



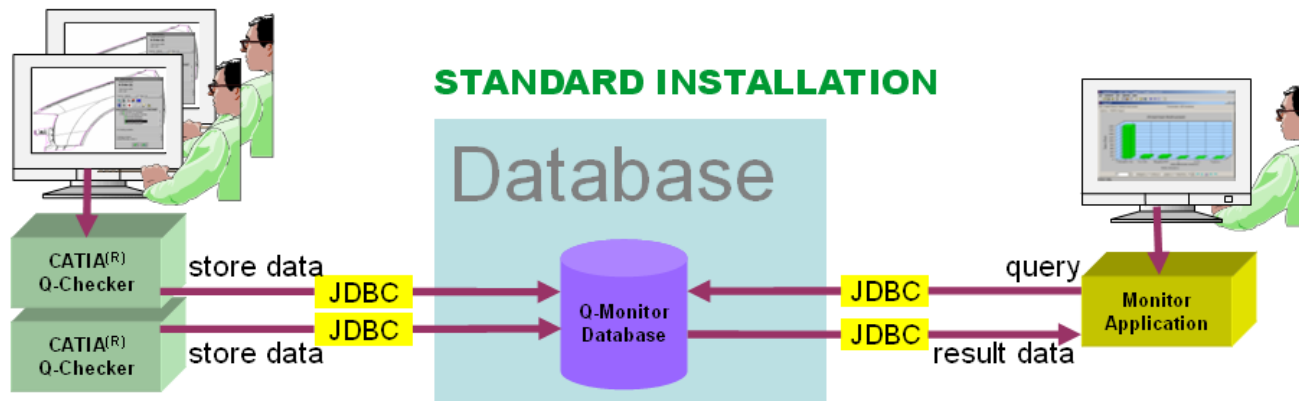
*Installation of
PostgreSQL 9.0.x
and Q-Monitor 4.x.x*

TRANSCAT
A DASSAULT SYSTEMES COMPANY

Installation of PostgreSQL and Q-Monitor

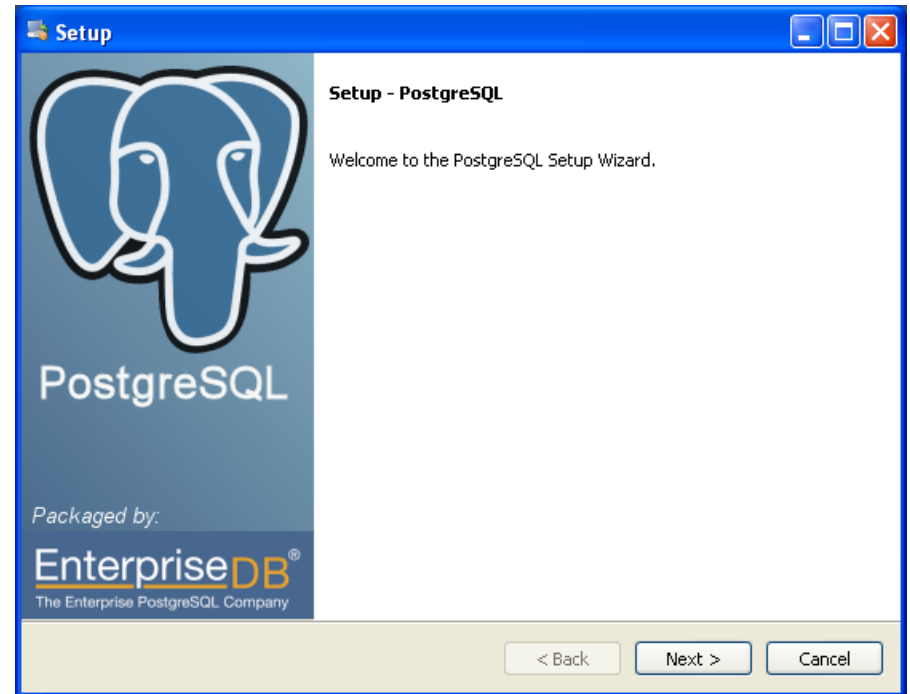
Installation tasks

- 👤 Install PostgreSQL 9.0.x on Windows (page 3-27)
- 👤 Install Q-Monitor 4.x.x and create the database tables (page 28-41)
- 👤 Test database connection and update database tables with Q-Monitor (page 42-47)
- 👤 Connect Q-Checker to the database (page 48-51)



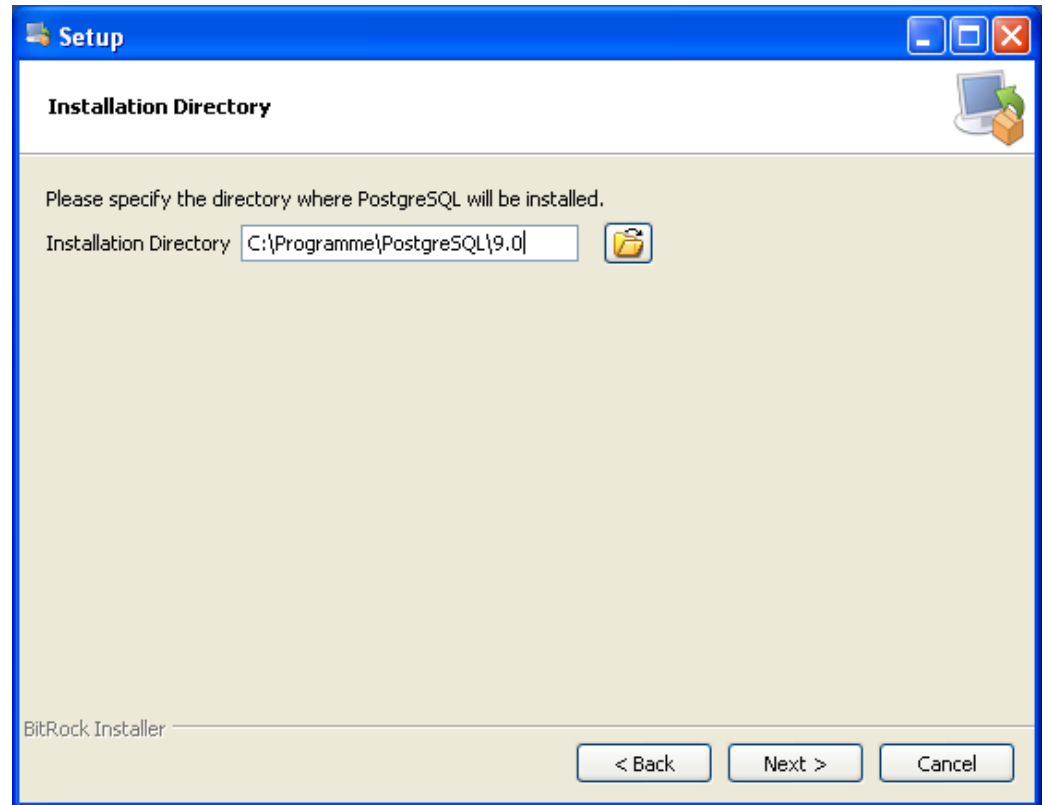
Installation of PostgreSQL

- Start the PostgreSQL installation by executing the installation file `postgresql-9.0.4-1-windows.exe` (Download PostgreSQL on www.postgresql.org)
- Click Next



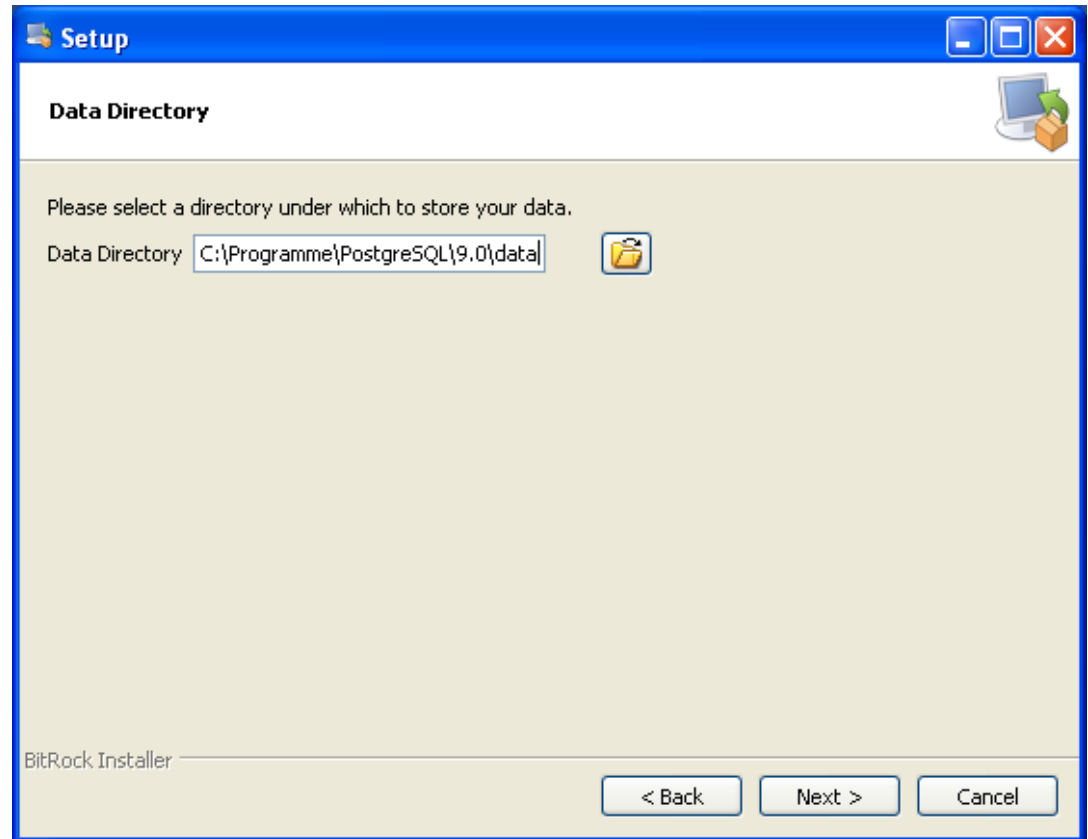
Installation of PostgreSQL

- Define the installation directory and
- Click Next



Installation of PostgreSQL

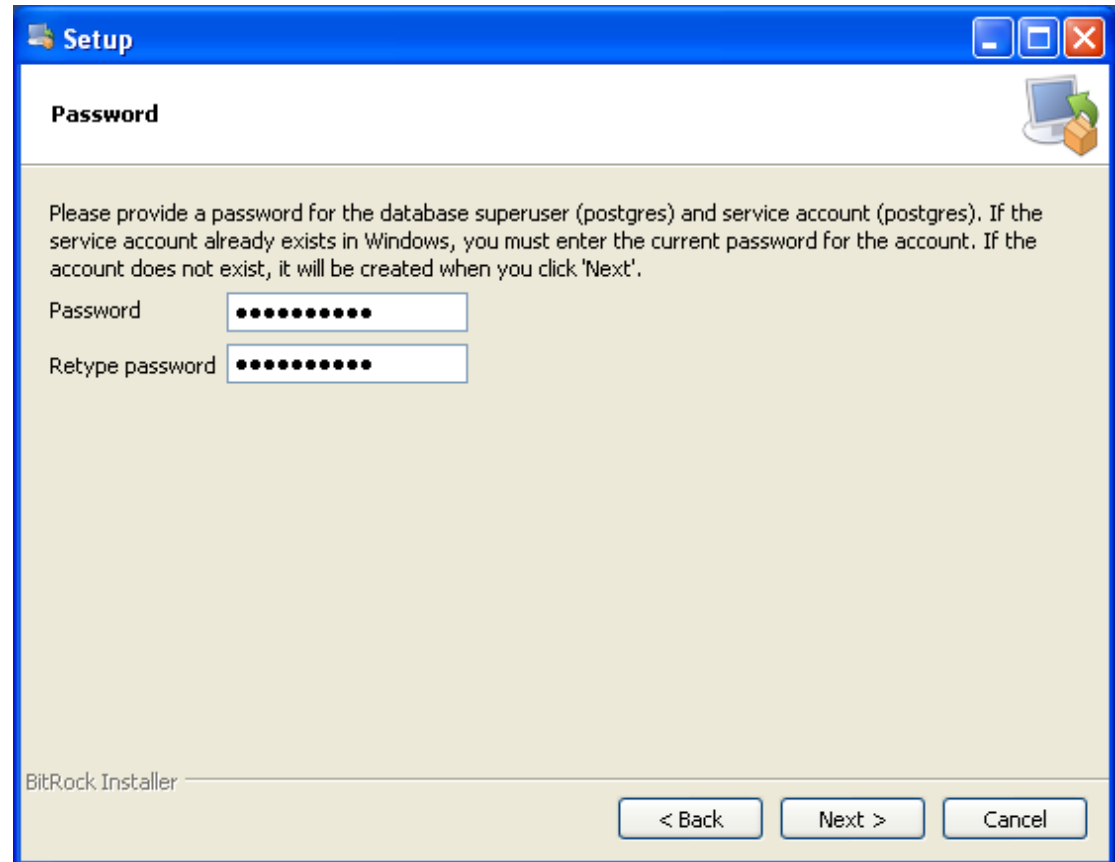
- Define the directory under which to store your data
- Click Next



