



pilo++db.trans  
user manual (eng.)  
for version 3.1

manual version 1.0

06.10.99

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software for marketing

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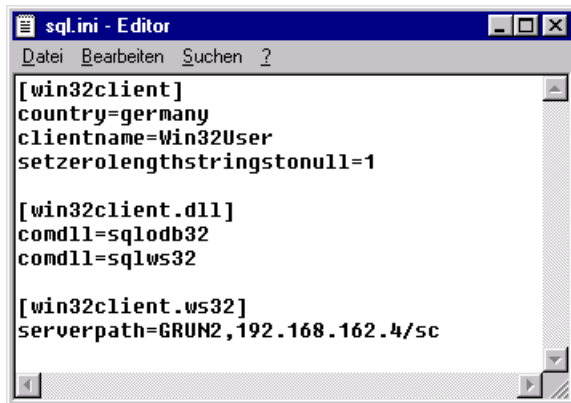
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## db.trans - Installation Guide

1. Insert the db.trans CD into the CD ROM drive or download the db.trans package from [www.pilodata.com](http://www.pilodata.com)
2. Create a directory for db.trans (e.g. C:\dbtrans)
3. Copy all files into this directory
4. Merge the statements of your SQL.INI with the SQL.INI from the db.trans package

## Connecting to Centura SQL Base

Read the Centura manuals for details about connecting to Centura SQL Base. Copy the following parameters to your SQL.INI file:



```
sql.ini - Editor
Datei Bearbeiten Suchen ?

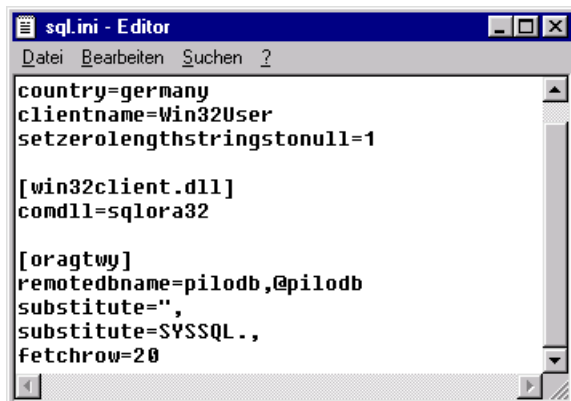
[win32client]
country=germany
clientname=Win32User
setzerolengthstringstonull=1

[win32client.d11]
comd11=sqlodb32
comd11=sqlws32

[win32client.ws32]
serverpath=GRUN2,192.168.162.4/sc
```

## Connecting to Oracle

Read the Oracle manuals for details about connecting to the Oracle server. Copy the following parameters to your SQL.INI file:



```
sql.ini - Editor
Datei Bearbeiten Suchen ?

country=germany
clientname=Win32User
setzerolengthstringstonull=1

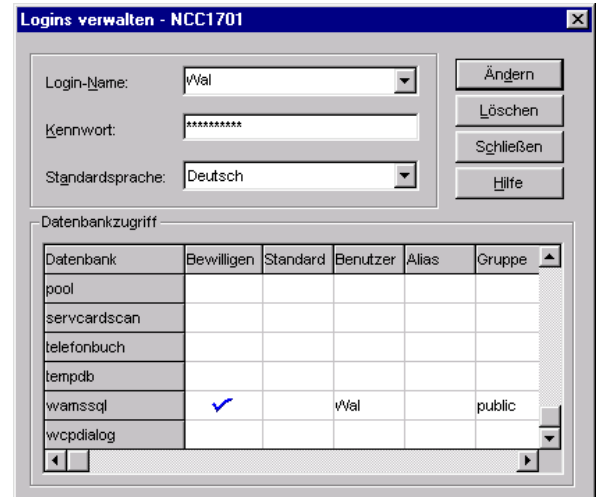
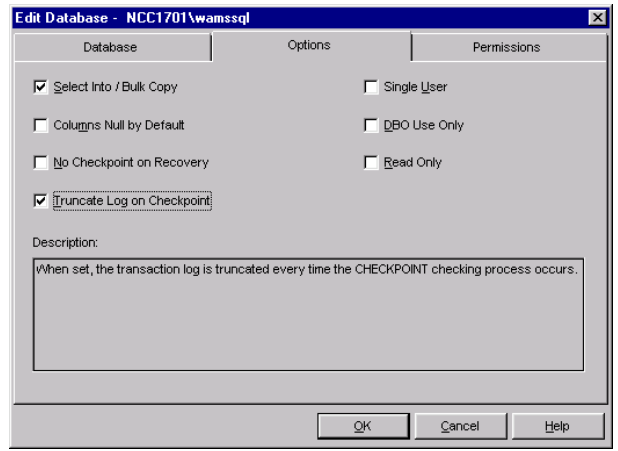
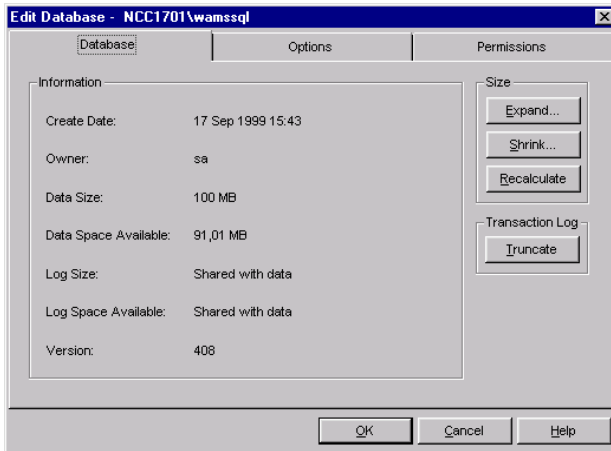
[win32client.d11]
comd11=sqlora32

[oragtwy]
remotedbname=pilodb,@pilodb
substitute=",
substitute=SYSSQL.,
fetchrow=20
```

