Tamino

Migration Guide

Version 10.7

May 2021

WEBMETHODS

This document applies to Tamino Version 10.7 and all subsequent releases.

Specifications contained herein are subject to change and these changes will be reported in subsequent release notes or new editions.

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Preface

Tamino XML Server 10.7 is the successor to Tamino XML Server 10.3. This document describes migration issues that you should be aware of when upgrading to version 10.7 from version 10.x, 9.x, 8.x or 4.4.

If you wish to upgrade to Tamino 10.7 from a Tamino version earlier than 4.4, you must first upgrade to 4.4. If necessary, contact your software supplier or refer to the documentation set for Tamino 4.4, which is available at Software AG's web-based Product Support System, Empower (**https://empower.softwareag.com/**).

The intended audience for this document is system administrators, database administrators and application developers.

This document covers the following migration aspects:

General	Discusses migration of schemas and data, and also changes in the functionality of Tamino.
Upgrading and Downgrading Using `SET VERSION`	Deals with all aspects of version management, especially with upgrading, downgrading and coexistence.
Migrating Applications	Deals with migrating applications.

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Document Conventions

Convention	Description
Bold	Identifies elements on a screen.
`Monospace font`	Identifies service names and locations in the format *`folder.subfolder.service`*, APIs, Java classes, methods, properties.
`Italic`	Identifies: Variables for which you must supply values specific to your own situation or environment. New terms the first time they occur in the text. References to other documentation sources.
`Monospace font`	Identifies: Text you must type in. Messages displayed by the system. Program code.
{ }	Indicates a set of choices from which you must choose one. Type only the information inside the curly braces. Do not type the { } symbols.
|	Separates two mutually exclusive choices in a syntax line. Type one of these choices. Do not type the | symbol.
[ ]	Indicates one or more options. Type only the information inside the square brackets. Do not type the [ ] symbols.
...	Indicates that you can type multiple options of the same type. Type only the information. Do not type the ellipsis (...).

Online Information and Support

Software AG Documentation Website

You can find documentation on the Software AG Documentation website at **https://documentation.softwareag.com**.

Software AG Empower Product Support Website

If you do not yet have an account for Empower, send an email to empower@softwareag.com with your name, company, and company email address and request an account.

Once you have an account, you can open Support Incidents online via the eService section of Empower at **https://empower.softwareag.com/**.

You can find product information on the Software AG Empower Product Support website at **https://empower.softwareag.com**.

To submit feature/enhancement requests, get information about product availability, and download products, go to **Products**.

To get information about fixes and to read early warnings, technical papers, and knowledge base articles, go to the **Knowledge Center**.

If you have any questions, you can find a local or toll-free number for your country in our Global Support Contact Directory at **https://empower.softwareag.com/public_directory.aspx** and give us a call.

Software AG TECHcommunity

You can find documentation and other technical information on the Software AG TECHcommunity website at **http://techcommunity.softwareag.com**. You can:

- Access product documentation, if you have TECHcommunity credentials. If you do not, you will need to register and specify "Documentation" as an area of interest.
- Access articles, code samples, demos, and tutorials.
- Use the online discussion forums, moderated by Software AG professionals, to ask questions, discuss best practices, and learn how other customers are using Software AG technology.
- Link to external websites that discuss open standards and web technology.

Data Protection

Software AG products provide functionality with respect to processing of personal data according to the EU General Data Protection Regulation (GDPR). Where applicable, appropriate steps are documented in the respective administration documentation.

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In general, migration of databases, schemas and data is not required when moving from Tamino 8.x, 9.x or 10.x to Tamino 10.7. It is only necessary to set the version of any existing version 8.x or 9.x databases to version 10.7 by using the `SET VERSION` command on the database in the Tamino Manager.

Related Documents

If you need more information about migration, please refer to the following:

- **Release Notes**
  For possible information on new, modified or removed features, refer to the *Release Notes*.
- **Last-minute information**
  Check for important last-minute information relevant for migration in the *readme.txt* file.

Definitions of Terms used

The following definitions are used throughout this document:

Migration

Migration means the transfer of a Tamino system from an older to a newer version, or from one machine to another. The target system may have the same architecture and operating system or different architecture and operating system. Migration includes both upgrading and also all other activities to accommodate changes in the structure and organization of Tamino schemas, data and applications so that the newer version of Tamino can be used as efficiently as possible.

Upgrade

Upgrade means the process of transferring a Tamino database from an older to a newer version. This includes all activities necessary for making the database operational under the new version, but not optimization. Upgrading is done using the `SET VERSION` command (see the section ***Upgrading and Downgrading Using*** *`SET VERSION`*).

