

English User Manual

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ODBC Driver

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1. Installation

1.1. Installation of the 16 bit driver

To install the driver insert the disk and select from Windows FILE menu - RUN - A:\SETUP. Do not use the ODBC Administrator function ADD DRIVER as this function is obsolete. After the welcome screen you will get a list of available drivers:

Available ODBC Drivers:	Cancel
vailable ODBC <u>D</u> rivers:	
A MARINE CARL CONTRACTOR	11-1-
SW-Tools	<u></u> cib

1. Available drivers on the installation disk

You should mark the SW-Tools ODBC Driver for installation and choose OK.

The ADVANCED options as shown below controls version checking and should normally not be adjusted. However you may read the version number of the driver:

Advanced Installation Options		Versions
Selected Driver(s) Install selected driver(s) with version checking	OK Cancel	<u>Component:</u> ODBC Driver Manager SW-Tools
Driver Manager	<u>H</u> elp	1
 Install <u>Driver</u> Manager with version checking <u>A</u>lways install Driver Manager Do <u>n</u>ot install Driver Manager 		Component Details File Name: SWODBC16.DLL Description: Driver
Translators Install <u>T</u> ranslators with version checking Always install Translators		Version:4.36.9610Creation Date:29-10-96Size:434.768 bytes
O Do not install Translators	Versions	Close

2. Advanced options and version number by installation

The ODBC driver is now copied from the disk to Windows System directory together with some small test tables and you will get a list of available data sources.

The ODBC driver manager supplied on the disk originates from Microsoft ODBC SDK 2.10 and will be installed/upgraded unless you have deselected this in the advanced options above.

Data Sources	
Data Sources (Driver):	Close
sdk21-Btrieve (Microsoft Btrieve Driver (file.ddf)) sdk21-csv (Microsoft Text Driver (*.txt; *.csv)) sdk21-Dbase (Microsoft Dbase Driver (*.dbf))	<u>H</u> elp
sdk21-Excel (Microsoft Excel Driver (*.xls)) sdk21-Fox (Microsoft FoxPro Driver (*.dbf))	<u>S</u> etup
sdk21-Paradox (Microsoft Paradox Driver (*.db)) sdk21-txt (Microsoft Text Driver (*.txt; *.csv))	Delete
SWI ools (SW-Lools)	<u>A</u> dd
	Drivers

3. List of data sources after installation

If you just select CLOSE from this menu, the driver is installed with a default SETUP for the test files and you can change this later after the first test using the test files. It is not required to adjust the options menu as this is for test logging only:

- ODBC Optio	ns
Stop Tracing Automatically	Select <u>File</u>
Trace File: \SQL.LOG	
OK Cancel	<u>H</u> elp

4. The options menu

Now select your favourite ODBC database program as MS-Query, Access or some other and make a quick check that the SW-Tools ODBC driver is available and the test tables are useable.

Hicrosoft	tQuery (jew Format Table <u>C</u> [사 SQL 승문장]	iteria <u>R</u> ecords Win C _{EI} V=Σ <u>2</u>	dow <u>H</u> elp ↓ X↓		
Ol City Company Country CustD Phone	DBC Customer		ODBC Orders istID derDate derID odID	Add Tables Lable: Attikeldatei Attikelgruppendatei Attikel-Stammdatei 1 Kundenauftrags Kopf Kundenauftrags Positionen Kunden-Bewegungen	Add Close
CustID	Company	Country	Pł	Kunden-Stammdatei	
ALWAO	Always Open Quick Mar	USA	(801) 555-7	Lieferantendatei	100000
ALWAO	Always Open Quick Mar	USA	(801) 555-7	ODBC Customer	Options
ALWAO	Always Open Quick Mar	USA	(801) 555-1		
ANDRC	Andre's Continental Food	USA	(206) 555-9	Øwner.	Ŧ
•	ly a see yaa	33¥3		ante de la composición de la composición Composición de la composición de la comp	
Include new	tables in the current query	r	ſ	Directory:	×.