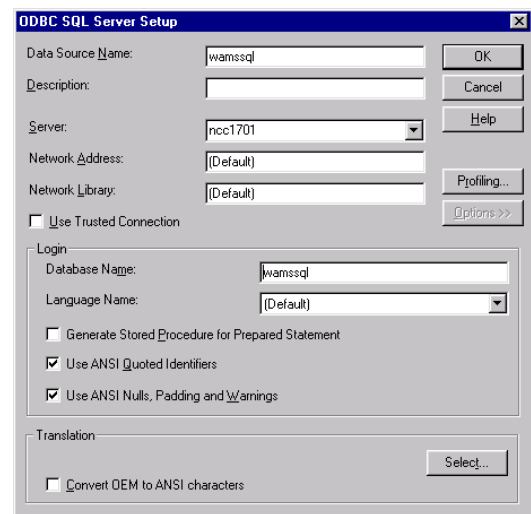
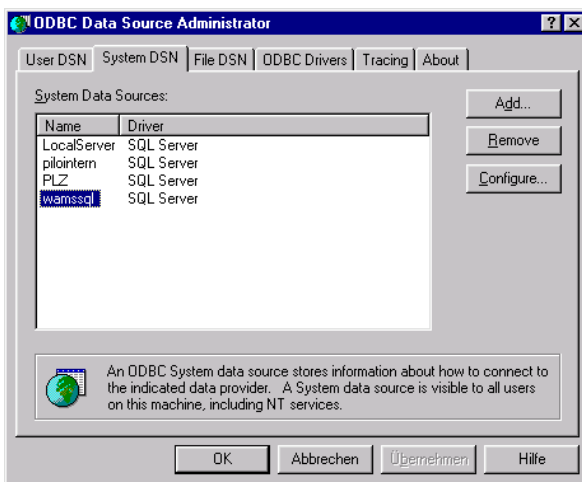
# Installation Guide

