

POINTBASE MICRO

The Ultra-Compact Database for Enterprise Mobility

Developers today are increasingly called upon to create enterprise mobility solutions for distributed organizations. These mobile applications allow field personnel to interact with back-end systems such as CRM, SFA and ERP; they automate workflows, increase employee productivity and access existing corporate data on the road. Enterprise mobility is now utilized across multiple functions and industries, including transportation, health care and pharmaceuticals, public safety, security and military operations.

These sophisticated applications are supported by a local database that resides on the mobile device. Field personnel and mobile professionals cannot rely on constant wireless access to manage their data – instead, information must be locally stored and synchronized with enterprise databases as needed or when convenient. These mobile databases therefore need an exceptionally small footprint combined with the ability to manage extensive amounts of data. They must also provide a standard of security equal to that of the most protected corporate infrastructure and offer high performance for diverse and complex mobile applications.

THE POINTBASE MICRO DATABASE

PointBase Micro helps developers meet these requirements with a platform-independent, relational database written entirely in Java and optimized for mobile environments. This robust, ultra-compact product can be embedded directly into mobile applications and is completely transparent to the end user. It is small enough (<45KB for J2ME CLDC/MIDP) to run on virtually all of today's mobile devices, yet includes comprehensive SQL functionality. Its Java-based portability eliminates recompiling for multiple platforms and reduces application upgrade complexities. Utilizing its companion product, PointBase UniSync, PointBase Micro synchronizes easily with corporate back-end databases.

By capitalizing on the capabilities of Java, PointBase Micro is a powerful, flexible database that is easy to deploy, install and operate with many applications, on any mobile platform including laptops, tablet PCs and PDAs. PointBase Micro enables comprehensive mobile solutions that allow your customers to extend the reach of their enterprise data to improve business operations.

Ultra-Compact Footprint and Complete Portability

PointBase Micro provides one of the smallest and most efficient databases available today for enterprise mobility: less than 45KB for J2ME CLDC/MIDP and less than 90KB for J2ME CDC and J2SE™. Its Java-based portability minimizes the resources required to test and integrate your application across all major mobile platforms. By running on any platform that supports a Java Virtual Machine (JVM), PointBase Micro gives developers the flexibility to develop, test and deploy with the same JDBC syntax and data types. Now you can rapidly extend mobile deployments without having to write scripts or decide on a subset of possible queries.

Robust, Standards-Based SQL Support

PointBase Micro allows you to meet customer query and access requirements with comprehensive SQL support. Features include:

- Support for a subset of standard SQL 92, including transactional support
- Support for a subset of the JDBC programming interface
- Optimized for the J2SE and J2ME™ (CDC and CLDC MIDP) platforms
- Full Unicode support for international applications

A High-Performance Local Data Store

PointBase Micro offers the high performance necessary for memory-constrained mobile platforms, combined with comprehensive functionality to meet a variety of developer needs. It is often used as a local data store for field data collection applications. Other applications can utilize PointBase Micro as an in-memory database on the J2SE and J2ME CDC platforms to improve database performance, storing objects in memory as long as the connection remains open; or to open multiple in-memory databases at the same time. PointBase Micro also offers the ability to create a read-only database for certain applications, such as one that utilizes a catalog.

Security and Encryption Using Java and SQL

Corporate data stored in the PointBase Micro database is protected against virus attacks by Java-based security, and against unauthorized access by SQL authentication procedures. Encryption is available at the column or database level on the J2SE and J2ME CDC platforms, using the high-performance Extended Tiny Encryption Algorithm (XTEA) for complete data security. Together, these mechanisms ensure that applications can be safely deployed in any mobile enterprise environment.

Bi-Directional Synchronization with PointBase UniSync

Utilizing its companion product, PointBase UniSync, PointBase Micro offers bi-directional synchronization with Oracle®, Microsoft® SQL Server™ and other JDBC-compliant corporate databases. PointBase UniSync assures that field personnel and mobile workers synchronize only the updated information that is needed, using a publish-and-subscribe model with PointBase Micro as a subscriber.