5. MS-Query example using the test files

1.2. Installation of a new version of the driver

You should just follow the steps described above. It is not necessary to delete the old version before you upgrade. Your setup information for the different Data Sources using the driver will be kept with exception of the DEMO system (Data Source Name SWTOOLS or SWTOOLS-32) where you must reinput any changes done to these.

1.2.1. Deleting an old driver

Deleting a driver causes all setup for all data sources using the driver to be lost! The deletion removes the driver itself (SWODBC16.DLL or SWODBC32.DLL) but not the small testsystem included.

1.3. The README file on the installation disk

The README file contains more technical information on the ODBC driver and some SQL examples. The file is a plain text file and may be edited and printed.

1.4. Installation of the 32 bit driver

The 32 bit driver requires a 32 bit operating system, i.e. Windows 95, NT or Windows 3.11 with WIN32s installed.

The 32 bit driver is installed exactly in the same way as the 16 bit driver described above. The driver has "32 bit" as part of its name.

Install Drivers		Data Sources	
Select one or more ODBC drivers to install from the list, then choose OK.	ОК	Data Sources (Driver):	<u>C</u> lose
Available ODBC Drivers:	Cancel	MS Access 7.0 Database (Microsoft Access Driver (*.mdl SW Tools32 (SW-Tools 32 Bit Driver)	<u>H</u> elp
SW-Tools 32 Bit Driver	<u>H</u> elp		<u>S</u> etup
			Delete
			<u>A</u> dd
		Options	D <u>r</u> ivers
l	<u>A</u> dvanced		

6. Installation of the 32 bit version

1.5. Selecting the 16 or 32 bit driver

If you are working with Windows for Workgroups 3.11 you should normally select the 16 bit driver.

If using Windows 95 or NT the 32 bit driver should be preferred unless your application is 16 bit. Note that long filenames are supported in the 32 bit driver only.

On the 32 bit operating systems there are separate ODBC driver managers for 16 and 32 bit drivers so both may be installed.

1.5.1. Using 16 bit applications with the 32 bit driver

The 32 bit driver contains generic thunking libraries which enable 16 bit applications to use the 32 bit driver. When the 32 bit driver is installed it becomes available for both the 32 and 16 bit ODBC administrator and can be set up separately from each of these.

If the 32 bit driver is not shown in the 16 bit applications you may have an old version of the ODBC driver manager where the 32 bit driver must be activated as SYSTEM DSN driver before it can be used as 16 bit.

1.5.2. Using 32 bit applications with 16 bit drivers

This is not possible.

2. Setting up the ODBC driver

When you install the driver for the first time is it automatically set up for use with the testsystem shipped with the driver:

Data Sources		👄 SW-Tools ODBC					
s (Driver): Microsoft Excel Driver (*.xls)) 7.0 Database (Microsoft Access Driver (*.mdl (SW-Tools 32 Bit Driver)	Data source Name Description	SWTools32 SW-Tools 32 Bit OD	04.36.9610p / 32				
<u>Setup</u> . Deleta ▲dd D <u>rivers</u>	Path's Basis.ssv Data Dictionary Dgtabase Qualifier is Table Owner is Table Owner is Table name is Remark is Max name length Eixed basis Company number Internal Test	Not used Not used Standard ID File description 001	Advanced options Allow update SQL names Uppgrcase only <u>Sort columns by fieldnumbers</u> <u>Ok</u>				

7. The default setup for the 32 bit version

2.1. Version number

On the top right of the screen you note 04.36.9610p/32 which indicates major version 04, minor version 36, release month 9610, for Production and 32 bit.

2.2. Name and description

The name is used when an application connects to the driver (DSN=DataSourceName). One ODBC driver can be installed many times with different names and setup. The description is a free text for your information.