## Connecting to Microsoft SQL Server

Create a new database with the Microsoft SQL Enterprise Manager

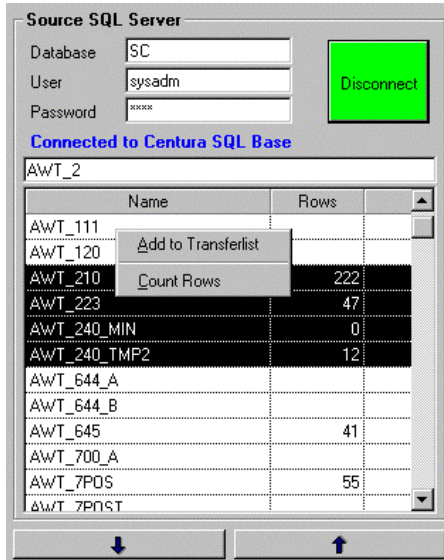


Connect to this database via the ODBC Data Source Administrator



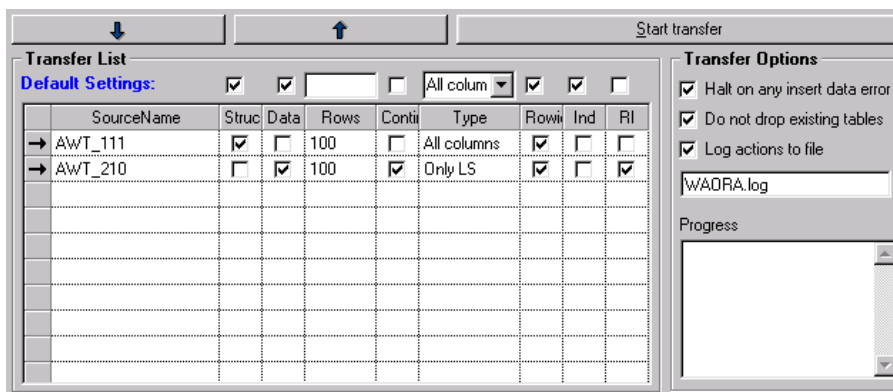


## Step 3 Selecting tables for transfer



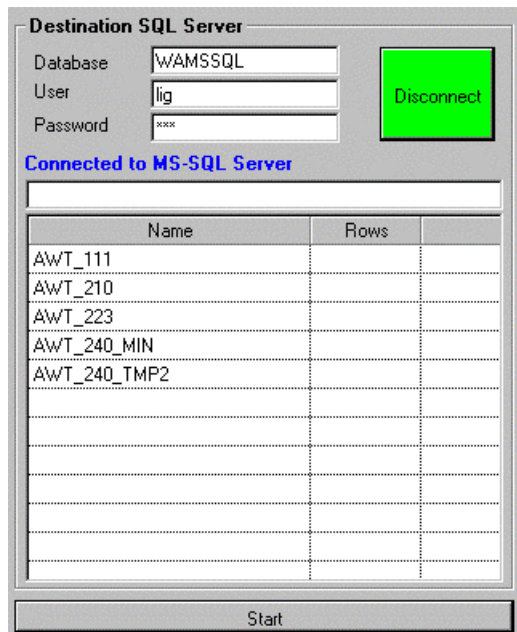
- Select tables (mouse or keyboard)
- Select groups of tables by typing the first identical letters into the selection line
- Display the number of rows of selected tables (right mouse button, CTRL + F5, SHIFT-F5 or CTRL + C)

## Step 4 Getting ready for transaction

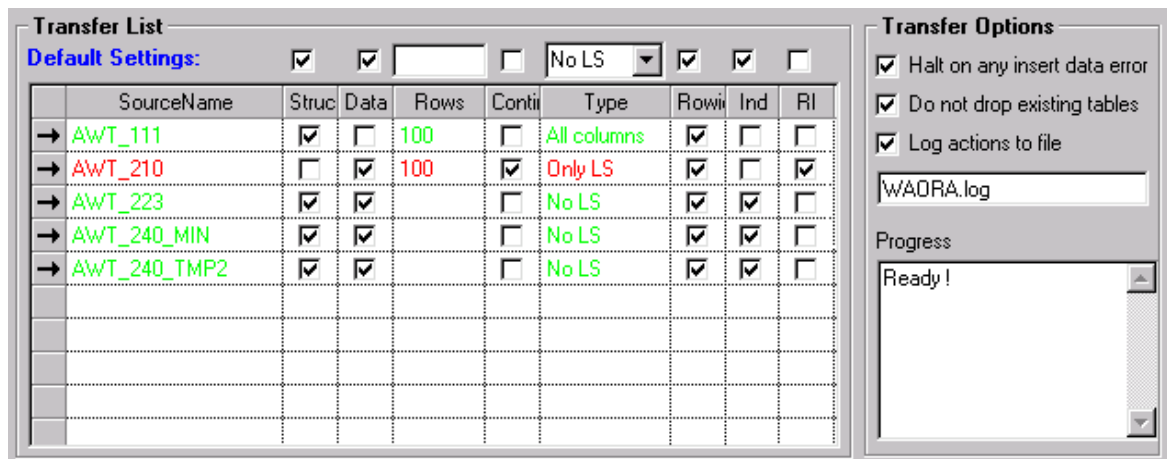


- Set *Default Settings* and copy the selected tables to the *Transfer list* with the down arrow button
- Remove any tables from the *Transfer list* with the up arrow button
- Existing settings of tables in the *Transfer list* won't be changed by new default settings. You may change these settings individually
- Set *Transfer Options*