Installation of PostgreSQL

Define an secure account password (e.g. *postgres82*)

Click Next

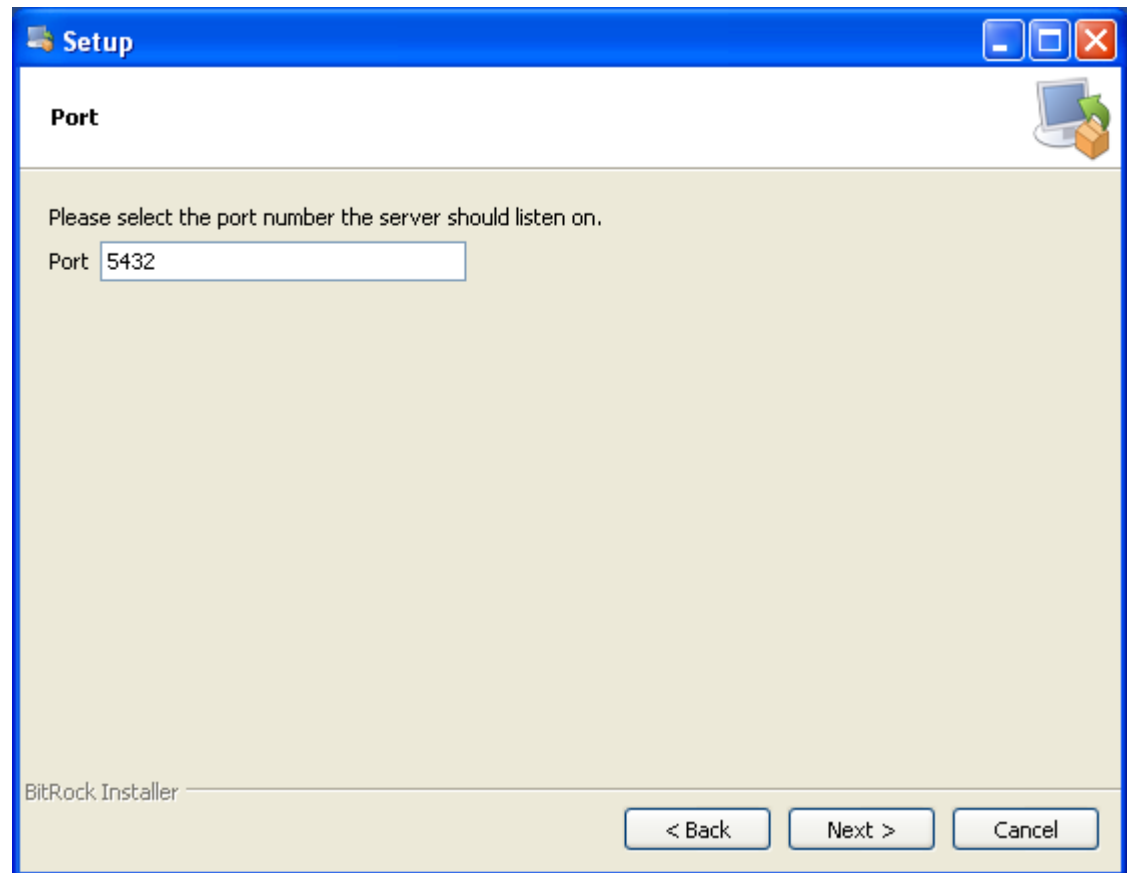


The screenshot shows a Windows-style dialog box titled "Setup" with a blue header bar. The main content area is titled "Password" and contains the following text: "Please provide a password for the database superuser (postgres) and service account (postgres). If the service account already exists in Windows, you must enter the current password for the account. If the account does not exist, it will be created when you click 'Next'." Below this text are two input fields: "Password" and "Retype password", both containing ten black dots. At the bottom of the dialog, there are three buttons: "< Back", "Next >", and "Cancel". The text "BitRock Installer" is visible in the bottom left corner of the dialog area.

