SAP Sybase SQL Anywhere

Manage enterprise data in remote and mobile locations

Speaker's Name/Department (delete if not needed)
Month 00, 2012

SAP

The New Real-Time Business

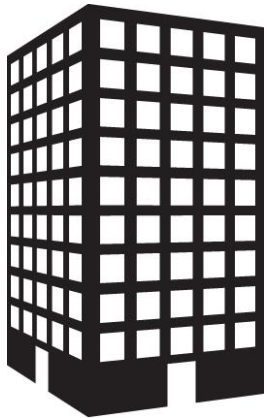**Real-Time Businesses are data-driven and must now be able to:**

- **Turn massive data into actionable information**

- **Deliver in-the-moment insight**

- **Maintain a 360° view of the enterprise**

- **Treat customers holistically**
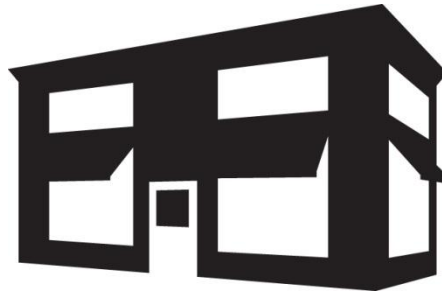
- **Transform business processes**

Data Strategies for the Real-Time Business
Capture and Synchronize Data – From Data Center to Device

Point-of-Action

Satellite Locations

Enterprise Network

RUN > **MANAGE** > **ANALYZE** > **ENABLE**

Life on the Edge
Challenges for Database-Driven Applications at the Point of Business

Data Centers:

vs.

Remote Locations:

- Squeaky clean
- Controlled environments
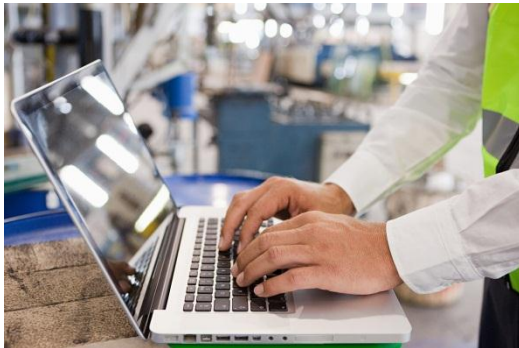- IT administration on site
- State-of-the-art

- "Real world"
- Weak signals, dead spots
- No IT staff present
- Low-cost, commodity hardware

SAP Sybase SQL Anywhere
A Suite of Data Management & Synchronization Technologies

Powerful solution for building high-performance applications in remote and mobile environments

MOBILE

- Delivery tracking
- Inspections
- Asset management
- Work order tracking

EMBEDDED SYSTEMS

- Kiosks
- Network management
- Medical appliances
- Smart metering

POINT-OF-ACTION

- Restaurants
- Retailers
- Practice management

SAP Sybase SQL Anywhere Overview

- A powerful **database management system** for managing enterprise data anywhere from the data center to the device
  - automated maintenance features
  - on-device data management
  - strong encryption
  - secure synchronization

- **Data synchronization** for linking thousands of users in remote and mobile locations to enterprise systems and data

- SQL Anywhere enables data-driven applications to be developed and deployed anywhere, and **complements existing enterprise data sources**
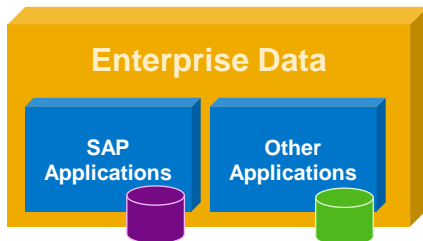
Enterprise Applications