## Step 5 Transferring to the destination



- Click the *Start* button for transfer
- Both, the *Progress* window and the *Transfer list* show the progress of the transfer
- (Screen shot after successfully completed transfer)



Transfer finished:

- Successfully completed actions are indicated by green colour
- errors and incomplete transfers are indicated by red colour
  - ➔ AWT\_210: Attempt to transfer data into a non-existing table

## Default Settings

### Structure

- Create the structure of all tables in the *Transfer List* with the options set  
 → AWT\_111 will be created, AWT\_210 not.  
 To avoid existing tables to be dropped select the transfer option *Don't drop existing tables*

### Data

- Transfer data of all tables in the *Transfer List* with this option set  
 → AWT\_120 data will be transferred, AWT\_111 data won't.

### Rows

- Limit the number of rows for a test transfer  
 → Transfer 100 rows of AWT\_210, no rows of AWT\_111.

### Continue

- Skip the number of rows existing already in the destination table(s) and transfer the remaining data. Only data of the data type selected in *Type* will be transferred. (Use *Count rows* to display the number of rows to be skipped)

### Type

- Select the data type for the transfer
  - *all columns*: all data types including long strings
  - *no LS*: all data types excluding long strings
  - *on ly LS*: long strings only, no other data types
 → Transfer long strings of AWT\_210 (AWT\_111 *Data* not selected).

### Row ID

- Create row ID in MS Server database of all tables with this option set. This option has no effect on Databases with implemented Row ID function (Oracle, Centura).  
 → Create row ID in AWT\_210, if this table already exists (*Structure* not set).

### Ind

- Create Index of all tables in the Transfer List with this option set  
 → Create index only for tables selected in the Source Window

### RI

- Create Referential Index of all tables in the Transfer List with this option set.  
 → Create Referential Index only for AWT\_210.

## Transfer Options

### Halt on Error

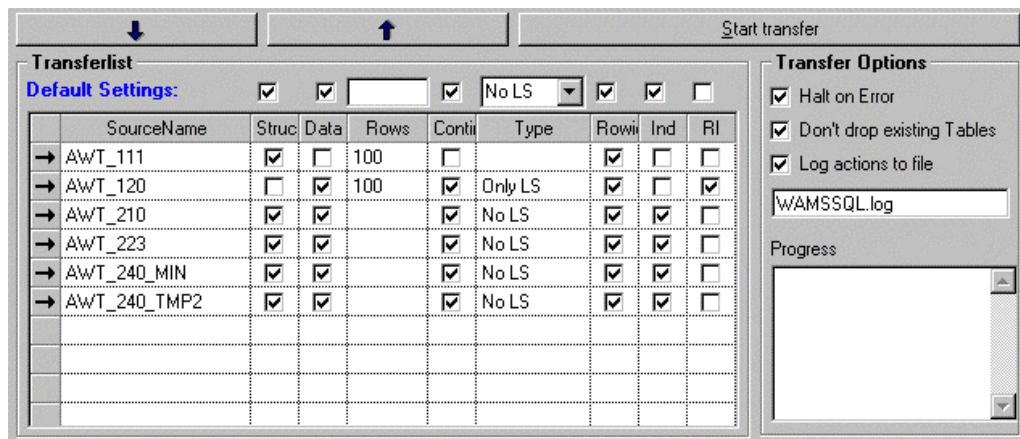
Stop the transfer in case of any error or warning. With this option set the transfer will halt on each error. Without this option set the transfer will halt on critical errors, but provide the choice to continue on non critical errors.

### Don't drop existing tables

Don't drop existing tables. Without this option set existing tables of the destination will be dropped and created again. All data of dropped tables will be lost.

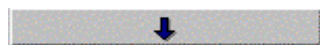
### Log actions to file

Create a log file and log actions. Default log file name is the *destination database name.log*.