Installation of PostgreSQL

Define the port where the server should listen on

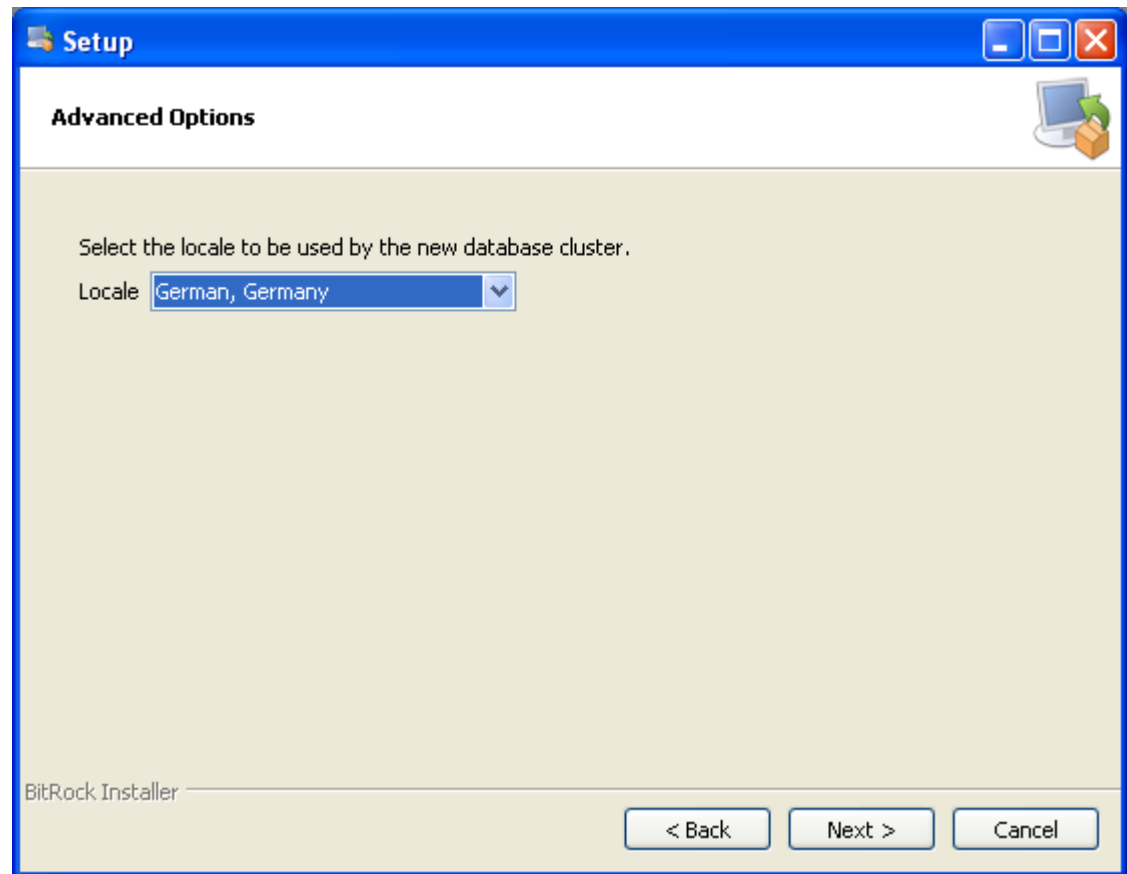
Click Next



Installation of PostgreSQL

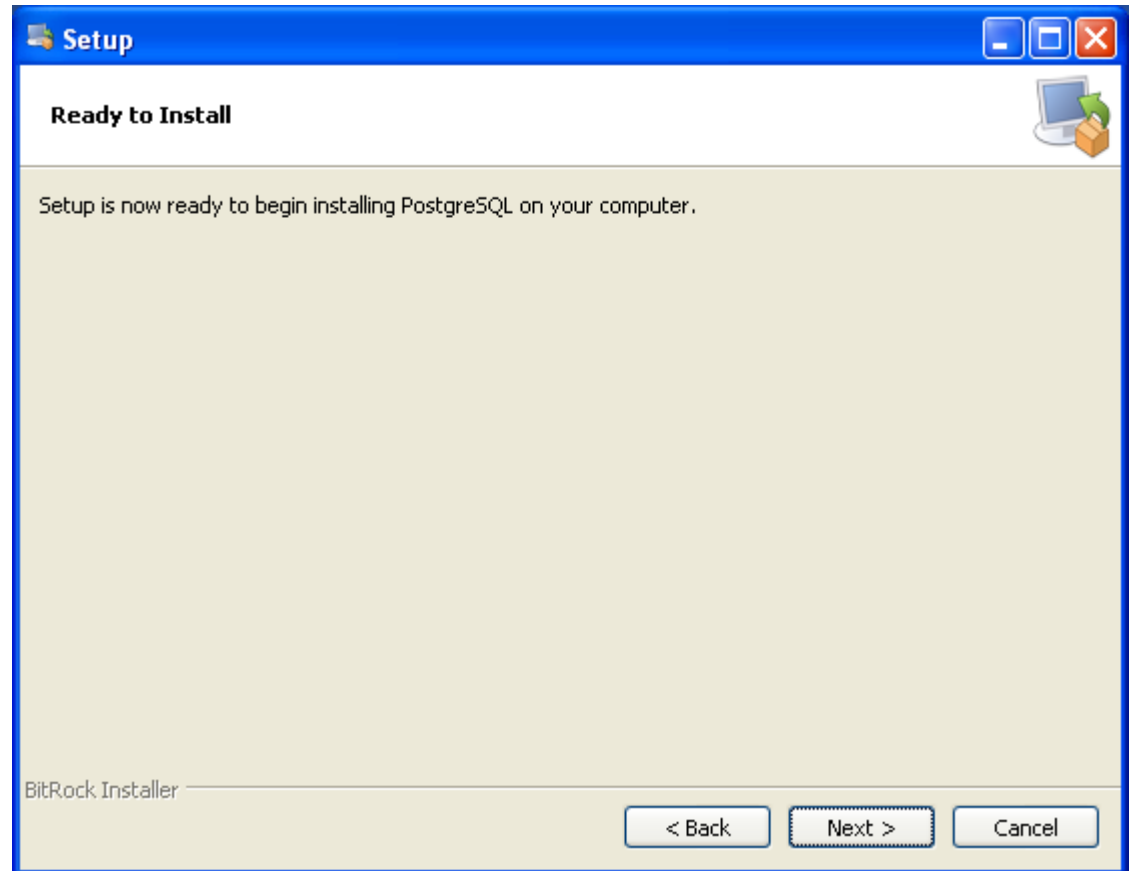
• Select the locale

• Click Next



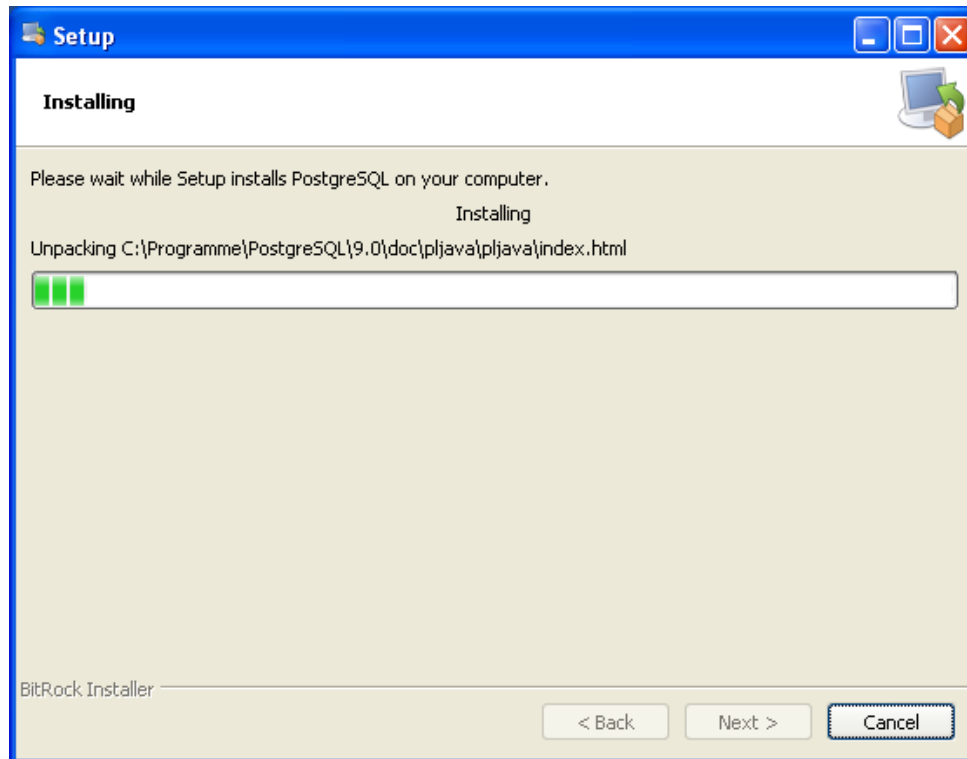
Installation of PostgreSQL

- To start the setup process click Next



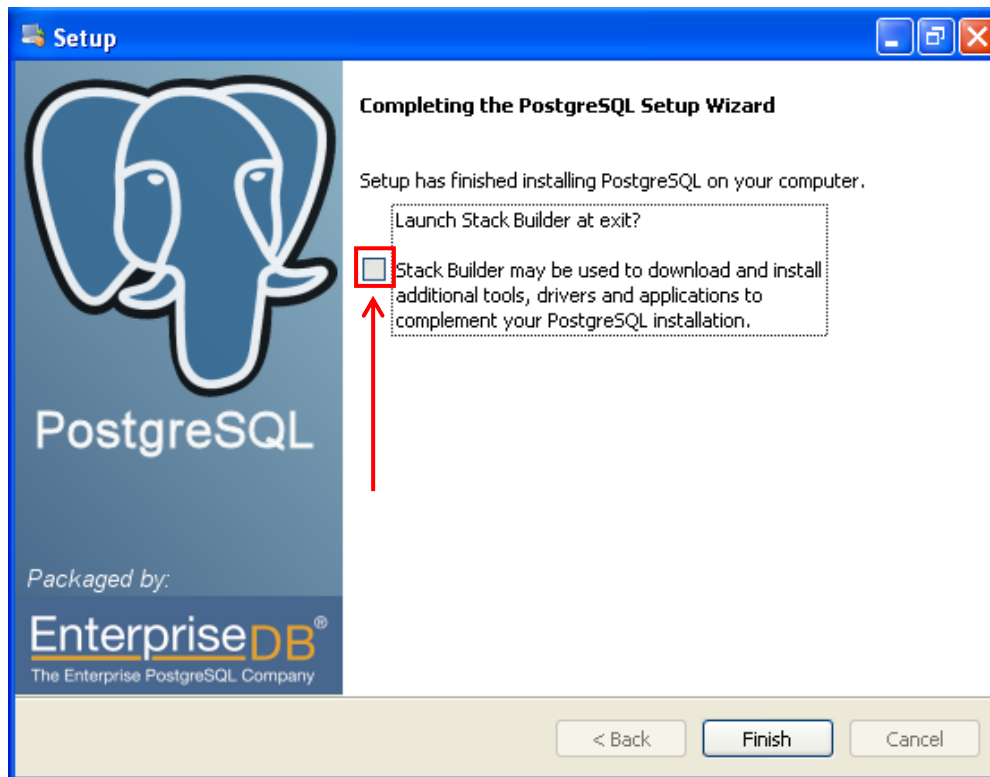
Installation of PostgreSQL

- Now the installation is running



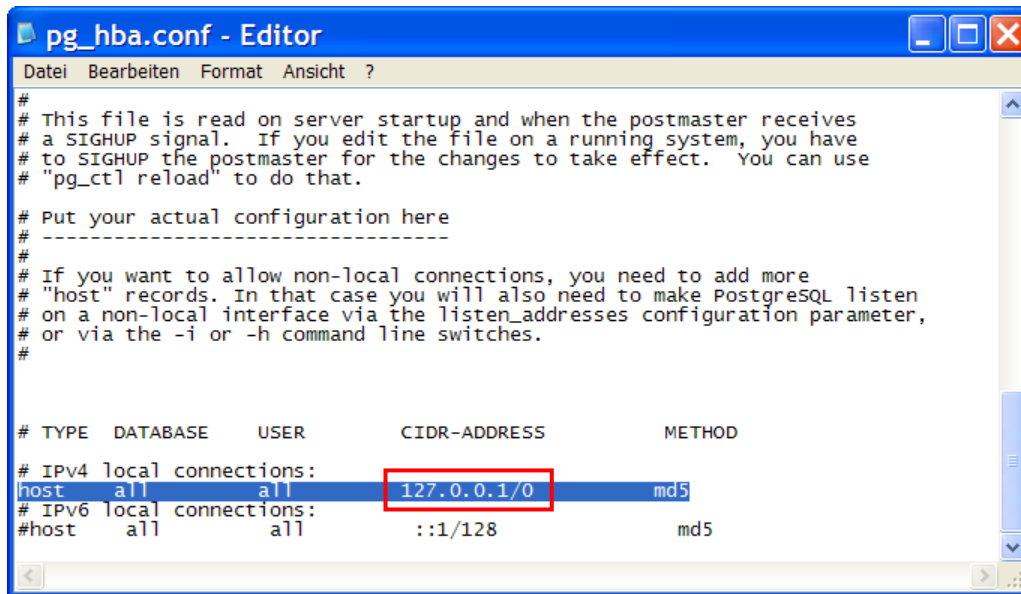
Installation of PostgreSQL

- To complete the installation deselect the checkbox and click Finish



Installation of PostgreSQL

- Open the file „*pg_hba.conf*“ in the installation directory of PostgreSQL (C:\Programme\PostgreSQL\9.0\data)
- Edit the following line (*CIDR-ADDRESS* to *.../0*)and save the file

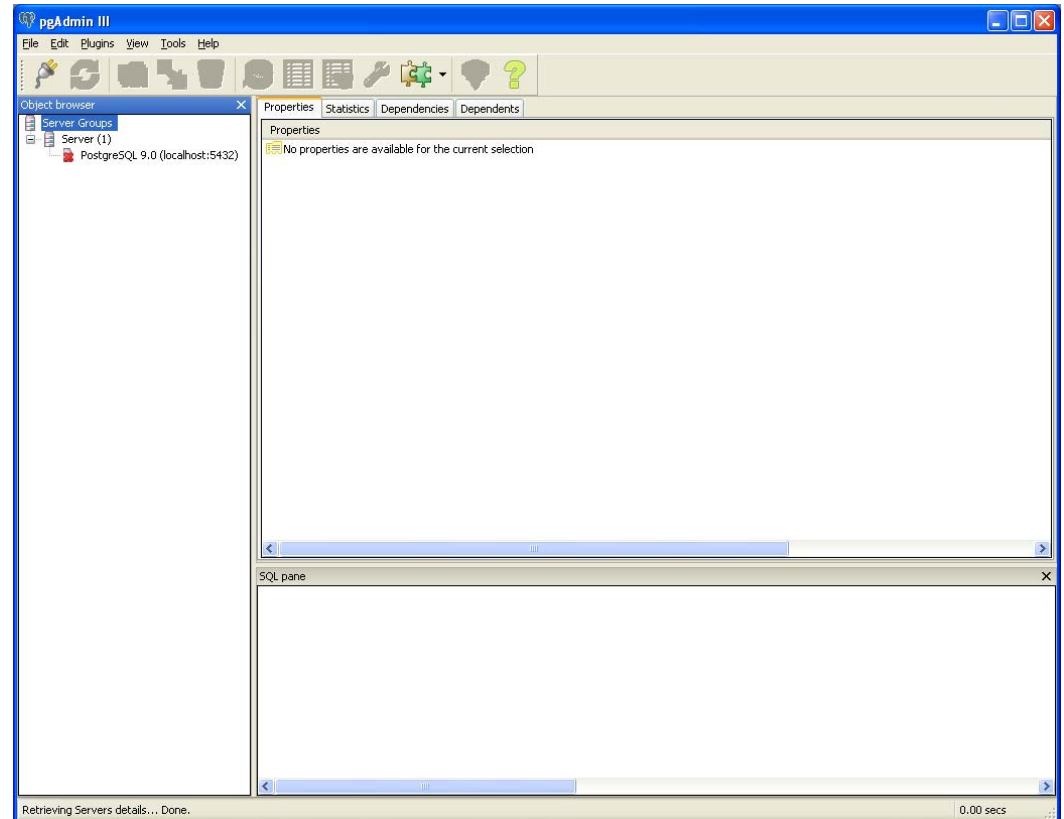


```
pg_hba.conf - Editor
Datei Bearbeiten Format Ansicht ?
#
# This file is read on server startup and when the postmaster receives
# a SIGHUP signal.  If you edit the file on a running system, you have
# to SIGHUP the postmaster for the changes to take effect.  You can use
# "pg_ctl reload" to do that.
#
# Put your actual configuration here
# -----
#
# If you want to allow non-local connections, you need to add more
# "host" records.  In that case you will also need to make PostgreSQL listen
# on a non-local interface via the listen_addresses configuration parameter,
# or via the -i or -h command line switches.
#
# TYPE DATABASE USER CIDR-ADDRESS METHOD
# IPv4 local connections:
host all all 127.0.0.1/0 md5
# IPv6 local connections:
#host all all ::1/128 md5
```

