



# The Next-Generation XML Server

## Core Architecture and Services

Tamino XML Server from Software AG is an award-winning, high-performance data management platform. Based on standard Internet technologies, it empowers you to locate and manage any type of content across your enterprise. At the heart of Tamino XML Server is a powerful XML engine providing all functionality necessary to process, generate and exchange XML documents on the fly.

### BENEFITS

- High performance
- Scalability
- No format-conversion overhead
- Easy use and administration
- Significant cost and time savings
- Enterprise-wide connectivity
- Maximum security
- High availability
- Collaboration among business partners
- Support for J2EE-compliant application servers
- Open Internet-standards-based

### DYNAMIC XML SERVER CORE

Tamino's core supplies the basic infrastructure to run the XML server, including:

- Buffer pool management
- Internal XML parser (validating/non-validating)
- Object processor (for storage)
- Object composer
- Data map (schema container)
  - Store/index Tamino XML objects
  - Maps data to RDBMSs, etc.
  - Maps data to Adabas DBs
  - Maps to InfoFields (Tamino-internal data typing)
- Server extensions/triggers associated with objects
- Various index types for simple/

complex elements and attributes

- Structure index
- Text/standard/no indexing
- Smart disk space management (based on LZW compression)
- Back up, restore and more.

Tamino's core infrastructure enables you to build server extensions and connect external databases. The power of Tamino's core is augmented by core and enabling services.

### CORE SERVICES

The core services are basic functional components inseparably coupled with Tamino XML Server's core. These services are available immediately following product installation.

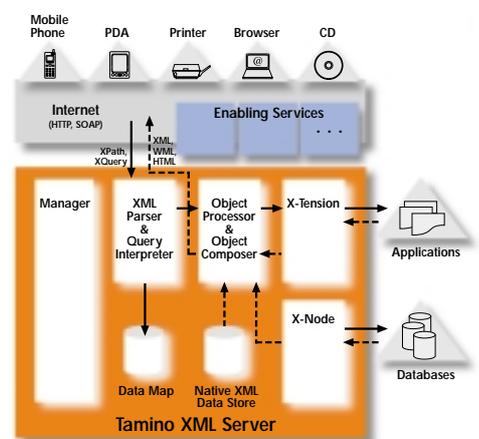
#### Native XML Data Store

- Accessible via HTTP-based DOM and SAX APIs
- Unrestricted storage capacity for
  - Well-formed XML documents
  - Valid XML documents
  - Non-XML documents.

#### Query/Text Retrieval Services

Tamino's built-in query interpreter supports:

- Tamino X-Query (extends standard XPath functionality)
- W3C XQuery<sup>1</sup>



- Full-text retrieval, can be combined with X-Query commands.

### Administration Service

Tamino Manager is a Tamino-specific plug-in for Software AG's Systems Management Hub (SMH). SMH is a browser-based management console for central set up, control, monitoring and performance tuning of one or multiple Tamino servers and other Software AG products. A batch interface is also available.<sup>2</sup>

### XML Schema Service

Tamino creates schemas based on DTDs and XML Schema and supports:

- Recursive elements (recursion level definable)
- Mapping to external data sources
- Index redefinition (by new schema).

<sup>1</sup> When XQuery has been ratified as a W3C standard  
<sup>2</sup> With Tamino Version 3.1 and up



### X-Tension Service

- Server functionality customization (in Java / C++<sup>3</sup>)
- Connection to external applications based on COM (Windows only) and JVM technologies.

### Security Service

This service provides built-in protection of data stored in Tamino by way of:

- Database-specific rights
- Security settings at node level (definable in access control list)
- User/group authorization check
- Four authorization levels (no/read/change/full).

### SQL Engine

- Executes SQL statements (DML, DDL, DCL)
- SQL 2 Entry Level
- ODBC and JDBC interfaces.

### ENABLING SERVICES

The enabling services provide an additional layer of value on top of Tamino XML Server. Tools and frameworks are included for efficient development of applications based on Tamino. These services can easily be extended either through Software AG's own efforts, those of partner companies and by independent Tamino Developer Community members.

### External Database Services

- Consolidation of disparate data sources
- Access to external databases via open API
- Optional Tamino X-Nodes for various hardware platforms and operating systems.

3 Windows systems only  
4 Currently in the planning stage  
5 SuSE Linux 7.2 only

### HTTP/API/EJB Services

- Include plug-ins for major Web servers (Apache API, ISAPI, NSAPI) and other APIs for DOM-based access to Tamino data via Java, JScript, ActiveX, Perl, etc.

### Interactive Services

- Allow ad hoc access to and query of Tamino via browser-based GUIs.

### Schema Editor Service

- Provides Tamino's own schema editor, as well as plug-ins for similar third-party products (e.g. Turbo XML from Tibco Extensibility).

### Application Framework Service

- (Tamino X-Application)
- Enables development of generic applications with minimal effort and offers code samples for download.

### WebDAV Server

- Based on Tamino WebDAV Server for easy drag-and-drop access to Tamino data using WebDAV-enabled browsers or applications.

### Synchronization Service

- For data transfer to and from mobile devices.

### Integration Services

- Synchronous access to external back-end applications (via EntireX Communicator)
- Propagation and transformation of received information
- Asynchronous application integration (via EntireX Orchestrator)
  - Messaging-oriented
  - Loosely coupled.

### UDDI Registry<sup>4</sup>

- Supports SOAP and UDDI standards (private/public) to exploit the power of Web services.

### MANAGE ALL TYPES OF DATA

Thanks to the high-performance add-ons provided by Tamino XML Server's core and enabling services, and its surrounding solutions, Tamino is an extremely versatile management platform for all types of structured and unstructured data.

### JOIN THE COMMUNITY

Software AG invites you to join its online forum, offering valuable information, guidance and help to developers who intend to build software applications, solutions or products based on Tamino XML Server. Register now at: <http://www.tamino.com/developer>

### SUPPORTED PLATFORMS

- Windows NT 4.0 (SP6a)
- Windows 2000 (SP2 - Professional, Server, Advanced Server)
- Windows XP
- Sun Solaris 7 and 8
- IBM AIX 4.3.3
- SuSE Linux 7.1 & 7.2 (Intel & S/390<sup>5</sup>)
- Red Hat Linux 7.2
- HP-UX 11.0 (32 bit)
- OS/390

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