2.3. Paths, Fixed basis and Company number

These identify the database definitions, servers and filenames, see below.

2.4. Behaviour against the application

These parameters controls how names are returned to the application used. In general you should not change these after you have defined applications programs using the driver as table names and field names may change causing the programs to stop working.

2.4.1. Qualifier and Owner

These should be set as NOT USED. It is possible to have either the file ID or the database interface name here as information returned.

2.4.2. Table name and remark

These defines how the table names are used in the SQL calls. The table name which is shown in, for example MSQuery may be the real filename, the file description text or the separate StandardId for the file.

The table description may then be set to give a further description of the table but is not shown in applications such as MSQuery.

2.4.3. Max name length and Uppercase

If needed the SQL field name length may be limited, and the name made case sensitive.

2.4.4. Sort columns by field numbers

By default the fields will be sorted on the field name. If you rather prefer to have the fields sorted by field numbers as entered in the datadictionary set this option on.

2.5. Internal test

Always leave this field blank unless otherwise told by the support staff. Each character of this field switches on different levels of test prints which goes to the file C:\WIF. It is useful for diagnosing problems but slows down the system and may fill up the disk if set accidentally.

2.6. Updating tables via the ODBC driver

To do this you must have a licence which allows updates.

The abilities to do updates is activated by setting the Allow Update option ON and also in the Data Dictionary setting the database interface (Server) to allow updates for the specific table. When update is activated you may use applications as Access or MSQuery to amend, create and delete rows. Note that all programs updating files should be carefully tested before use, and done on your own responsibility.

2.6.1. Activating WRITE

Using the UPDATE facility with the ODBC driver enables foreign products as ACCESS to update directly in X-Basic files.

NOTE: Every single update should be tested carefully before trusted

As the datadictionary contains all informations of the key structures changing a field will update all index this field is part of. As well may an insert or delete be reflected in the maximum of 15 indexes in a BASIC file.

To activate write you must check the following

- LICENSE for ODBC driver must allow Write and marked for this PC
- LICENSE for CTRAS must be present, allow Write and marked
- FDF CTRAS (X-Basis library) must be activated for WRITE
- The files you want to update must use this, not just X-Basic
- The ODBC driver must be setup and marked for Update
- If using MSQuery the update should be activated from its menu

We strongly recommend the use of server version (006.003) as this has been updated for the new codetable structure.

A special routine had to be implemented for the 6 digit dates in BASIC files (,6, fields) as these by read are converted to the ODBC standard DATE structure. By write such field is converted back and will always be written as YYMMDD.

2.7. W95B setup

Windows 95B together with Office 97 takes advantage of facilities in ODBC 3.0 whereas the driver setup has been moved partly away from the ODBC Administrator and is instead done online when a connection is made.

This procedure is now supported as the parameters from the online setup will be correctly stored in the new .DSN files.

3. Activating systems other than the testsystem.

The ODBC driver uses the same Data Dictionary as the TRIO package and such a Data Dictionary must be defined before the driver can be used. Each table and field needed must be described in it together with the database servers. Definitions may be imported from the database. For details refer to the Data Dictionary Manual.

When such definitions are present and useable in TRIO you will not have to change these to use the ODBC driver. All that is needed to be done is to make the ODBC driver point correctly to them.

3.1. The Data Dictionary preferences

As an example when TRIO is installed with the standard directories the Preferences looks like:

	Preferences
File definitions:	c:/mydir/xbasic/dmf/
Database:	c:/mydir/xbasic/isa/
Spool files:	J:/TMP/
Applications:	c:/mydir/rap/
Basis.ssv:	c:/mydir/xbasic/
Language:	English
Sign:	Default ±
Date output:	Year/Month/Day ±
Separator for:	Decimal point=. 🛓 is: .
Ask for save wh	en changes in report
⊠ <u>U</u> se 3D Grid-edi	ting 14 ± <u>OK</u>
Pitchsize for Grid-	diting <u>Cancel</u>

8. The preferences in the Data Dictionary Definition

3.2. Creating a new Data Source Name

You create a copy of the ODBC data source by ADD in the Administrator, by default the name is TRIO, but this may be changed, and set the PATHS to point to the used paths.