Installation of PostgreSQL

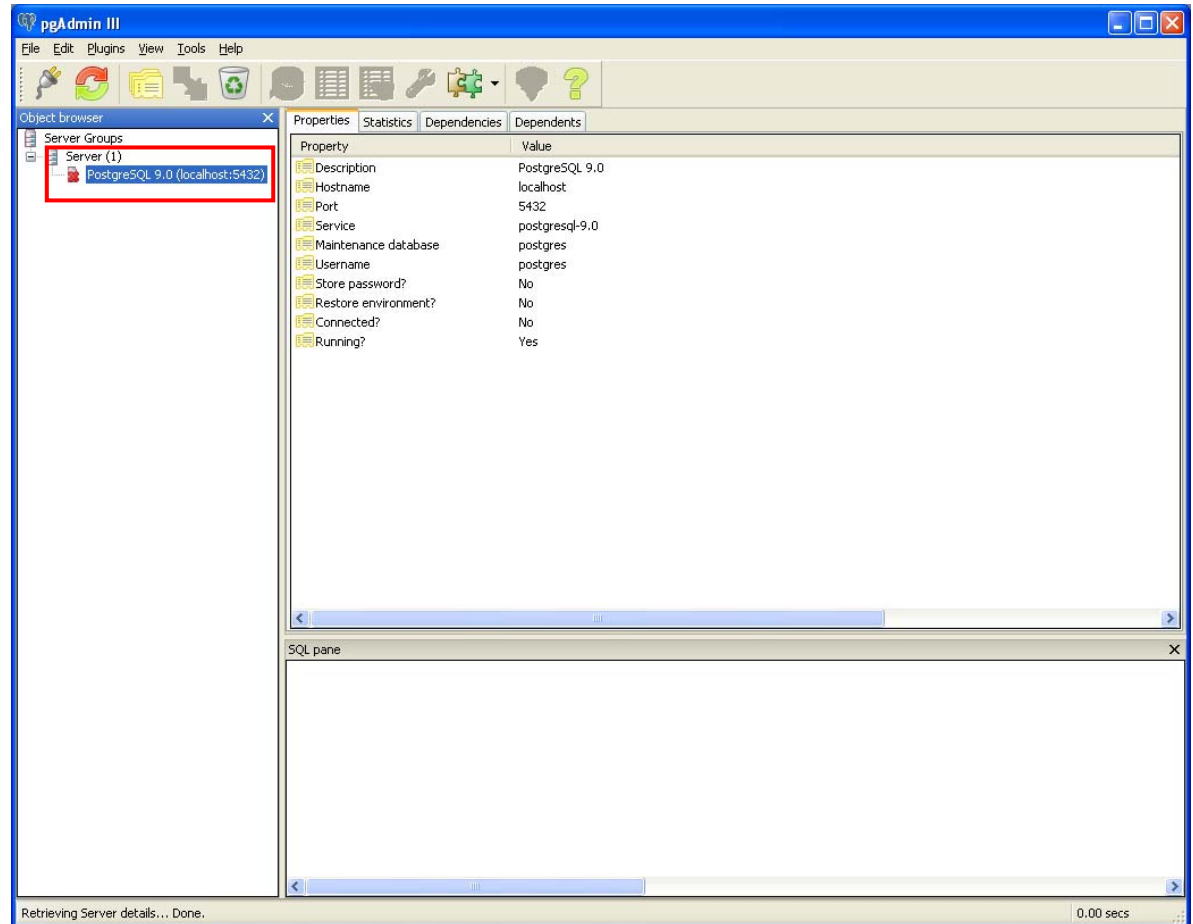
Start pgAdmin III tool

- Windows Start
- Programs
- PostgreSQL 9.0
- pgAdmin III



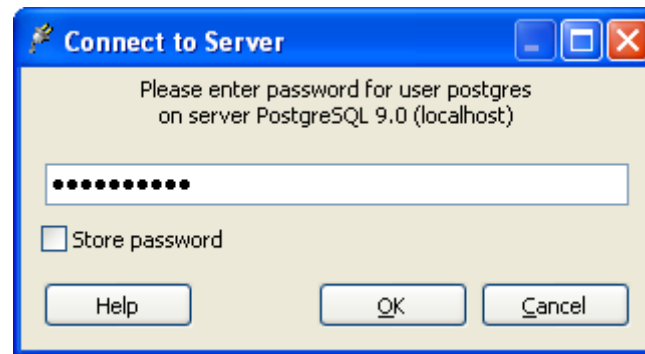
Installation of PostgreSQL

Double Click on
PostgreSQL 9.0



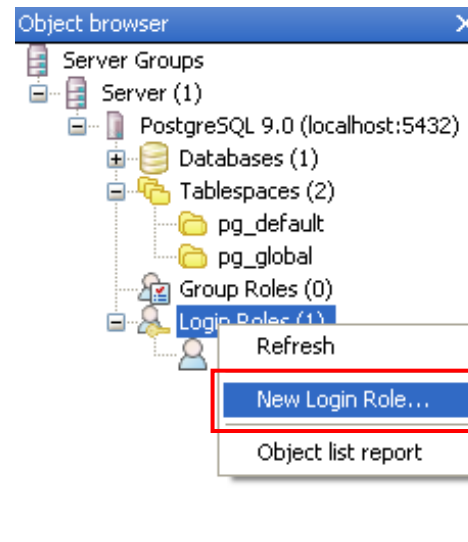
Installation of PostgreSQL

- Enter password:
postgres82
- Click OK



Installation of PostgreSQL

- Right mouse button on Login Roles >> „New Login Role ...“



Installation of PostgreSQL

- Define a role name and a password
- Click OK to create the login role

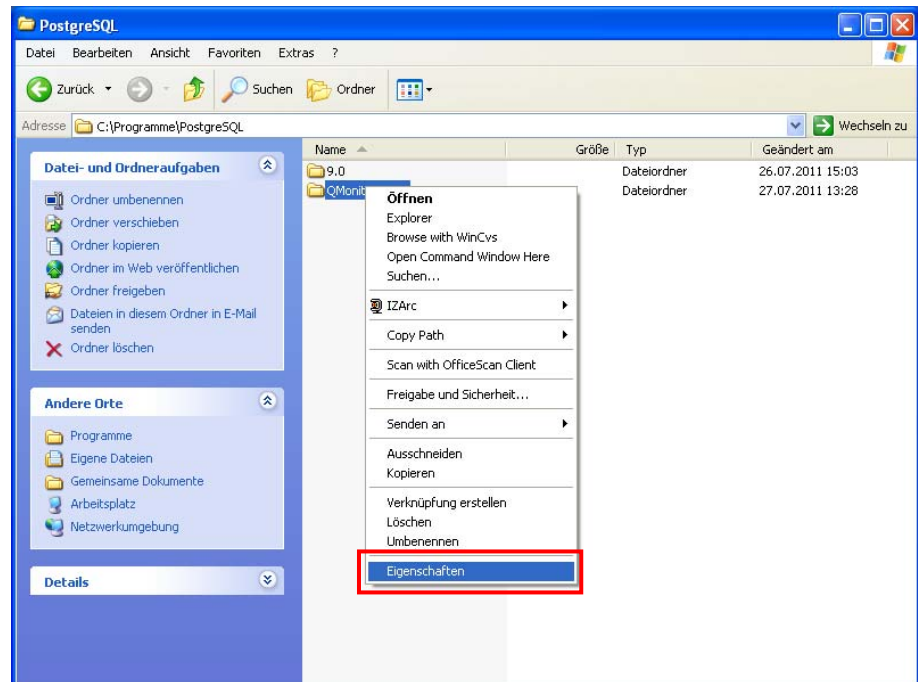
The screenshot shows the 'New Login Role...' dialog box with the following fields and values:

- Role name: qmonitor
- OID: (empty)
- Can login:
- Password: (masked with dots)
- Password (again): (masked with dots)
- Account expires: never
- Connection Limit: (empty)
- Comment: (empty)
- Use replication: no

The 'OK' button is highlighted, indicating the next step in the process.

Installation of PostgreSQL

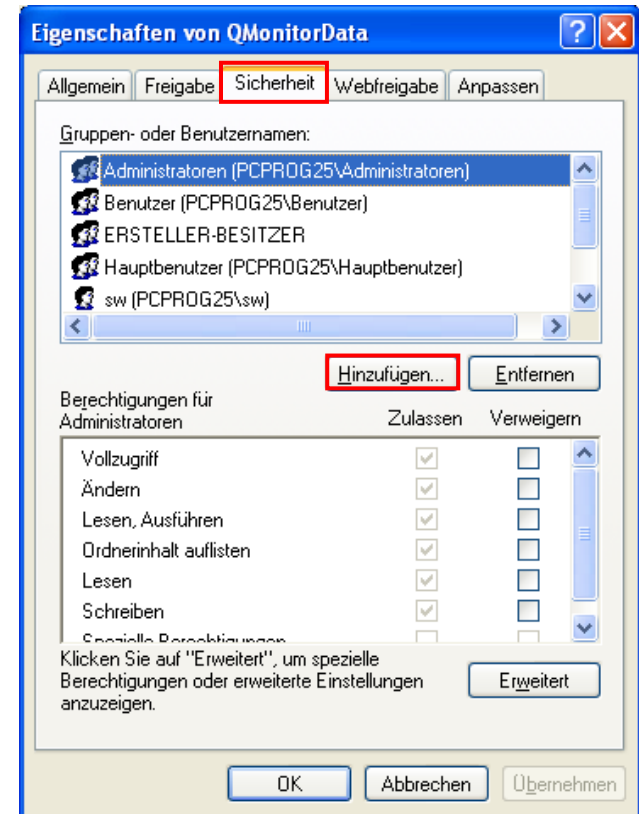
- Open the Windows Explorer and create a local directory for the Tablespaces, e.g. C:\Programme\PostgreSQL\QMonitorData
- Possibly a change of the permissions is necessary
- Check with right mouse button „Properties“



Installation of PostgreSQL

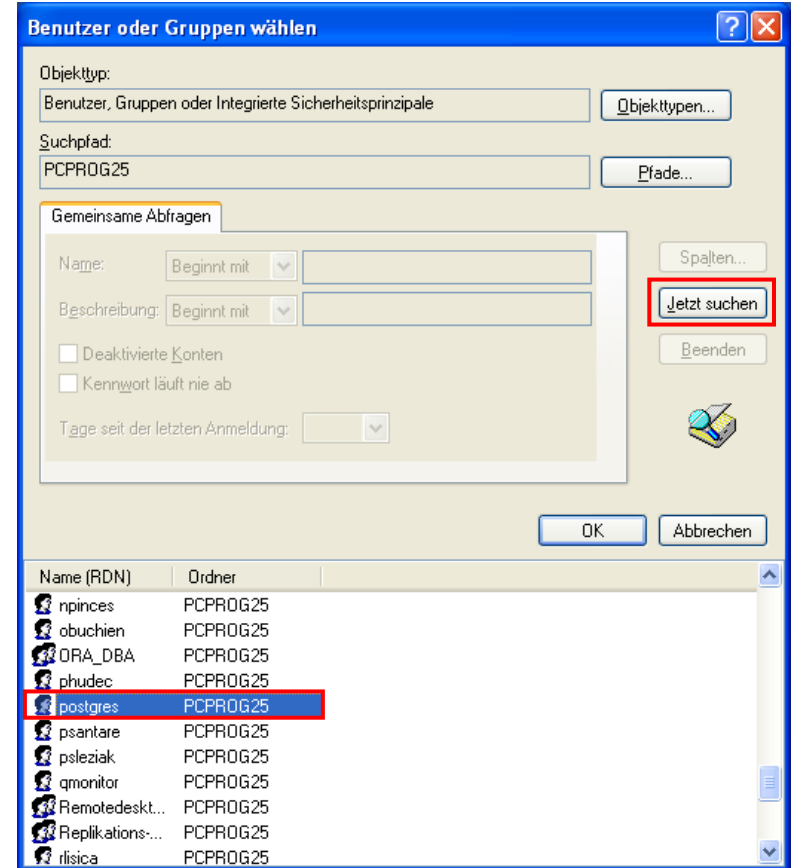
- Click on the „Security“ tab and then „Add“

(In case „Security“ tab is not available, start Windows Explorer and go on Tools – Folder Options – View and deactivate the point „Use simple file sharing (Recommended)“)



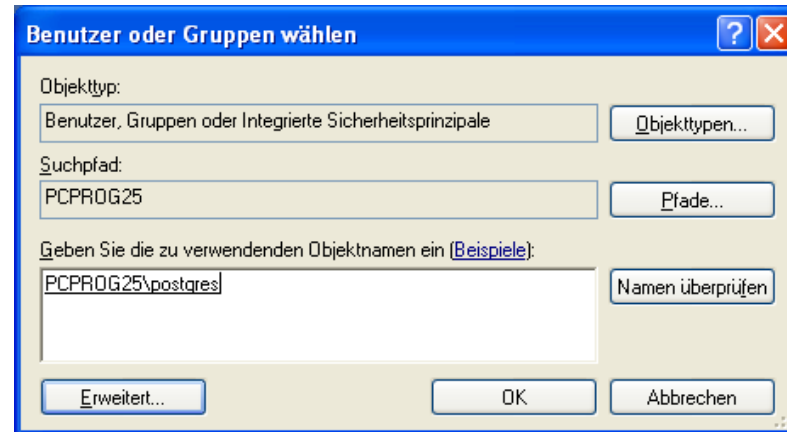
Installation of PostgreSQL

- Click on „Search“ and choose the user postgres from the list
- Click OK



Installation of PostgreSQL

Click OK

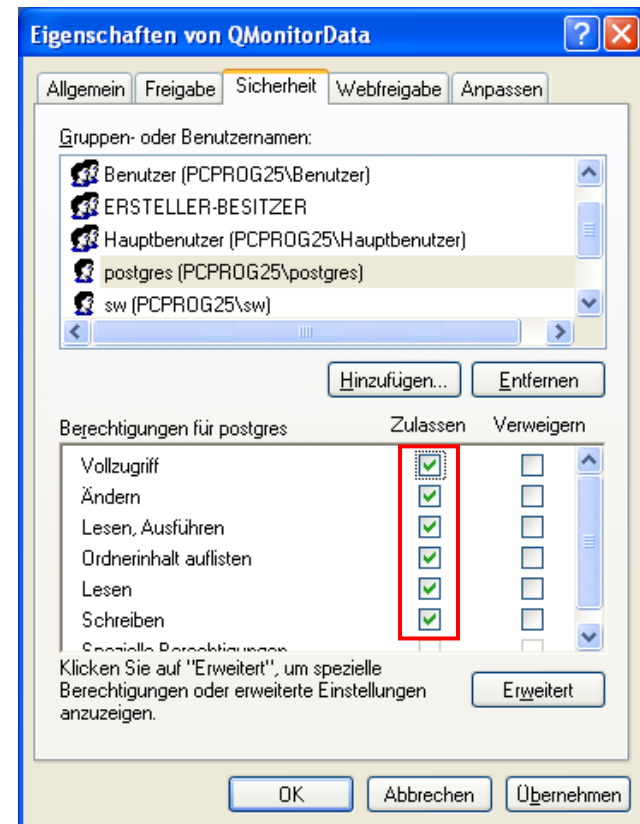


The screenshot shows a Windows-style dialog box titled "Benutzer oder Gruppen wählen". It contains the following fields and buttons:

- Objekttyp:** A text box containing "Benutzer, Gruppen oder Integrierte Sicherheitsprinziple" and a button labeled "Objekttypen...".
- Suchpfad:** A text box containing "PCPROG25" and a button labeled "Pfade...".
- Geben Sie die zu verwendenden Objektnamen ein (Beispiele):** A text box containing "PCPROG25\postgres" and a button labeled "Namen überprüfen".
- At the bottom, there are three buttons: "Erweitert...", "OK", and "Abbrechen".

