

ODABA Releases TODBMS and Tools 17.3.0

ODABA is a Terminology-Oriented Database Management System (TODBMS) based on standards for object-oriented databases (ODMG 2003). In contrast to other databases that are focused on big data processing, ODABA stands for smart data processing, i.e. it is intended to be used for complex problems and complex data structures in combination with complex processing rules.

The latest version of ODABA has been released on Saturday, October 31st, 2025. With ODABA 17.3.0 a version with several bug-fixes, some new features and minor changes has been provided. For Windows users, a DevStudio 2022 compiled version is released as 64 bit. The 32-bit version is not longer provided as binary. For Linux users, GCC 6 is supported.

Binary installations for Windows are delivered as 64 bit versions compiled with VS2022.

More details are described in change logs and in notices delivered with the development databases (ODE tools: **Objects/Notices**). Notices delivered with the databases also contain a list of open topics planned for next releases. Notices are stored separately for basic functions (**sos.dev**), database kernel (**opa.dev**), GUI framework (**gui.dev**) and ODE tools (**ode.dev**).



run Software-Werkstatt GmbH
Winckelmannstrasse 61
12487 Berlin

Tel: +49 (30) 609 853 44
e-mail: run@run-software.com
web: www.run-software.com

Berlin, October 2025

Content

ODABA is a Terminology-Oriented Database Management System (TODBMS) based on standards for object-oriented databases (ODMG 2003). In contrast to other databases that are focused on big data processing, ODABA stands for smart data processing, i.e. it is intended to be used for complex problems and complex data structures in combination with complex processing rules.

The latest version of ODABA has been released on Saturday, October 31st, 2025. With ODABA 17.3.0 a version with several bug-fixes, some new features and minor changes has been provided. For Windows users, a DevStudio 2022 compiled version is released as 64 bit. The 32-bit version is not longer provided as binary. For Linux users, GCC 6 is supported.

Binary installations for Windows are delivered as 64 bit versions compiled with VS2022.

More details are described in change logs and in notices delivered with the development databases (ODE tools: **Objects/Notices**). Notices delivered with the databases also contain a list of open topics planned for next releases. Notices are stored separately for basic functions (**sos.dev**), database kernel (**opa.dev**), GUI framework (**gui.dev**) and ODE tools (**ode.dev**).

Detailed changes (ODABA)

The behavior of some features has been improved. Several bugs have been removed. Removed bugs and minor improvements are reported in the change log.

ODABA Database kernel (base)

Several ODABA components have been improved or provide extended features:

Lock/Unlock

Locking strategy has been changed in order to prevent internal transactions from dead-locks. When updating data, always the owning collection is locked while updating data and execute related context functions

Enumeration attributes

Enumeration attributes allow changing the order key (name, label, title, code), which will influence the string representation of enumeration attributes

Data exchange

Data exchange nodes support type context for the relates instance type.

OHTTPServer

OHTTPServer requests are processed within a transaction in order to rollback changes in case of errors. Moreover, posted data is passed to request and can be requested by calling postedDate() function

Several errors have been fixed and storing data processes have been optimized..

ODABA Application Program Interface (base/opa)

Some extensions and some changes have been made on API functionality.

Change status has following meaning:

- new - New function, class, enumeration or enumerator
- updated - Function has been updated
- expanded - Functions with same name but different parameter lists have been added
- removed - Function has been removed from interface
- return - return value data type changed
- osi - Function has been added to OSI interface

Interface changes:

Basic classes (namespace **odaba**)

- **Application**
 - traceMessage (new, C++, osi)
 - registerProcess (new, C++, osi)
 - applicationErrorText (new, C++, osi)
- **Database**
 - markUpdatedEBI (new, C++, osi)
 - systemInfo (new, C++, osi)
 - initializeThread (new, C++, osi)
- **Property**
 - isInternalProperty (new, C++, osi)
 - unlockCollectionForUpdate (updated, C++, osi)
 - unlockCollection (updated, C++, osi)
 - setAutoSelection (new, C++, osi)
 - propertyExist (new, C++, osi)
 - openExternData (new, C++, osi) - with string
 - execute (new, C++, osi) - passing data to function
- **Value**
 - toHex (new, C++, osi)
- **Option**
 - iniFilePath (new, C++, osi)
- **Date**
 - subtract (new, C++, osi)
 - operator- (new, C++)
- **DateTime**
 - subtract (new, C++, osi)
 - operator- (new, C++)
- **Time**
 - subtract (new, C++, osi)
 - operator- (new, C++)
- **String**
 - setCodingType (new, C++, osi)
 - appendWord (new, C++, osi)
 - appendLine (new, C++, osi)
 - formatString (new, C++, osi)
 - extract (expanded, C++, osi)
- **BaseContext**
 - state1 (expanded, C++, osi)
 - state2 (expanded, C++, osi)
 - state3 (expanded, C++, osi)
- **utils::HTTP**
 - postedData (new, C++, osi)

