Advantage™ Database Server JDBC Driver

- Type 4 JDBC driver
- JDBC 2.0 compliant
- Native access to Advantage Database Server
- Certified for Java Runtime Environment 1.3 or greater
- Supports data encryption for enhanced security
- Supports full read committed transaction processing
- Provides access to ADT and DBF file formats (including Visual FoxPro 9 field types)
- Supports updateable and scroll sensitive result sets (live cursor)
- Provides query progress information and query cancellation capability

The Advantage JDBC Driver is a high performance type 4 JDBC driver that provides native access to Advantage Database Server through any Java-enabled applet, application, or application server. The driver is written for the Java environment, allowing developers to incorporate Java technology and extend the functionality and performance of their existing systems.

The Advantage JDBC Driver is a powerful tool for Java developers building applications that access Advantage Database Server, a client/server solution that provides high performance, stability and scalability to multi-user applications. The Advantage JDBC Driver has been designed to allow Java developers to maintain the industry standard, independent connectivity between Java applications and Advantage Database Server.

The Advantage JDBC Driver is JDBC 2.0-compliant and passes 100% of the relevant JDBC CTS tests, and it facilitates a fast link between Advantage, Java IDEs, and applications. The Advantage JDBC Driver is written completely in Java and is self-contained within one distributable module. No other Advantage client piece is needed for the Advantage JDBC Driver to communicate to the Advantage Database Server.

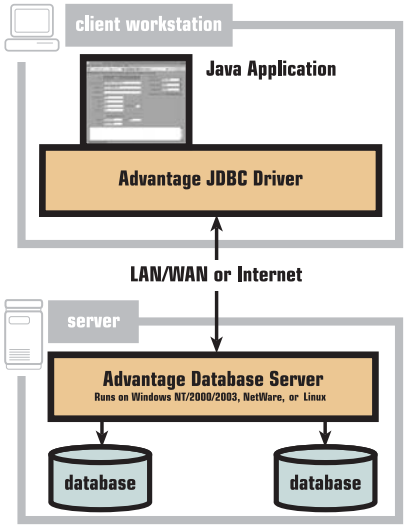
TYPE 4 DIRECT-TO-DATABASE DRIVER

JDBC technology drivers fit into one of four categories, or types, ranging from type 1 to type 4. JDBC drivers are categorized based upon their Java nativeness, with type 1 being the least native and type 4 being the most native. The Advantage JDBC Driver is a thin, type 4 direct-to-database Java driver. The Advantage JDBC Driver communicates directly to the Advantage Database Server via the TCP/IP protocol.

ADVANTAGE DATABASE SERVER

Using the Advantage JDBC Driver in conjunction with Advantage Database Server allows Java developers to create a true client/server solution that adds performance and stability to multi-user LAN, WAN or Internet applications.

Advantage Database Server is a complete, high performance database solution. The Advantage Database Server supports Windows, Linux, and NetWare networks and requires no database administrator.



FULL SCALABILITY—WRITE ONCE, DEPLOY ANYWHERE

Advantage applications can be deployed in various LAN, WAN and Internet environments and support multiple network operating systems with one set of source code. The Advantage JDBC Driver does not require an additional client interface, JDBC-ODBC bridge, nor a different set of code for different deployment environments.

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Therefore, you only need to write one application with one version of code for cross-platform deployment on any platform with the Java Runtime Environment 1.3 or greater, including Windows, Linux, Macintosh, NetWare, etc.

SPECIFICATIONS

Conformance

The Advantage JDBC Driver supports the JDBC 2.0 Core interfaces. It is compiled and tested using the JDK/JRE 1.3 and it is certified for the Java Runtime Environment 1.3 or greater. The Advantage SQL engine has SQL support that consists of most of the ANSI SQL-92 standard and ANSI PSM 2003 scripting.

Advantage Database Server

Advantage Database Server v7.0 or greater

Server operating systems

(via the Advantage Database Server)
Novell NetWare 5.x or greater
Microsoft Windows x86 (IP, IPX)
Microsoft Windows x86_64 (IP)
Linux x86, x86_64 (IP)

Supported file formats

Advantage proprietary database (ADT tables, ADI index files, ADM memo files)
FoxPro-compatible (DBF tables, CDX index files, FPT memo files)
CA-Clipper compatible (DBF tables, NTX index files, DBT memo files)

Advantage Database Server (client/server)

maximum number of transactions — limited by memory
maximum number of connections — limited by memory
maximum number of files opened simultaneously — limited by memory
maximum number of tables — limited by memory

Database maximums

maximum ADT table size
- Windows NT/2000/XP/2003 with NTFS — 16 exabytes (18,446,744,073,709,551,616 bytes)
- Windows NT/2000/XP/2003 with FAT32 — 4 gigabytes (4,294,967,296 bytes)
- NetWare 5 or greater with NSS file systems — 16 exabytes (18,446,744,073,709,551,616 bytes)
- NetWare 5 or greater with traditional file systems — 4 gigabytes (4,294,967,296 bytes)
- Linux pre-2.1.2 — 11 glibc and pre-2.4 kernel — 2 gigabytes (2,147,483,648 bytes)
- Linux glibc 2.1.2 — 11+ with kernel 2.4+ — 8 exabytes (9,223,372,036,854,775,807 bytes)

maximum DBF table size — Maximum Record Count (2,147,483,648) multiplied by Record Length (depending upon operating system and file system)
maximum number of records — 2.2 billion
maximum record length — 65,530 bytes
maximum field name length — 128 characters for ADT tables, 10 characters for DBF tables
maximum number of columns per table — ~3,500 for ADT tables, 2,035 for DBF tables

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