Offices

Individuals
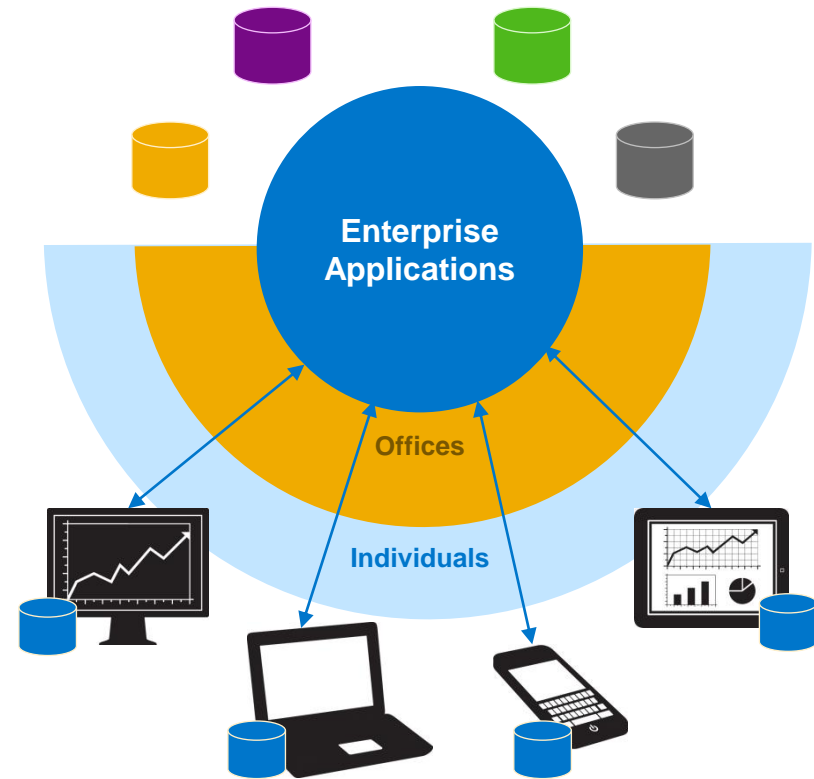
Optimized Components
Simplify Data-Driven Applications in Remote Locations

MobiLink™

Highly scalable session-based synchronization technology for heterogeneous data sources.

MobiLink™ Synchronization Server
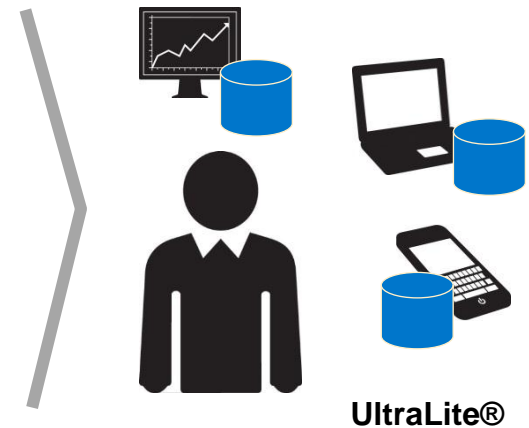
Enterprise Data

SAP Applications

Other Applications

SQL Anywhere Server

A feature-rich RDBMS for desktop and server applications in zero-administration environments.

Remote Servers

SAP Sybase SQL Anywhere Server
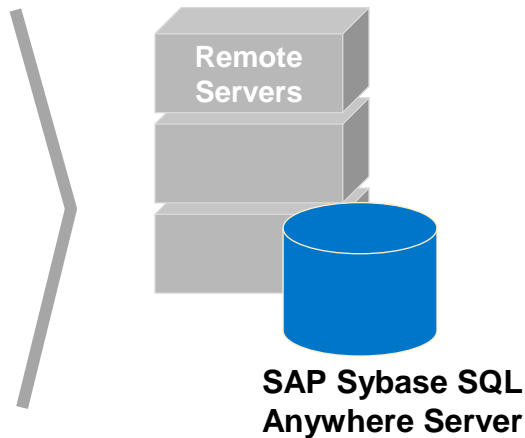
UltraLite®

A compact in-process database with built-in synchronization for small footprint devices.

UltraLite®

SAP Sybase SQL Anywhere
Key Features – Data Management

Enterprise-Class

- Hundreds of concurrent users, hundreds of GBs of data
- OLTP benchmark: 20,000 transactions per minute on an $18K machine
- Enterprise-caliber RDBMS features—spatial and text datatypes, OLAP queries, parallel query execution, advanced query optimization, high availability
- Profiling, debugging, administration and monitoring tools

Self-Managing

- Self-administering—backups, validity checks, alerts
- Self-tuning of cache, threads, and queries
- Self-healing statistics

Embeddable

- Good citizen on the machine—shares resources
- Portable database files
- Fully localized
- Wide range of operating systems and programming languages

Secure

- 256-bit strong encryption for end-to-end security
- Database file encryption protects stored data from unauthorized access
- Communication encryption protects in-flight data

SAP Sybase SQL Anywhere
Key Features – Synchronization

MobiLink Server

- Bi-directional data replication to heterogeneous backend database systems
- Scales to tens of thousands of clients
- Consolidated DBMSs supported: Sybase, Oracle, DB2, Microsoft SQL Server, MySQL, HANA
- SQL Anywhere or UltraLite on the remote side
- Transactional integrity across entire system
- Flexible change based synchronizations

Secure

- 256-bit strong encryption for end-to-end security

UltraLite

- In-process database targeted at resource-constrained platforms like handhelds and smartphones
- Standard SQL language
- Built-in synchronization client: change tracking, network management
- 256-bit strong encryption for end-to-end security
- Platforms: Windows Mobile, BlackBerry, iOS, Android