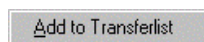


### Add tables

Add all tables selected in the source window to the *Transfer List* by.



add button



menu item

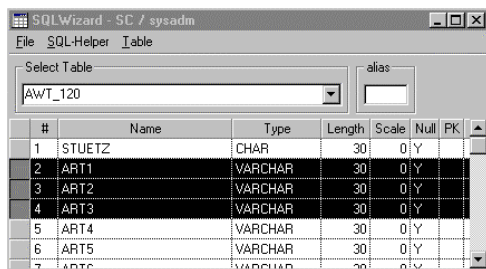
<F9>

keyboard

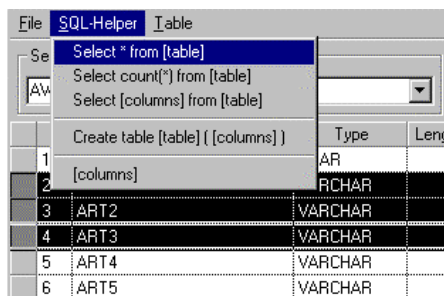
## Little Helpers – SQL Wizard and SQL Console

**SQL Wizard** and **SQL Console** are tools for getting information about the source and destination database. The **SQL Wizard** retrieves column name, data type, field length, scale, null and primary key of any table included in the source or destination database and provides shortcuts for copying most common SQL statements including table and column names to the **SQL Console** or to the clipboard. The **SQL Console** executes SQL queries and displays the results

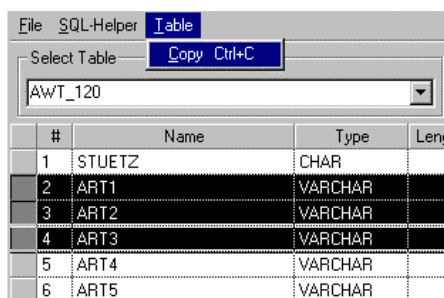
### SQL Wizard



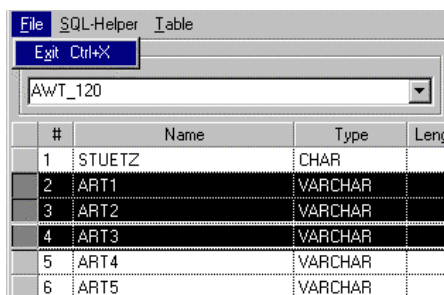
- Start the SQL Wizard
  - Source database: SHIFT + F4
  - Destination database: CTRL + F4
  - or *Source* or *Destination* menu
- Select a table
- Count, name, type, length, scale, null and primary key (pk) of all columns of the selected table are displayed



- Use the SQL-Helper to copy commands to the clipboard for further use in e.g. SQL Console
  - [table] table name in *Select Table*  
→ AWT\_120
  - [columns] selected from the listed columns  
→ ART1, ART2, ART3
  - [columns] (last line): Copy the names of the selected columns to the clipboard  
→ ART1, ART2, ART3



- Copy the structure of the selected table to the clipboard



- Exit SQL Wizard

## SQL Console

The screenshot shows a window titled "SQLConsole - SC / sysadm". The window contains a text area with the following SQL query:

```
select art1, art2, art3
from awt_120
```

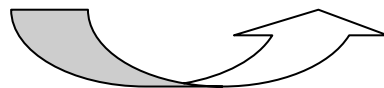
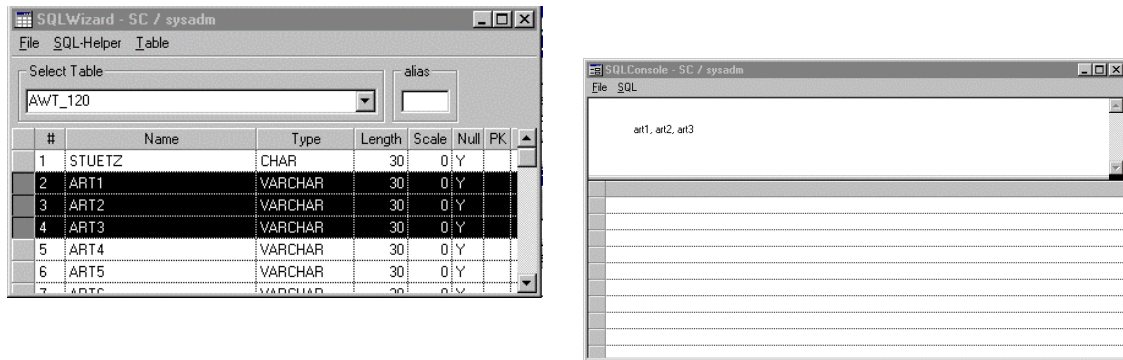
Below the text area, a table displays the results of the query. The table has four columns: an unlabeled column, "art1", "art2", and "art3". The data rows are as follows:

	art1	art2	art3
	"Winter"	"Standheiz."	"Check"
	52	22	31
	11	3	8
	22	7	9
	9	7	8
	58	22	34
	10	4	8
	16	5	10
	38	20	17
	35	12	16