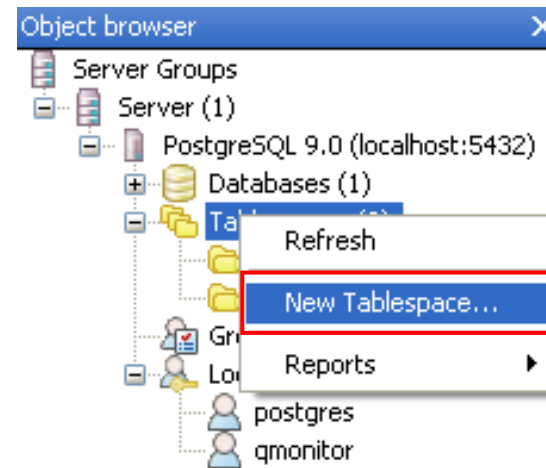
Installation of PostgreSQL

- Grant to the user postgres all permissions on the directory QMonitorData



Installation of PostgreSQL

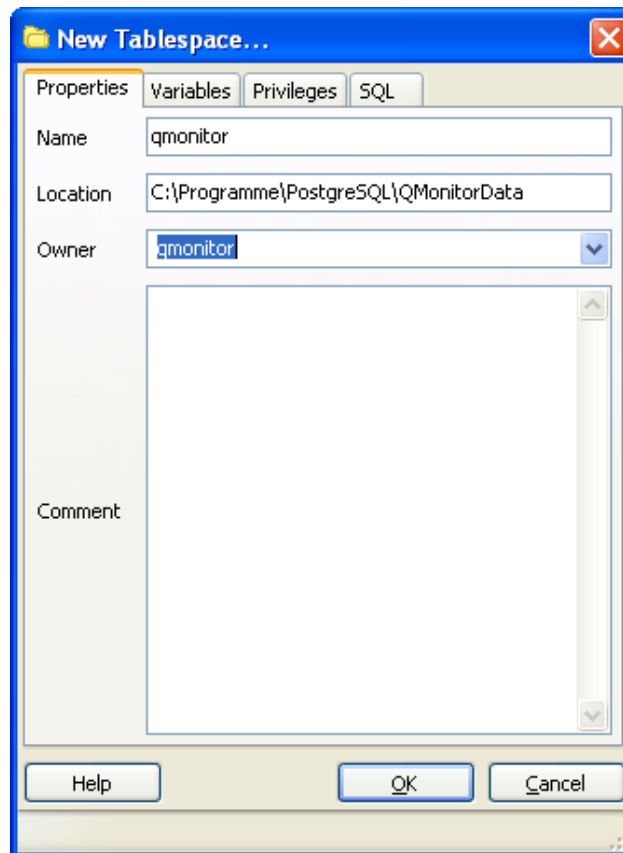
- Right mouse button on Tablespaces >> „New Tablespace“



Installation of PostgreSQL

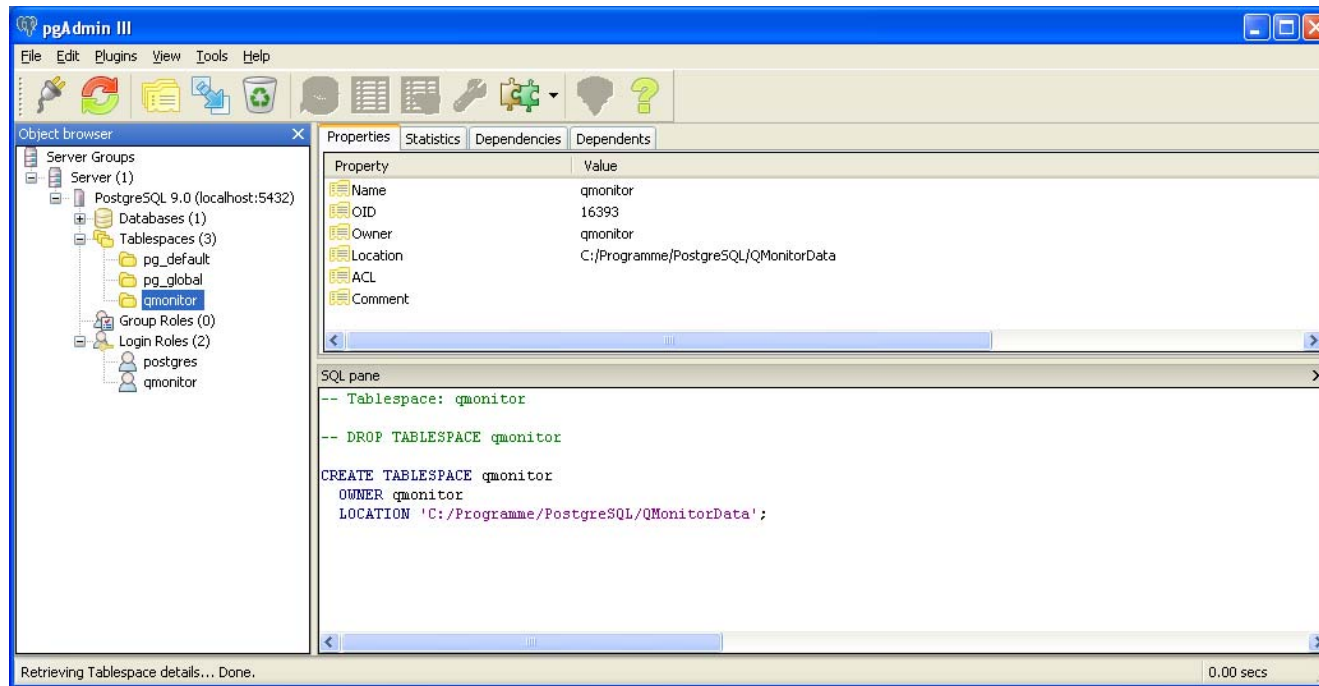
- Enter the values as shown. As location set the path **C:\Programme\PostgreSQL\QMonitorData**

- Click OK



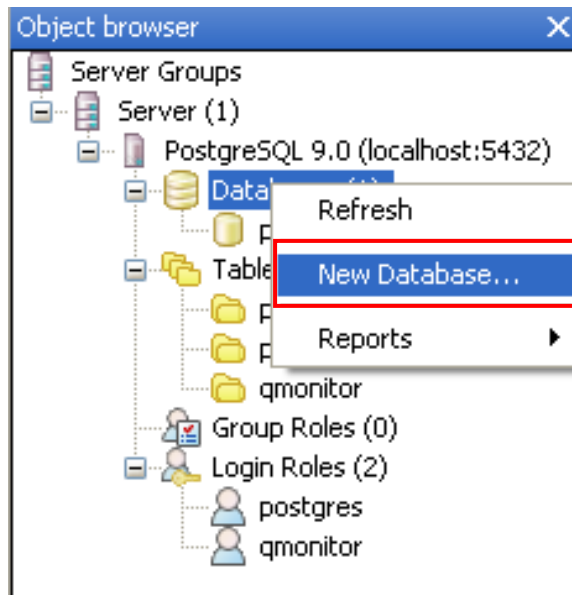
Installation of PostgreSQL

- A new tablespace „qmonitor“ is created



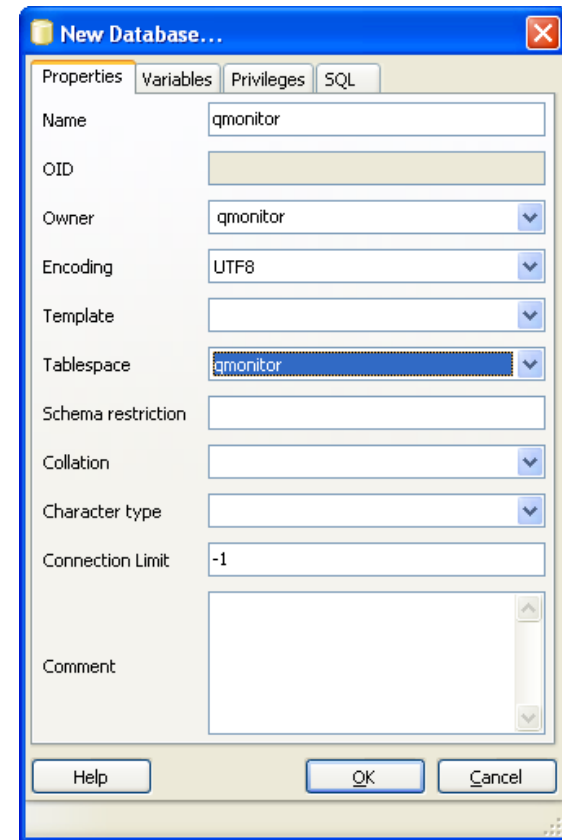
Installation of PostgreSQL

- Right mouse button on Database „New Database“



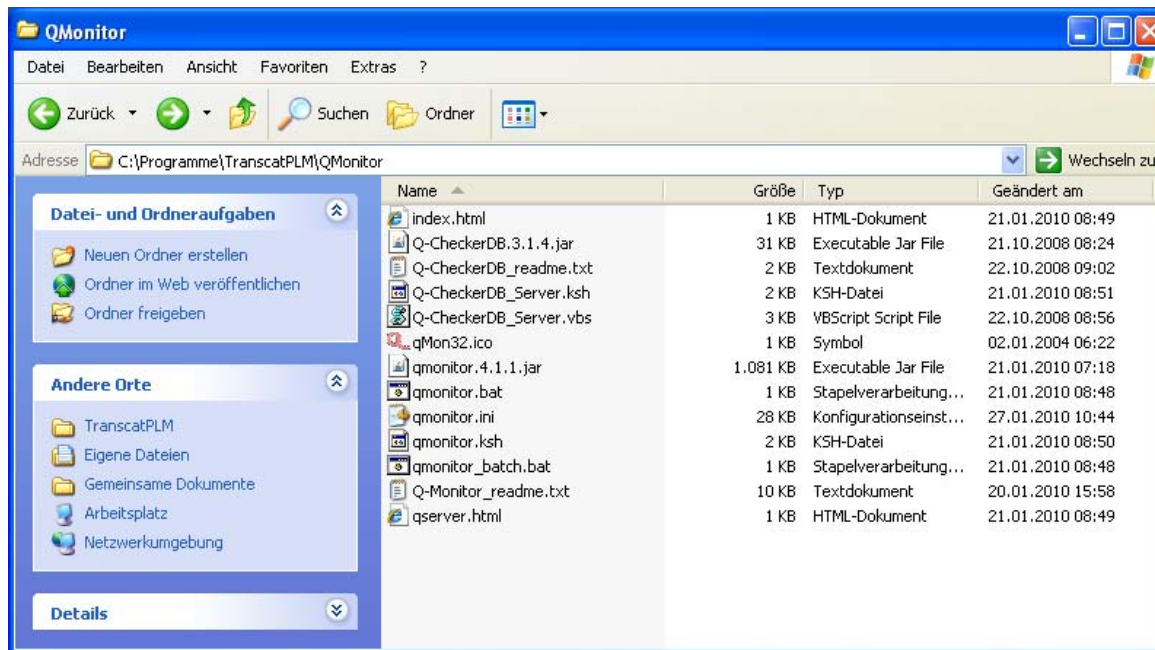
Installation of PostgreSQL

- Enter the values as shown
- Click OK
- A new database „qmonitor“ is created
- Close the pgAdmin III tool



Installation of Q-Monitor

- Extract the program file qmonitor.4.x.x.zip into the directory **D:\Programme\TransCAT\QMonitor**



Installation of Q-Monitor



- Download the JDBC driver from (<http://jdbc.postgresql.org/download.html>)
- Past the JDBC driver into the Q-Monitor installation directory (e.g. D:\Programme\TransCAT\QMonitor)

***NOTE:**

The used JDBC Driver depends on your local installed Java Version:

JDK 1.4 or 1.5

→ *JDBC3 Postgresql Driver*

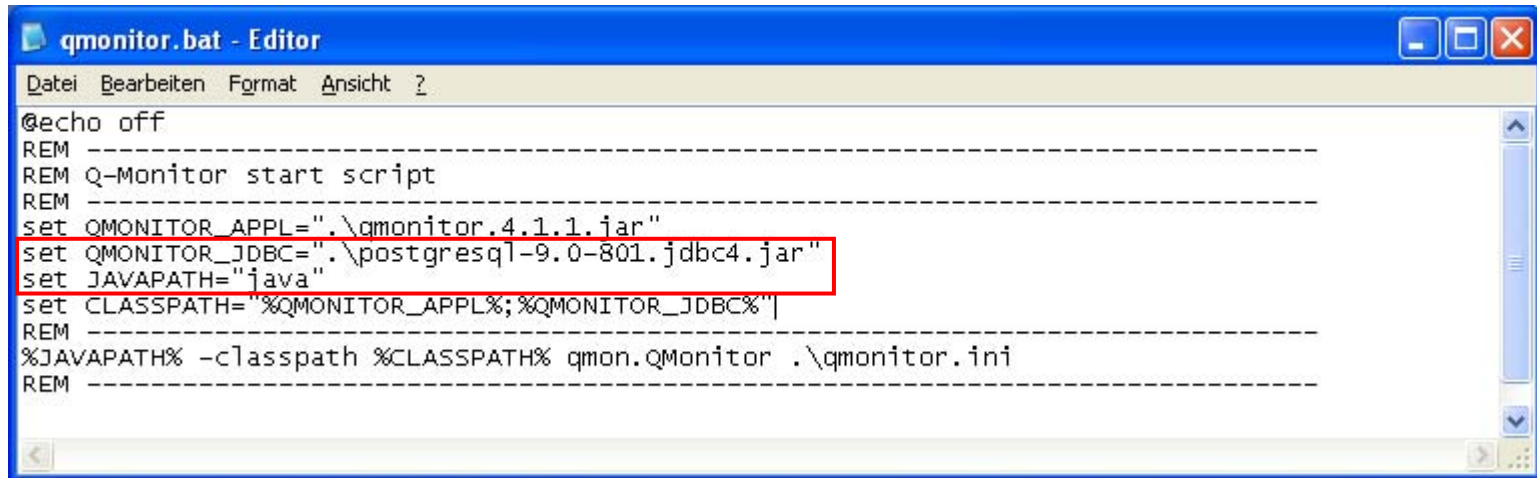
JDK 1.6

→ *JDBC4 Postgresql Driver*

Installation of Q-Monitor

- Adapt the Java installation path in the qmonitor.bat file to the local installation of Java
- Add the JDBC driver to the classpath