SAP Sybase SQL Anywhere Roadmap
A Front-end Database for your SAP Landscape

Today

- Industry-leading embedded database and data synchronization
- Extends enterprise data to frontline environments
- Rapid development and deployment
- Out-of-box performance
- Self-tuning, self-healing

Tomorrow

Extend real-time data from SAP HANA to mobile and remote applications

Case Study: Indian Railways
Bi-directional synchronization ensures 'always on' operations

POINT OF SALE

Ticket kiosks embedded with Sybase SQL Anywhere enable customers to buy tickets without human intervention

- Passengers can immediately buy an unreserved return ticket for any of the 8,520 trains across regions
- Improves the customer experience—buying an unreserved ticket is easier and takes less time
- Continued ticketing service even if back-end infrastructure is unavailable
- Extremely cost-effective solution for regions with limited or poor connectivity
- Reduces passenger lines and crowds at booking offices and stations

Case Study: BNSF Railway
Capturing maintenance data in remote locations

FIELD SERVICE

Mobile inspectors and crew people can enter field data in extremely remote locations; synchronization is assured

- 32,500 route miles across 28 states and two Canadian provinces
- 8,000 employees working along the rail lines provide field data that is critical for maintenance planning.
- Data is entered into SQL Anywhere on laptops, then synchronize with back-end DB2 database when connection is available.
- Labor savings of $7,500 per day by eliminating dial-up disconnect problems
- Bandwidth-friendly, small footprint, easy to customize

Case Study: CEDC
A distributed IT environment built around SQL Anywhere

RETAIL AND DISTRIBUTION

SQL Anywhere system streamlines and unifies business processes for a geographically diverse organization

- One of the world's largest vodka producers
- Data integrity, reliability, and independence across 84 distribution points
- Synchronization technologies helps unify data
- Rapid deployment
- Reduction in support costs
- Sarbanes-Oxley compliant

Case Study: Security Finance
Trouble-free data consolidation across 1,000 branches

CONSUMER LOAN OFFICES

Consumer load company synchronizes data effortlessly from 1,000 branches—ensuring and up-to-the-moment view of the business

- A data-intensive business with over 1 million customers
- SQL Anywhere captures branch office activity and quickly synchronizes with headquarters using MobiLink
- Virtually no maintenance or onsite support is needed for the SQL Anywhere in branch offices.
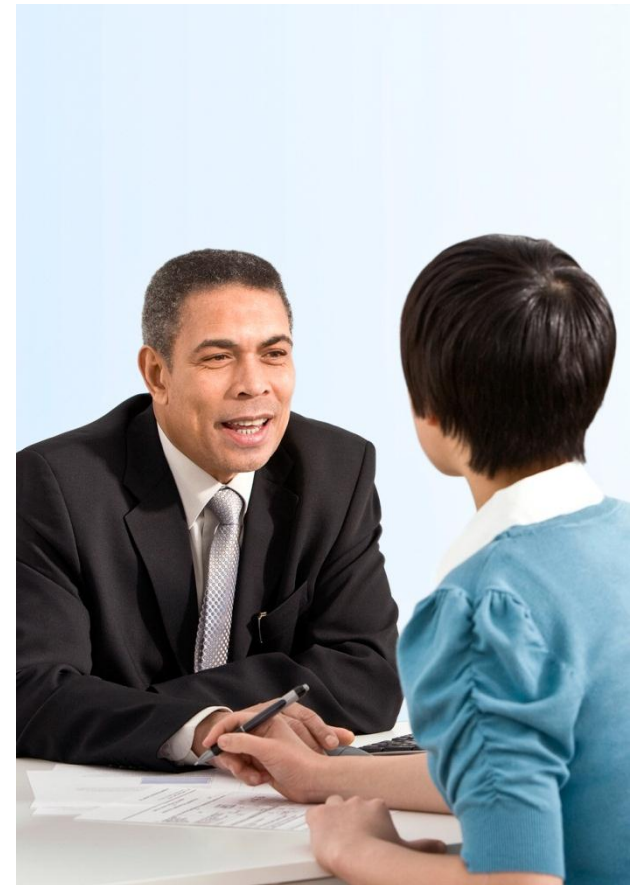
Why Run Remote and Mobile Applications on SAP Sybase SQL Anywhere?

1 Create powerful, data-driven applications that run remotely on servers, laptops, handhelds, and smartphones

2 Extend enterprise data management to all parts of the organization with best-of-breed synchronization technologies

3 Run enterprise databases in zero-administration environments with self-tuning and self-managing capabilities

4 Leverage advanced features and flexible, standards-based platforms to speed application development