-	SW-Too	ls ODBC
Data source		04.37.9611
<u>N</u> ame	TRIO	
<u>D</u> escription	ODBC Driver for Th	RIO standard installation
Path's		
<u>B</u> asis.ssv	C:\MYDIR\XBASIC	
Data Dictionary	C:\MYDIR\XBASIC	\DMF
D <u>a</u> tabase	C:\MYDIR\XBASIC	NSA .
<u>Q</u> ualifier is	Not used 1	Advanced options
Table Owne <u>r</u> is	Not used 1	Allow update
Table name <u>i</u> s	Standard ID	E IX SQL names Upp <u>e</u> rcase only
Remar <u>k</u> is	File description	E Sort columns by fieldnumbers
<u>M</u> ax name length		
<u>F</u> ixed basis		
Company number	001	<u>k</u>
Internal <u>T</u> est		<u>C</u> ancel

9. The ODBC driver setup for this installation

Note that also the Company Number must be set correctly and the field Fixed Basis should be left blank.

3.3. The Data dictionary driver setup

The Data Dictionary installation details for a file could look like:

0		File				•			
File ID:	dk Debtor file	•	X-Basic			2	Ŀ		
Filename:	90/GF-03000abc		Standard ID:						
Realname:	C:/MYDIR/XBASIC/0)/90/GF-03000.001	1			_			
Filetext:	Debtor file]						
		Database interfac	e				<u>.</u>		
Туре		X-Basic		±	<u>0</u> K				
Internal Type	e	X-Basic		±	<u>C</u> ancel				
Description		X-Basic				23			
LU0 Path		C:\MYDIR\XBASIC\0\			Delete				
User				1	63	88			
Password		Te.			<u>C</u> ompany				
Server		200.0.0.2					X-Basi	C	
Connection t	уре	TCP/IP		±	Company				<u>0</u> K
Server pass	word			ĺ	001				<u>C</u> ancel
Code conver	sion	UNIX/DOS German		<u>+</u>		Í			
Read only		Yes.		ŧ					

10. The Data Dictionary information for the X-Basic driver

4. Notes and hints on different applications using ODBC.

ODBC stands for Open DataBase Connectivity and is a standard which can be used by a lot of applications.

However the single product/version may have specific behaviour, requirements or limitations why we in the following will make a short list of the products which has passed our eyes and our notes on these.

If you are using other applications we would like to here your experience and hints about these.

4.1. MSOffice.

Note that when you install MSOffice you should explicitly state that MSQuery must be installed to get ODBC access in Word, Access and Excel. MSOffice version 4.2(16 bit/W311) and 7.00(32 bit/W95,NT) is tested.

4.1.1. MSQuery

Tested with MSQuery version 1.00(16 bit/W311) and 2.00(32 bit/W95,NT) is tested. Has a limitation of 65535 rows in the 16 bit version.

4.1.2. Access

Tested with Access version 2.00(16 bit/W311) and 7.00(32 bit/W95,NT) is tested.

4.1.3. Word

Tested with Word version 6.00(16 bit/W311) and 7.00(32 bit/W95,NT) is tested.

4.1.4. Excel

Tested with Excel version 5.00(16 bit/W311) and 7.00(32 bit/W95,NT) is tested. Has a limitation to 16384 rows both for 16 and 32 bit versions.

4.2. Impromptu

Known to be working.

5. Notes on different database interfaces

5.1. CTras Quattro interface

This is supplied in a 16 bit version only. It may be used together with LAN, direct ALM or Windows sockets. If you are using Windows Sockets ensure that the latest version of CTRASQ.DLL is installed.

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