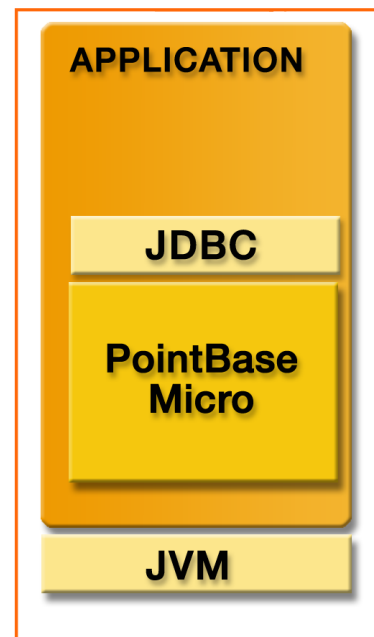


Figure 1: PointBase Micro: Complete Transparency within the Java Application

One-Step Deployment through Transparent Data Management

Embedded within your application and running in the same JVM, the PointBase database is completely transparent to the end user. This enables immediate, one-step deployment to laptops or memory-constrained devices from a single executable JAR file. Such a rapid, painless implementation of mobile environments helps to speed customer adoption and lowers the cost of installation and maintenance.

KEY FEATURES:

- Platform-independent database written entirely in Java
- Optimized for the J2ME and J2SE platforms
- Ultra-compact database footprint (<45KB for J2ME CLDC/MIDP) for mobile applications
- Database encryption and standards-based secure communication
- Standards-based development using JDBC and SQL

KEY BENEFITS:

- Extend enterprise data to improve the productivity of mobile workers
- Transparent database embedded within your application
- Cross-platform functionality for laptops, tablet PCs and PDAs
- Complete query access to data without precompiling
- Easy synchronization with corporate databases with no need for constant wireless access

Complete Technical Support for Your Implementation

PointBase provides world-class support for PointBase Micro to further reduce the tight development cycles required for today's mission-critical projects. We offer up to three months of free support during evaluation, and, upon purchase, an additional 30 days of free installation support. Customers under contract receive technical support from PointBase engineers during standard business hours via a web-based support system. This includes access to a comprehensive and dynamic knowledge base that allows you to research your question or issue using a variety of criteria (product, keywords, or phrases) to determine if a resolution is readily available. You can also manage a personalized support account to obtain the current status of your incident.

PointBase: Your Mobile Database Technology Partner

PointBase's proven products are leading the next generation of development for Java-based applications. Whether you are enabling applications for field force automation, SFA, CRM or an industry-specific application, PointBase Mobile Database products are designed to improve productivity, speed customer service and maximize your business success.

PointBase Micro Specifications

100% Java Database <ul style="list-style-type: none"> • Ideal for Windows®, Windows CE/PocketPC®, Symbian EPOC®, Sharp Zaurus®, Embedded Linux and other Java platforms 	Security <ul style="list-style-type: none"> • SQL authentication • Encryption of stored data • Column and database level
Zero Administration <ul style="list-style-type: none"> • Automatic recovery • Rule-based query optimizer 	Micro Footprint Architecture <ul style="list-style-type: none"> • Jar file <45K for J2ME CLDC/MIDP • Jar file <90K for J2SE and J2ME CDC
Transparent, Embedded Data Management <ul style="list-style-type: none"> • Simple installation • Minimal system resource requirements 	Transactions <ul style="list-style-type: none"> • autocommit • commit • rollback
DML <ul style="list-style-type: none"> • insert • update • delete • Java functions in values clause, set clause, and predicates 	DQL <ul style="list-style-type: none"> • multi-table joins • predicates: comparison, like • Java functions in select list and predicates • aggregates (distinct, count, sum, max, min, avg)
DDL <ul style="list-style-type: none"> • create/drop table • create/drop index • create function • create user • includes: null / not null, primary key • alter table 	Data Types <ul style="list-style-type: none"> • blob (binary) • char • date • decimal • integer • time • timestamp • varchar
Scalar functions <ul style="list-style-type: none"> • Pluggable Java functions 	Internationalization <ul style="list-style-type: none"> • Unicode (international character set) support
Tools <ul style="list-style-type: none"> • load/unload database • Console gui tool 	Other Features <ul style="list-style-type: none"> • Prepared Statements • Auto-increment • Multiple connections • Read-only database • In-memory database