- Start the SQL Console
    - Source database: **SHIFT + F3**
    - Destination database: **CTRL + F3**
    - or *Source* or *Destination* menu
  - Type your SQL statements  
or
  - Paste an SQL statement from the clipboard  
(see SQL Wizard for copying to the clipboard)
  - Execute the SQL statement: **CTRL + E**
- ➔ From the SQL Helper (see SQL Wizard) the menu item *„Select [columns] from [table]“* was selected for table AWT\_120 and columns ART1, ART2 and ART3.

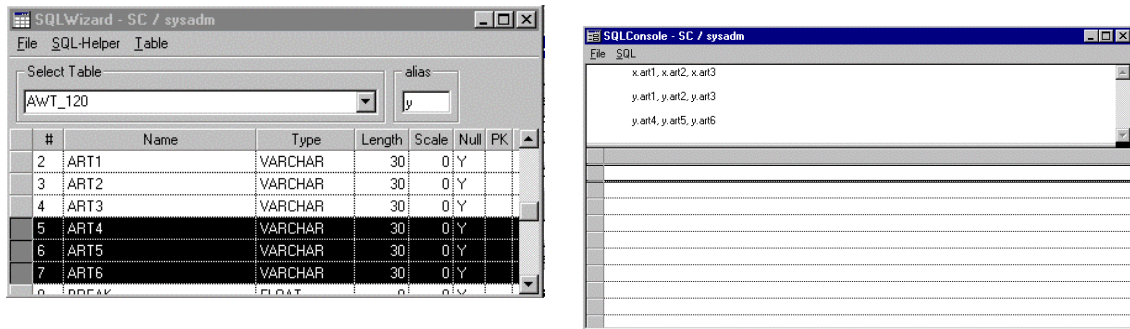
## Shortcuts – for SQL Wizard and SQL Console

### Drag and drop selected columns

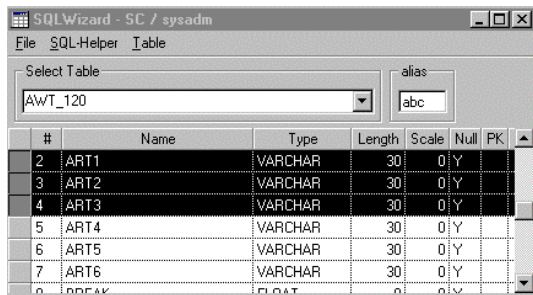


- select one or more columns in the SQL Wizard
- drag and drop the selected columns (eventually into an existing SQL statement)
  - ➔ ART1, ART2 and ART3 are copied to the SQL Console for use in SQL statements.

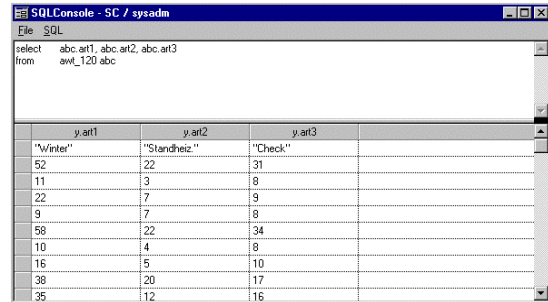
## Aliasing columns



- select one or more columns in the SQL Wizard
- write the prefix for the selected columns into the 'alias' field
- drag and drop the selected columns including the prefix (eventually into an existing SQL statement)
  - ➔ first alias was set to 'x' and ART1, ART2 and ART3 were selected and dragged and dropped as x.art1, x.art2 and x.art3,
- next alias was set to 'y' and ART1, ART2 and ART3 were selected and dragged and dropped as y.art1, y.art2 and y.art3 and
- finally alias was set to 'y' again and ART4, ART5 and ART6 were selected and dragged and dropped as y.art4, y.art5 and y.art6.