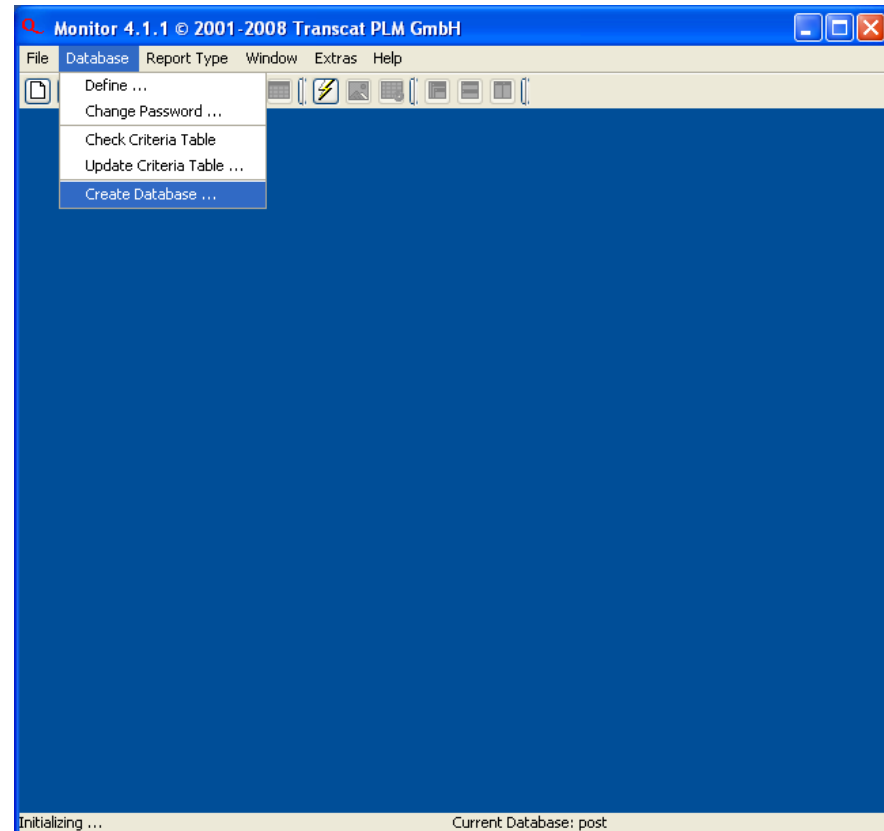
NOTE: Java runtime min. 1.4 is prerequisite for Q-Monitor and must be installed on the machine!



```
qmonitor.bat - Editor
Datei Bearbeiten Format Ansicht ?
@echo off
REM -----
REM Q-Monitor start script
REM -----
set QMONITOR_APPL=".\qmonitor.4.1.1.jar"
set QMONITOR_JDBC=".\postgresql-9.0-801.jdbc4.jar"
set JAVAPATH="java"
set CLASSPATH="%QMONITOR_APPL%;%QMONITOR_JDBC%"
REM -----
%JAVAPATH% -classpath %CLASSPATH% qmon.QMonitor .\qmonitor.ini
REM -----
```






Installation of Q-Monitor

- Start Q-Monitor by double click on qmonitor.bat
- Click on „Create Database“



Installation of Q-Monitor

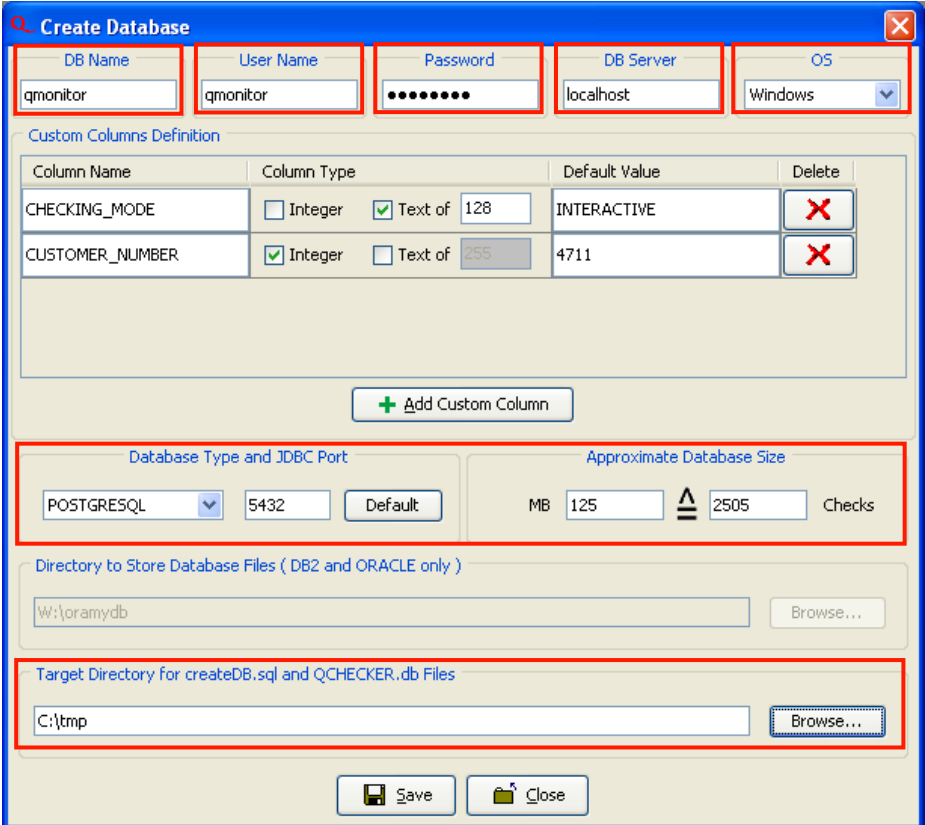
1 Fill out the database information

-  DB Name
-  User Name
-  Password (e.g. *qmonitor*)
-  DB Server
-  OS

2 Enter Database Type/Port number and table size

3 Choose a directory where the SQL script createDB.sql and Q-Checker Database file QCHECKER.db should be created (e.g. *c:\tmp*).

 Press Save



The screenshot shows the 'Create Database' dialog box with the following fields and annotations:

- Annotation 1:** Points to the top row of input fields: DB Name (qmonitor), User Name (qmonitor), Password (masked), DB Server (localhost), and OS (Windows).
- Annotation 2:** Points to the 'Database Type and JDBC Port' section, showing POSTGRESQL selected, port 5432, and 'Approximate Database Size' set to 125 MB and 2505 Checks.
- Annotation 3:** Points to the 'Target Directory for createDB.sql and QCHECKER.db Files' field, which is set to C:\tmp.

Column Name	Column Type	Default Value	Delete
CHECKING_MODE	<input type="checkbox"/> Integer <input checked="" type="checkbox"/> Text of 128	INTERACTIVE	<input checked="" type="checkbox"/>
CUSTOMER_NUMBER	<input checked="" type="checkbox"/> Integer <input type="checkbox"/> Text of 255	4711	<input checked="" type="checkbox"/>

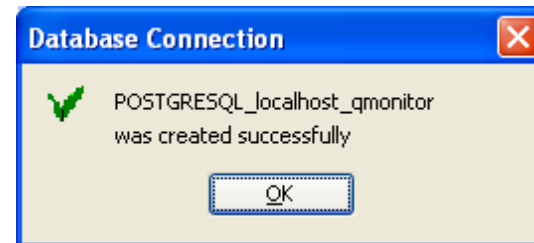
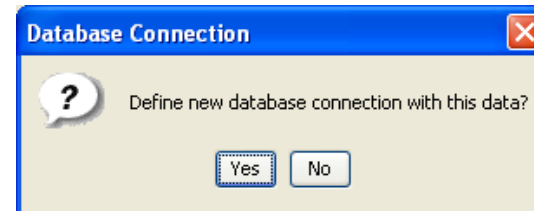
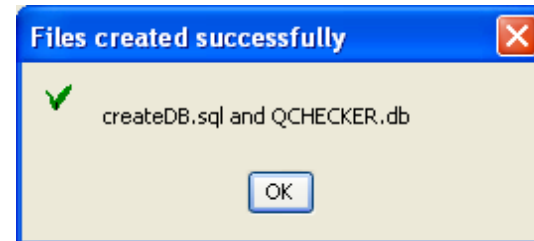
Installation of Q-Monitor

- The following panel appears
- Click OK

- The following panel appears
- Click Yes

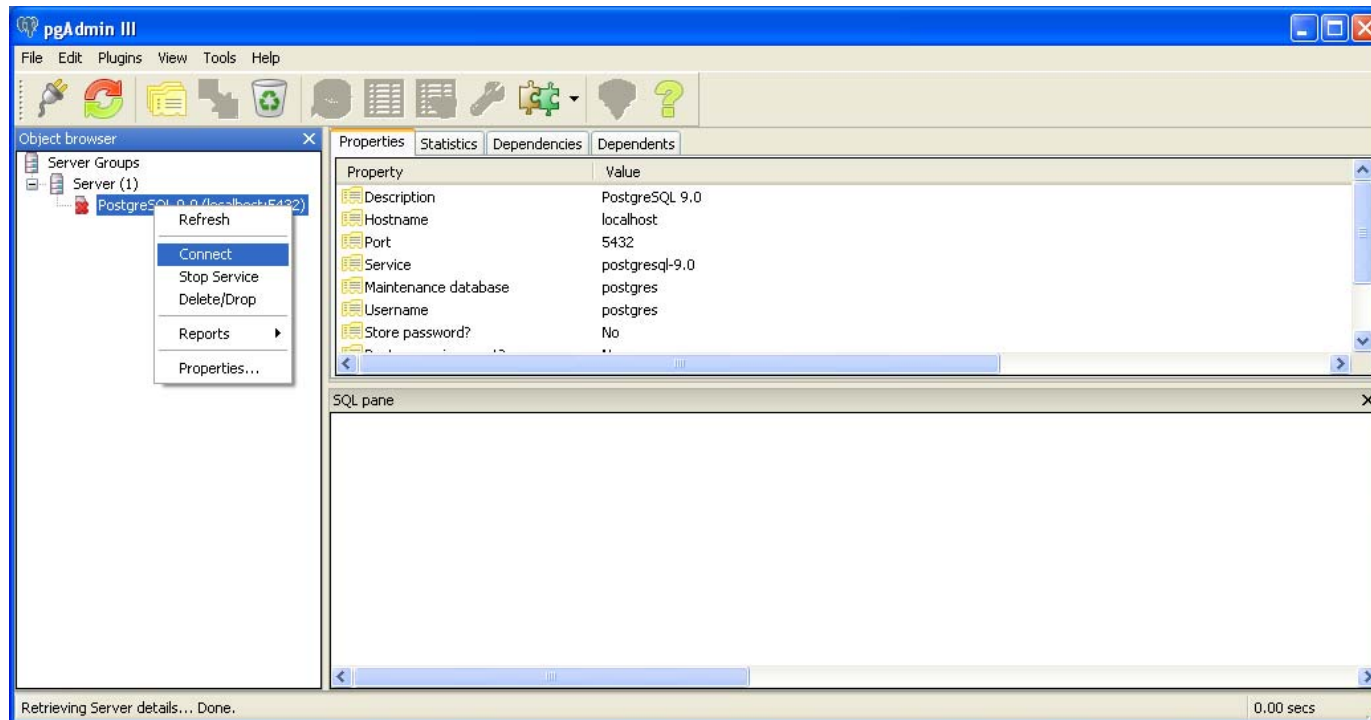
- The Database connection is created and set to default in Q-Monitor
- Click OK