Downgrade

Downgrade means the process of transferring a Tamino database from a newer to an older version. This could be used if, for example, you install the new Tamino version on a test basis but wish to return to the older version for production purposes. See the section ***Upgrading and Downgrading Using*** *`SET VERSION`* for more information.

License File

Tamino 10.7 requires its own license file which is delivered with the product. Tamino 10.7 does not work with a license file from any of the previous Tamino version.

Migration of Tamino Databases from Linux 32-bit to 64-bit Platforms

The following steps are necessary in order to migrate Tamino databases from Linux 32-bit Linux to 64-bit:

- Make backups of applicable databases in the 32-bit environment
- Install a 64-bit Tamino version on a 64-bit Linux machine
- Transfer the backup files (<*PRODUCT_DIR*>/*db*/*.*1B0*) to the 64-bit Linux machine
- Restore databases via `Create Database From Backup`.

  For more information see section *Database Handling*.

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This chapter describes what you should know about the coexistence of different Tamino versions and upgrading and downgrading between them. In detail, the following topics are described:

Coexistence of Tamino Version 10.7 and Previous Tamino Versions

Tamino version 10.7 can coexist with previous versions on the same computer. After you have installed Tamino Version 10.7, you can use the `SET VERSION` operation, which is activated using the *Tamino Manager* **SET VERSION** button, to upgrade from version 8.x, 9.x, or 10.x to version 10.7.

Note: The authentication mode of the database needs to be set to "none" before a database can be upgraded via `Set Version`. For more information see section *Authentication Modes*.

Upgrading from Previous Versions of Tamino to Tamino 10.7

The `SET VERSION` operation converts a database from an older version to a newer version. This involves updating the database's internal structure level, which is necessary when there is version dependent data for the datastore or X-Machine layer.

Caution: Before you execute the `SET VERSION` operation, make a backup of the current state of your database.

Caution: Downgrading from version 10.7 to any previous version is not supported. (For more information, see the section ***Downgrading***.) As setting the Tamino version to 10.7 is an irreversible process, the only way to return to the old state of your original Tamino database is to restore a backup of that database into an installation of the correct Tamino version.

Before activating the `SET VERSION` operation the database must be known Tamino 10.7. The database to be upgraded is not known if the database version is older than 9.5 or the Tamino 10.7 installation is using another root directory (side-by-side installation). There are two possibilities to do this:

- Create the database to be upgraded using a backup
- Transfer the meta-data of the database to be upgraded to the internal configuration store used by Tamino 10.7 using:

  <PRODUCT_DIR>/v107/bin/MoveDbConfig.[sh|cmd] <database name>

You can activate the `SET VERSION` operation using **inoadmin** tool.

When upgrading from a previous version of Tamino to Tamino 10.7, note the following:

- Whilst an upgrade is in progress, the database cannot be accessed by applications.
- If, for any reason, the upgrade fails, it can be repeated and restarted at the point where it was interrupted.
- The upgrade from Tamino version 8.x, 9.x, or 10.x to Tamino version 10.7 is rejected if one or more of the following conditions is true:
  - The version of the database to be upgraded is not version 4.4, 8.0, 8.2, 9.5, 9.7, 9.12, 10.1 or 10.3
  - The database to be updated is a replication database.

Downgrading

Downgrading a Tamino 10.7 installation to a prior version is not supported. Setting the version of a database to version 10.7 is irreversible.

However, it is possible to operate multiple Tamino installations with different versions in parallel on a single computer.

If you want to return to a former version of Tamino, you must restore a backup of your original database of that specific version (via `restore` with the option `Don't recover`, or via `recover until` with a timestamp before the SET VERSION was done, or via `create from backup`).

You can restore the database backup of a former Tamino version even if that version of Tamino is not installed. Check whether the relevant backup is still in the backup list of that database. If it is, you can simply restore that backup with the option “Don't Recover”. Afterwards you should do the `SET VERSION` immediately so that you can start the database again. If your backup is not present in the backup list, then you need a separate copy of the database backup. Use the function `Create Database from Backup`.

Important: After you have restored your former installation using this backup, we recommend making a new backup. Use this backup instead of the original one if you later want to recover to the state after restoration of the former Tamino version.

4 Migrating Applications

If you have written applications that are based on Software AG's query language X-Query and wish to migrate these applications to the W3C query language XQuery, guidelines for doing this are provided in the *Release Notes* document of the documentation set for Tamino XML Server version 4.2. You can find the documentation archive for version 4.2 at Software AG's web-based Product Support System, Empower (**https://empower.softwareag.com/**).

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