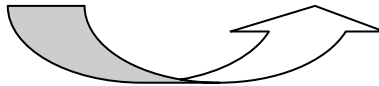
Using *Select [columns] from [table]* from the SQL Helper menu


#	Name	Type	Length	Scale	Null	PK
2	ART1	VARCHAR	30	0	Y	
3	ART2	VARCHAR	30	0	Y	
4	ART3	VARCHAR	30	0	Y	
5	ART4	VARCHAR	30	0	Y	
6	ART5	VARCHAR	30	0	Y	
7	ART6	VARCHAR	30	0	Y	
8	INDFAY	DATE	8	0	Y	



```
select abc.art1, abc.art2, abc.art3
from awt_120 abc
```

y.art1	y.art2	y.art3
"Winter"	"Standheiz"	"Check"
52	22	31
11	3	8
22	7	9
9	7	8
58	22	34
10	4	8
16	5	10
38	20	17
35	12	16



- select one or more columns in the SQL Wizard
- select *Select [columns] from [table]* from the SQL Helper menu (builds and copies the statement to the clipboard)
- insert the statement into the SQL Console
- execute the statement (CTRL + E)
  - ➔ from table AWT\_120 the columns ART1, ART2 and ART3 were selected. *Alias* was set to ,abc`.

## Supported data type conversion

Data type conversions currently supported by db.trans:

### From SQL Base to MS-SQL Server

SQL Base	MS-SQL Server
CHAR, VARCHAR	VARCHAR
LONG VARCHAR, LONG	TEXT (default) IMAGE
NUMBER	DECIMAL (15,0)
DECIMAL, DEC	DECIMAL
INTEGER, INT	INT
SMALLINT	SMALLINT
FLOAT	FLOAT
REAL	REAL
DOUBLE PRECISION	FLOAT
DATETIME	DATETIME
DATE	DATETIME
TIME	DATETIME
TIMESTAMP	DATETIME
ROWID	TIMESTAMP

## From SQL Base to Oracle

SQL Base	Oracle
CHAR, VARCHAR	VARCHAR2
LONG VARCHAR, LONG	LONG VARCHAR
NUMBER	NUMBER
DECIMAL, DEC	NUMBER
INTEGER, INT	NUMBER
SMALLINT	NUMBER
FLOAT	NUMBER
REAL	NUMBER
DOUBLE PRECISION	NUMBER
DATETIME	DATE
DATE	DATE
TIME	DATE
TIMESTAMP	DATE

## From MS-SQL Server to SQL Base

<b>MS-SQL Server</b>	<b>SQL Base</b>
BIT	VARCHAR
CHAR, VARCHAR	VARCHAR
SYSNAME	VARCHAR
TIMESTAMP	VARCHAR
DECIMAL	DECIMAL
BINARY	BINARY
DATETIME	DATETIME
FLOAT	FLOAT
IMAGE	IMAGE
INT	INT
MONEY	MONEY
NUMERIC	NUMERIC
REAL	REAL
SMALLDATETIME	SMALLDATETIME
SMALLINT	SMALLINT
SMALLMONEY	SMALLMONEY
TEXT	TEXT
TINYINT	TINYINT
VARBINARY	VARBINARY

## From MS-SQL Server to Oracle

<b>MS-SQL Server</b>	<b>Oracle</b>
BIT	VARCHAR2
CHAR, VARCHAR	VARCHAR2
SYSNAME	VARCHAR2
TIMESTAMP	VARCHAR2
DECIMAL	NUMBER
BINARY	- not implemented yet -
DATETIME	DATE
FLOAT	NUMBER
IMAGE	LONG RAW
INT	NUMBER
MONEY	NUMBER
NUMERIC	NUMBER
REAL	NUMBER
SMALLDATETIME	DATE
SMALLINT	NUMBER
SMALLMONEY	NUMBER
TEXT	VARCHAR2( 2000 )
TINYINT	NUMBER
VARBINARY	- not implemented yet -

## Supported data types

### From Oracle to SQL Base

<b>Oracle</b>	<b>SQL Base</b>
FLOAT	FLOAT
NUMBER	NUMBER
CHAR, VARCHAR2	VARCHAR
LONG RAW	VARCHAR
LONG	LONG
DATE	DATE

## Supported data types

### From Oracle to MS-SQL Server

<b>Oracle</b>	<b>MS-SQL Server</b>
FLOAT	DECIMAL
NUMBER	DECIMAL
CHAR, VARCHAR2	VARCHAR
LONG RAW	VARCHAR
LONG	TEXT
DATE	DATETIME