- Close Q-Monitor



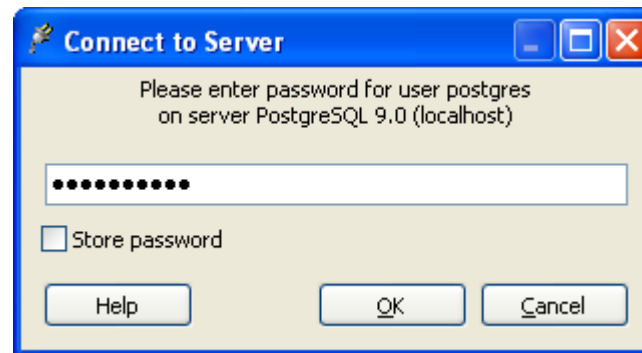
Installation of Q-Monitor

- Restart pgAdmin III
- Right mouse button „connect“



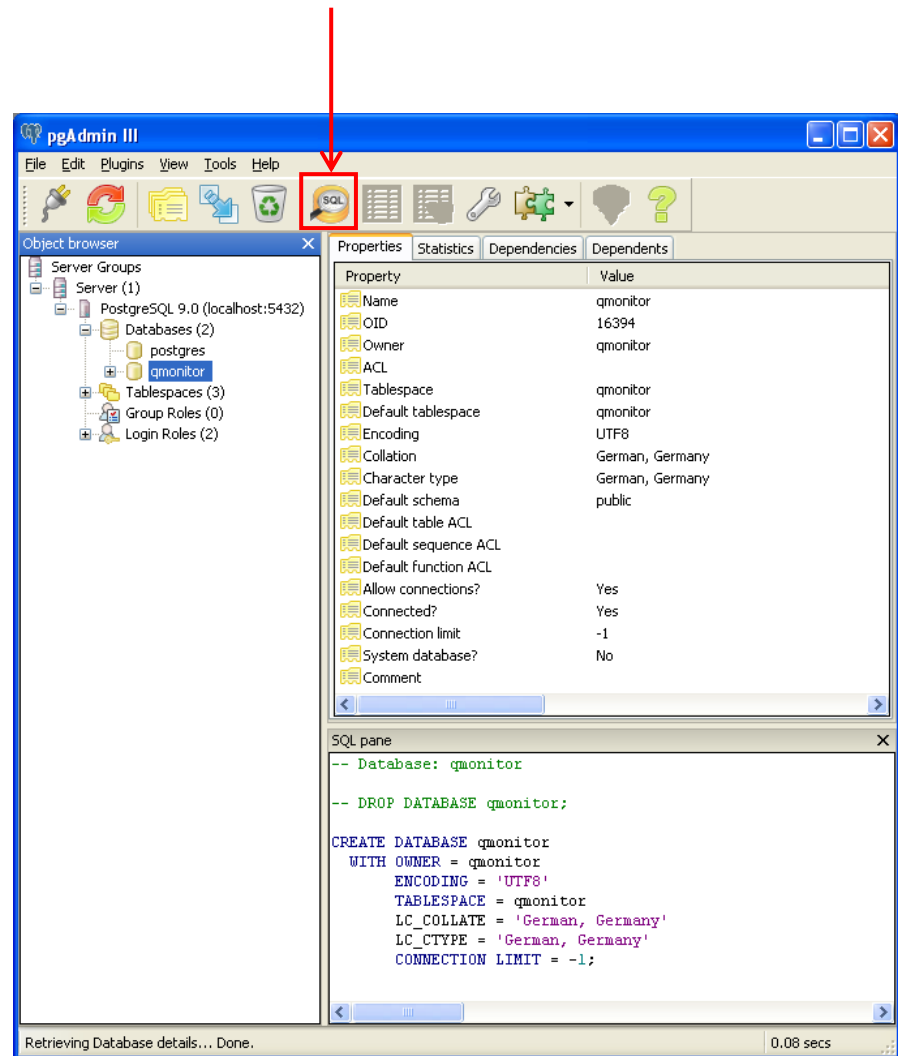
Installation of Q-Monitor

- Enter password:
postgres82
- Click OK



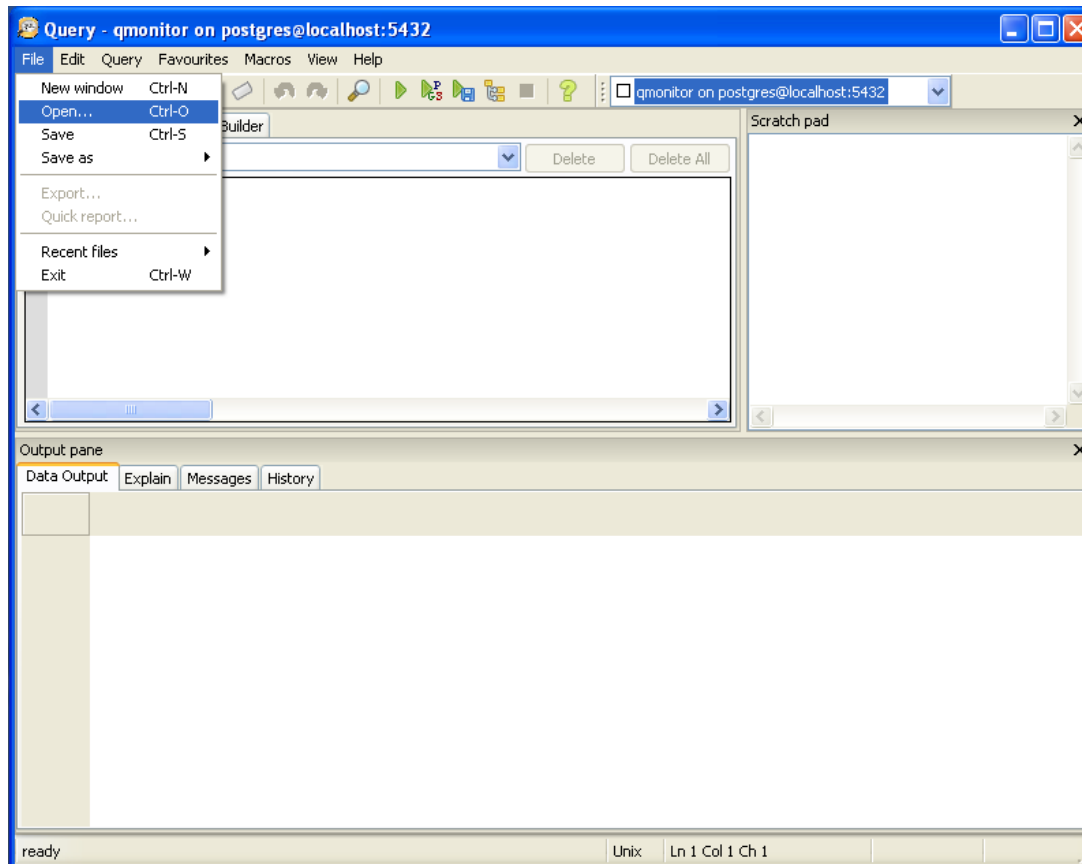
Installation of Q-Monitor

- Select the database qmonitor
- Click on the sql icon



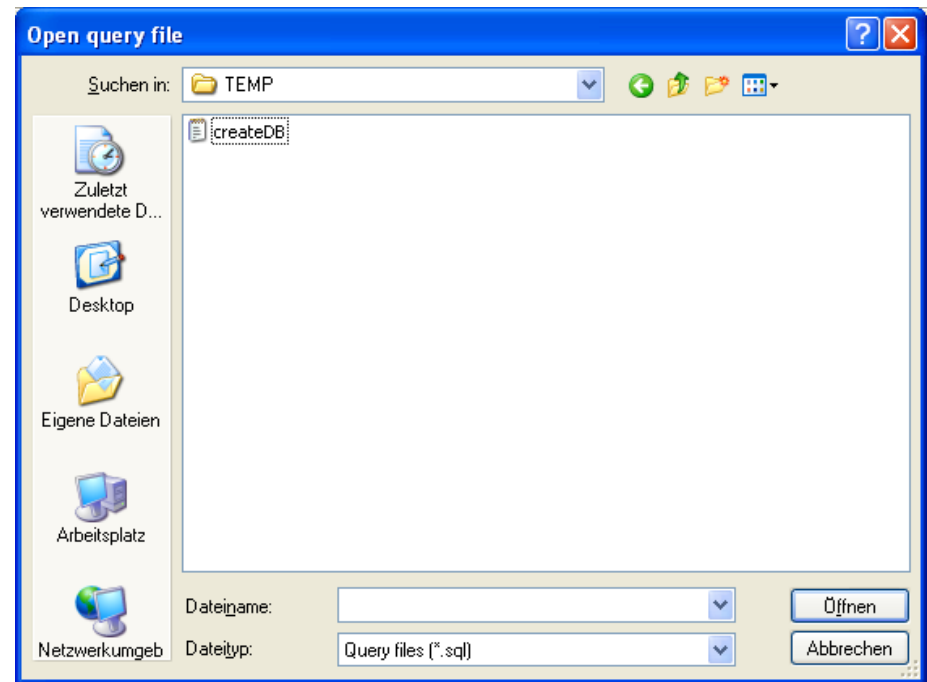
Installation of Q-Monitor

- Click on File – Open



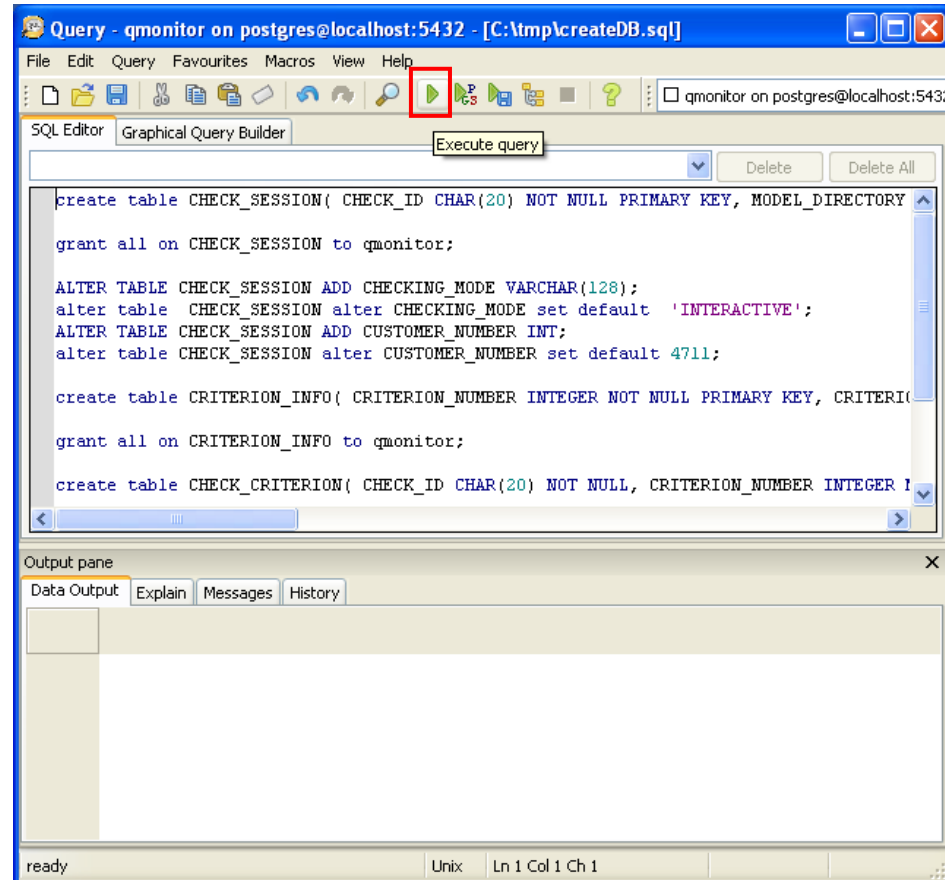
Installation of Q-Monitor

- Select the sql script which is created by Q-Monitor Database Creation (filename: *createDB.sql*)



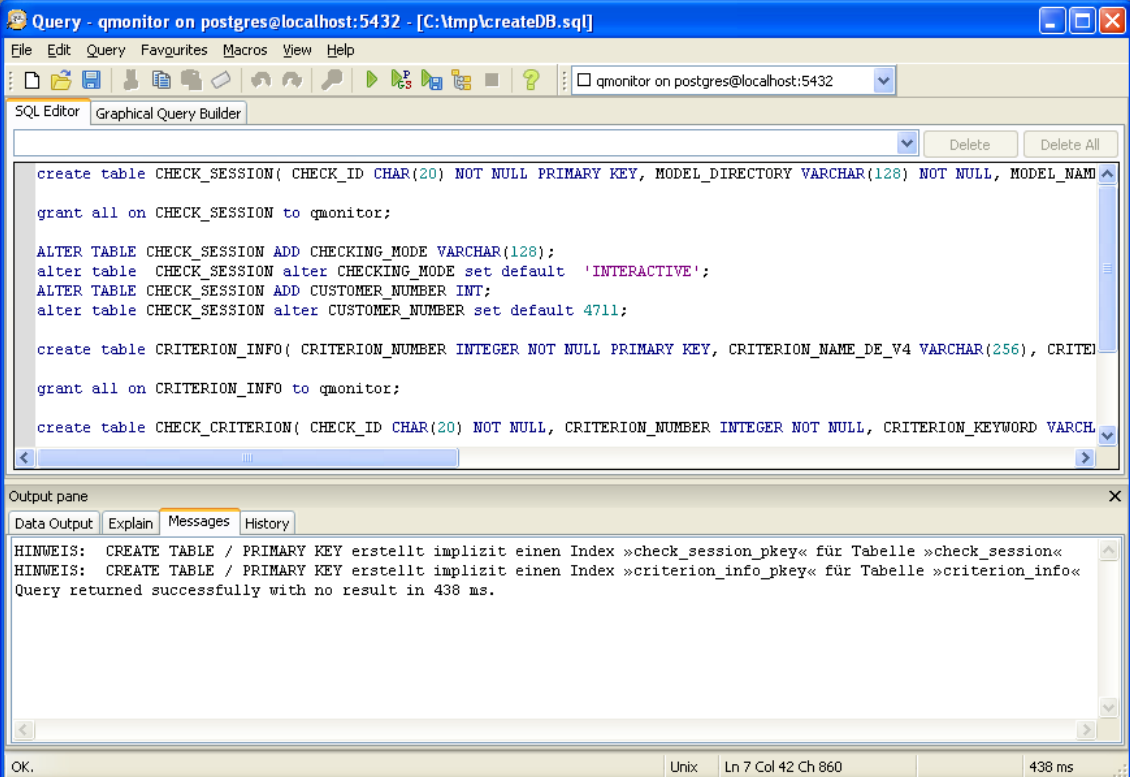
Installation of Q-Monitor

Click on
„execute query“



Installation of Q-Monitor

- Tables are created
- Close pgAdmin III



The screenshot shows a PostgreSQL SQL Editor window titled "Query - qmonitor on postgres@localhost:5432 - [C:\tmp\createDB.sql]". The window contains the following SQL code:

```
create table CHECK_SESSION( CHECK_ID CHAR(20) NOT NULL PRIMARY KEY, MODEL_DIRECTORY VARCHAR(128) NOT NULL, MODEL_NAM
grant all on CHECK_SESSION to qmonitor;

ALTER TABLE CHECK_SESSION ADD CHECKING_MODE VARCHAR(128);
alter table CHECK_SESSION alter CHECKING_MODE set default 'INTERACTIVE';
ALTER TABLE CHECK_SESSION ADD CUSTOMER_NUMBER INT;
alter table CHECK_SESSION alter CUSTOMER_NUMBER set default 4711;

create table CRITERION_INFO( CRITERION_NUMBER INTEGER NOT NULL PRIMARY KEY, CRITERION_NAME_DE_V4 VARCHAR(256), CRITE
grant all on CRITERION_INFO to qmonitor;

create table CHECK_CRITERION( CHECK_ID CHAR(20) NOT NULL, CRITERION_NUMBER INTEGER NOT NULL, CRITERION_KEYWORD VARCH
```

The Output pane at the bottom shows the following messages:

```
HINWEIS: CREATE TABLE / PRIMARY KEY erstellt implizit einen Index »check_session_pkey« für Tabelle »check_session«
HINWEIS: CREATE TABLE / PRIMARY KEY erstellt implizit einen Index »criterion_info_pkey« für Tabelle »criterion_info«
Query returned successfully with no result in 438 ms.
```

The status bar at the bottom indicates "OK.", "Unix", "Ln 7 Col 42 Ch 860", and "438 ms".

