX®, HP-UX, Sun Solaris; Linux on Intel® processor-compatible servers, Linux for IBM @server zSeries™ servers; Reliant UNIX; SGI IRIX; Compaq Tru64; Microsoft® Windows® 2000, XP, 2003 (.Net)</li> </ul>



#### Find out more

For more information about IBM Informix Dynamic Server 9.40 and the full spectrum of innovative IBM Database Management products and services, contact your local IBM representative or go to:

ibm.com/software/data/informix

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