Tamino Mobile

The portable XML database that lets you take your most important XML data anywhere!

Tamino Mobile Version 4.0 is a portable, small-footprint database tailored for and targeted at the rapidly growing market for handheld devices and embedded systems. With Tamino Mobile, centrally maintained data can easily be accessed offline by mobile employees where direct wireless connection is not possible or economical.

THE SMART WAY TO BE MOBILE

The Tamino Mobile database enables you to make faster, better and more informed decisions when you are away from your office or home and cannot access your primary information server. Whether for professional or private use, Tamino Mobile 4.0 gives you quick access to up-to-date copies of important information.

Tamino Mobile is the perfect mobile database for managing personal information, such as news, PIN codes, shopping lists, etc. In addition, the rising number of pervasive computing applications will require both structured and unstructured information to be recorded, stored and transferred across a multitude of computers and a variety of networks. Tamino Mobile's database search mechanisms, based on the W3C's XPath Recommendation, provide excellent and efficient offline search capabilities.

INNOVATIVE TECHNOLOGY

Tamino Mobile has been designed for devices with limited processing power, memory and battery capacity. Tamino Mobile's footprint depends on the chosen operating system, the API used and the target
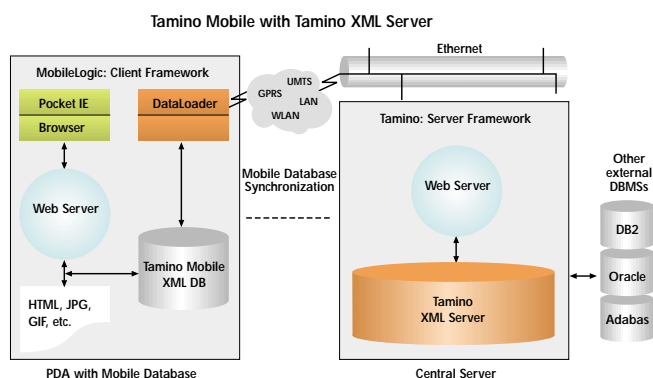

Tamino Mobile with Tamino XML Server

CPU. This ranges from 430-990 KB only. Indexing is defined in Tamino Mobile's database schema, providing faster searches for single attributes, multiple attributes and attribute groups. Indexes can be redefined automatically.

FOR COST-EFFECTIVE MOBILE AND WIRELESS ACCESS

Mobility of data does not necessarily depend on having online access to your central server data via a wireless connection. In most situations, a mobile database containing an up-to-date copy of situation-relevant server data is sufficient. In this respect, Tamino Mobile provides a very economic wireless communication solution for packet- or data-volume-oriented environments. Required offline data is pre-selected through a server-side, mobile accessible portal and is synchronized with your mobile database, either as

soon as a change in the server database occurs or when requested. Once the Tamino Mobile database has been synchronized with pre-selectable information that is of special interest at a specific time and a specific location, you can easily browse and query this information offline. Thanks to its native XML storage capabilities, original documents from a central XML server can be copied to the mobile database. Using XSL stylesheets, these documents can be flexibly reformatted to display only the desired content. HTML-based portal solutions, on the other hand, allow you to drag content onto your handheld, but provide for no intelligent searching. Through information personalization and the associated low transmission costs (particularly where bandwidth is limited), Tamino Mobile provides the most economical solution. Its simple architecture adheres to the

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limitations of handheld devices, Internet appliances and embedded systems. All you need is a standard browser to display your data.

UNIQUE FEATURES
Modular architecture
Thanks to its modular architecture, Tamino Mobile can be optimized for specific application areas, balancing small footprint, performance, robustness and programming features.

Native storage of XML data
Unique in the industry, Tamino Mobile has been designed to efficiently display, navigate and search XML documents, providing dramatic benefits over flat-file and relational databases that are not designed for XML documents. Now you can use XML-intelligent applications on any device.

No format conversion required
By storing XML data in the handheld device, the flexibility and power of XML is made available throughout the entire processing chain – from the central server to the end user's PDA. There's no need to modify server-side XML documents for display on the handheld after their download onto Tamino Mobile. Just apply the appropriate stylesheet.

In-memory or secondary storage
The Tamino Mobile database may run either as a pure in-memory database, or as a database with secondary storage, such as flash and micro disk.

Internationalization
Tamino Mobile follows the Unicode standard for internationalization.

[1] Linux version in planning
[2] PocketPC 2002 for StrongARM processors only
[3] Revision March 23, 2002

Optimal customization
To provide you with the optimum database product for your application, Software AG provides customization on two levels:

- **Installation parameter setting**
  When installing Tamino Mobile it is possible to fine-tune the database by adjusting parameters. Example: to balance performance vs. data footprint
- **Programmable mechanisms**
  Tamino Mobile is flexible in that it allows programmers to choose data structures and define indexes to speed up data, navigation and searches.

GET YOUR DATA WITH MOBILE-LOGIC
MobileLogic is a special Software AG Professional Services framework that builds on pre-developed components (for example, stylesheets) for quickly building custom browser-based portal solutions. MobileLogic provides a data loader module for downloading data from your central Tamino XML Server into Tamino Mobile's database repository. Working off-line after synchronization with a pre-configured portal significantly reduces the volume of transmitted data, cuts down on database update duration and at the same time reduces transmission costs dramatically. The PDA or notebook computer running Tamino Mobile can be synchronized via the corporate LAN, wireless LAN, GPRS or UMTS.

PROFESSIONAL SERVICES
Software AG develops custom applications using a Tamino Mobile de-

veloper kit. Development is based on a Tamino Mobile version designed for Windows NT 4.0 (SP5), Windows 2000 Professional, Windows XP and Linux[1] operating systems.

Deployment Platforms Available
- Runtime license for Windows CE 3.0 and PocketPC 2002[2] on handheld PCs (StrongARM, MIPS or SH3 processors supported)
- Further runtime licenses available for Windows 98, Windows ME, XP Home and Linux[1].
- Runtime versions for other platforms can be made available on request

APIS, XML Support and Utilities
- Native API
  - C++ and Java compliant
- XML API
  - Any XML document can be represented natively as a tree or graph structure
  - DOM XPath interface (DOM level 3 XPath compliant[3])
  - XPath implemented for responding to XML-related queries (meta data and data)
  - Full import/export and parsing of any XML document
  - DOM level 2 Core supported
  - SAX 2.0 supported
  - DTD support
- Transcoding support
  Tamino Mobile 4.0 supports UTF-8, UTF-16, US ASCII and Latin-1 unicode encodings.

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