- **utils::File**
 - freeDiskSpace (new, C++, osi)
- **utils::TextFile**
 - read (expanded, C++, osi)

More details are described in ODABA online documentation: **Reference documentation/ODABA Application Program Interface.**

ODABA Script Interface OSI

OSI interfaces have been provided for all new (or changed) interface functions. Several bugs when executing OSI functions have been removed.

Open document support

No changes made.

Detailed changes (ODE and GUI framework)

New application for defining and testing HTTP server requests has been provided. The Associate feature has been improved. Also, some bugs in managing GUI resources have been removed.

The version now supports QT5 and QT6. QT4 is not longer supported

GUI Framework (gui)

Bug fixes have been made. The Associate dialog now provides instances from the source collection, which are not yet in the target collection, when source and target are compatible.

An important change has been made to focus activate and deactivate logic (enter and leave events). So far, events had been generated beginning with the selected control along the parent hierarchy up to the main window. Now, generating events will stop on the next higher modal dialog.

ODE tools (ode)

HTTPMapper tool now supports post data. Moreover, posted data and result support JSON formatting. Some minor errors have been removed.

ODABA GUI Application Program Interface (gui/ode)

By accident in the last version class members have not been generated properly for several resource classes. This had not been a problem when using resource classes in OSI functions or obtaining resources from the application, but when construction classes as Font, Size, Point, Color in an application, this could cause problems.

Several extensions and some changes have been made on API functionality.

Change status has following meaning:

- new - New function, class, enumeration or enumerator
- updated - Function has been updated
- expanded - Functions with same name but different parameter lists have been added
- removed - Function has been removed from interface
- return - return value data type changed
- osi - Function has been added to OSI interface

Context classes

- **GUIBaseContext**
 - reopenProject (new, C++, osi)
 - resetDesignCache (renamed, C++, osi) - frrom invalidateResourceCache
 - doBeforeValueChanged (new, C++, osi)
- **ControlContext**
 - columnEvent (new, C++, osi)
 - removeRegion (new, C++, osi)

Resource classes

- **Color**
 - Constructor (new, C++, osi)
- **Cell**
 - hasData (new, C++, osi)
- **Line**
 - hasData (new, C++, osi)
- **Region**
 - removeColumn (new, C++, osi)
 - removeRegion (new, C++, osi)
- **Font**
 - color (new, osi)
 - textColor (new, osi)

ODABA Documentation

The documentation tree has been extended by adding new function documentation.

Installing ODABA

ODABA, including applications and libraries, is available for free under Open Source licenses (GPL). ODABA runs on various hardware configurations, operating systems and works on many desktop environments. ODABA can be obtained as source code distribution and in various binary formats from <http://sourceforge.net/downloads/odaba/>.

Several features require third party components, which have to be installed before installing ODABA. When the corresponding libraries are not available, one may install ODABA, but the features referenced below will not work.

- libzip - required for LibreOffice document generation
- zlib - required for data compression and database backup and restore)
- curl - required for enhanced email support)
- hunspell - required for spell check in ODE tools, like terminus
- libmicrohttp - required for OHTTPServer(D)
- Qt4 or Qt5 - for running the ODABA GUI framework

Using optimizing compiler GCC 6, `this` pointer checks must not be optimized. Use `-fno-delete-null-pointer-checks` option when using GCC optimizing compiler.

Previous Releases

With the release of ODABA 17.3.0 we declare the end of live for all previous released ODABA versions less than version 17.3.0. Bug fixes on 17.x.x version are provided on demand.

System model has not been changed and no version upgrade is required.

About RUN-Software

RUN-Software develops database management system ODABA and tools since 1994. Besides general and particular software solutions, RUN-Software publishes theoretical works about database theory and terminology in connection with data modeling.

See also: www.run-software.com