Installation of Q-Monitor

Database structure

CRITERION_INFO		
CRITERION_NAME_DE	CRITERION_NAME_EN	CRITERION_NUMBER
Modellgröße	Model Size	1115
Aktives Set	Current Set	1098
:	:	:

NLS Criterion names

Coupled by key
CRITERION_NUMBER

CHECK_CRITERION		
CRITERION_NUMBER	CHECK_ID
1115		1707..21
1098		1707..21
1048		1707..21
1099		1707..21
1048		1707..22
:		1707..22

Complete Data for each
checked Criterion

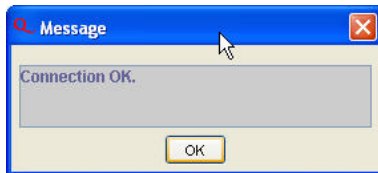
CHECK_SESSION				
CHECK_ID
1707..21				
1707..22				
1707..23				
:				

Header Data for each check

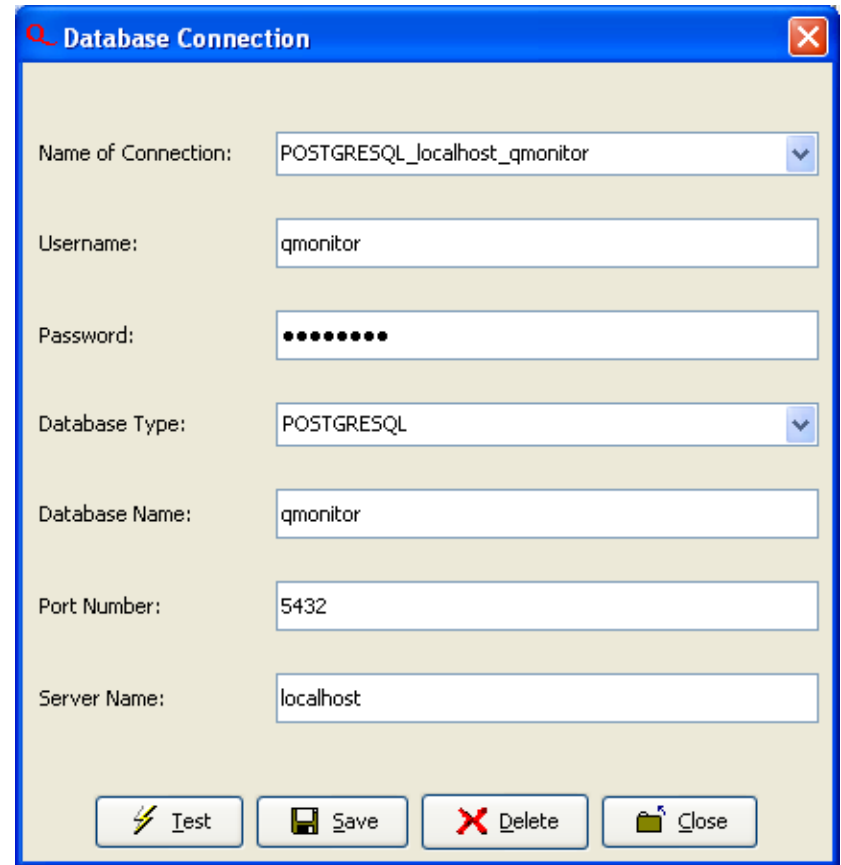
Coupled by key CHECK_ID

Installation of Q-Monitor

- Start Q-Monitor
- Click on „Database – Define“
- Verify the Database Connection information
- Click on „Test“. The following message should appear

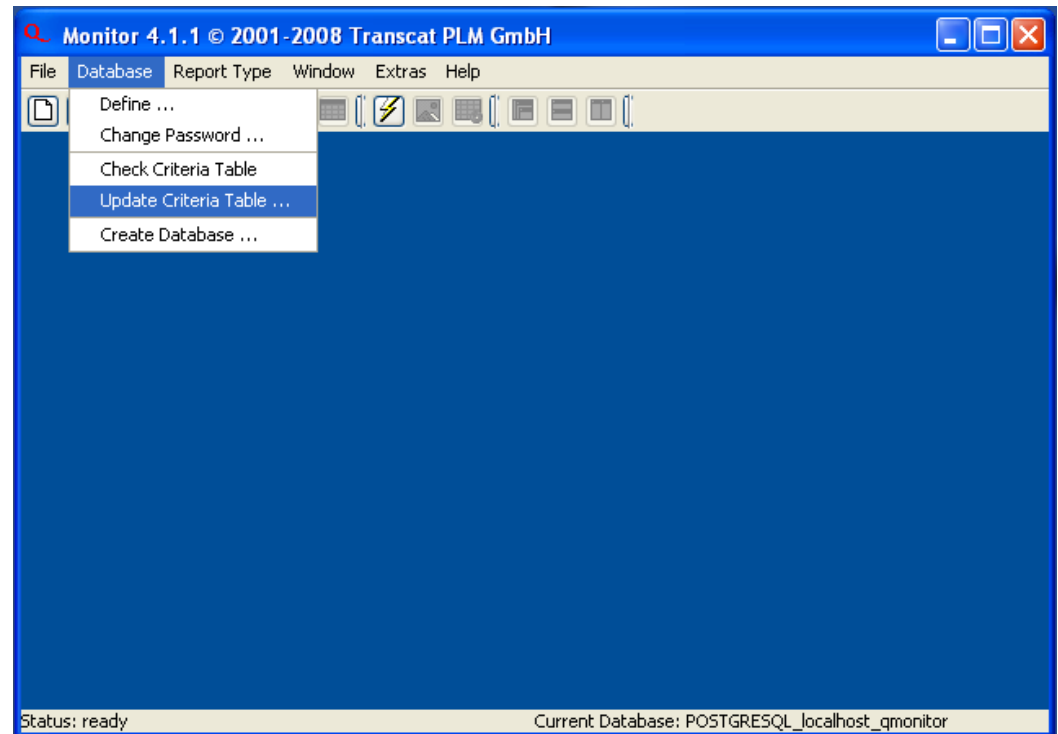


- Exit the panel with „Save“ and „Close“

A "Database Connection" dialog box with a blue title bar and a close button. It contains several fields: "Name of Connection:" (dropdown menu with "POSTGRESQL_localhost_qmonitor"), "Username:" (text box with "qmonitor"), "Password:" (password field with 7 dots), "Database Type:" (dropdown menu with "POSTGRESQL"), "Database Name:" (text box with "qmonitor"), "Port Number:" (text box with "5432"), and "Server Name:" (text box with "localhost"). At the bottom, there are four buttons: "Test" (lightning bolt icon), "Save" (floppy disk icon), "Delete" (red X icon), and "Close" (door icon).

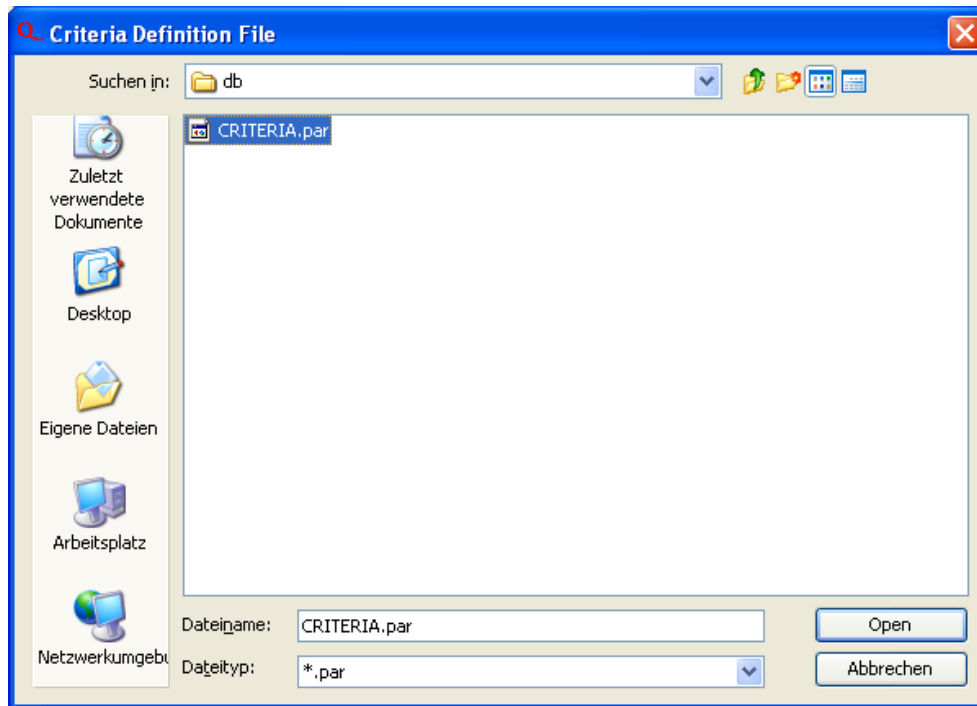
Installation of Q-Monitor

- Click on „Update Criteria Table“



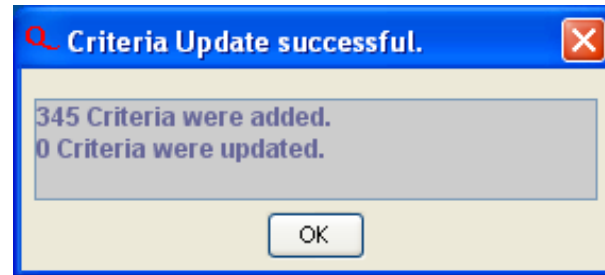
Installation of Q-Monitor

- Select from the Q-Checker installation directory
.../adminV5/DEFAULT/db the file CRITERIA.par



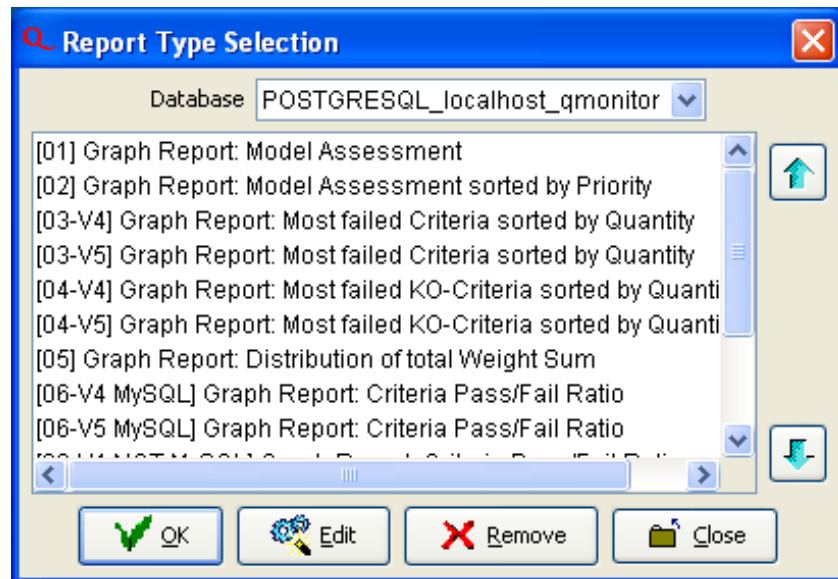
Installation of Q-Monitor

- The Criteria Table is updated successfully.



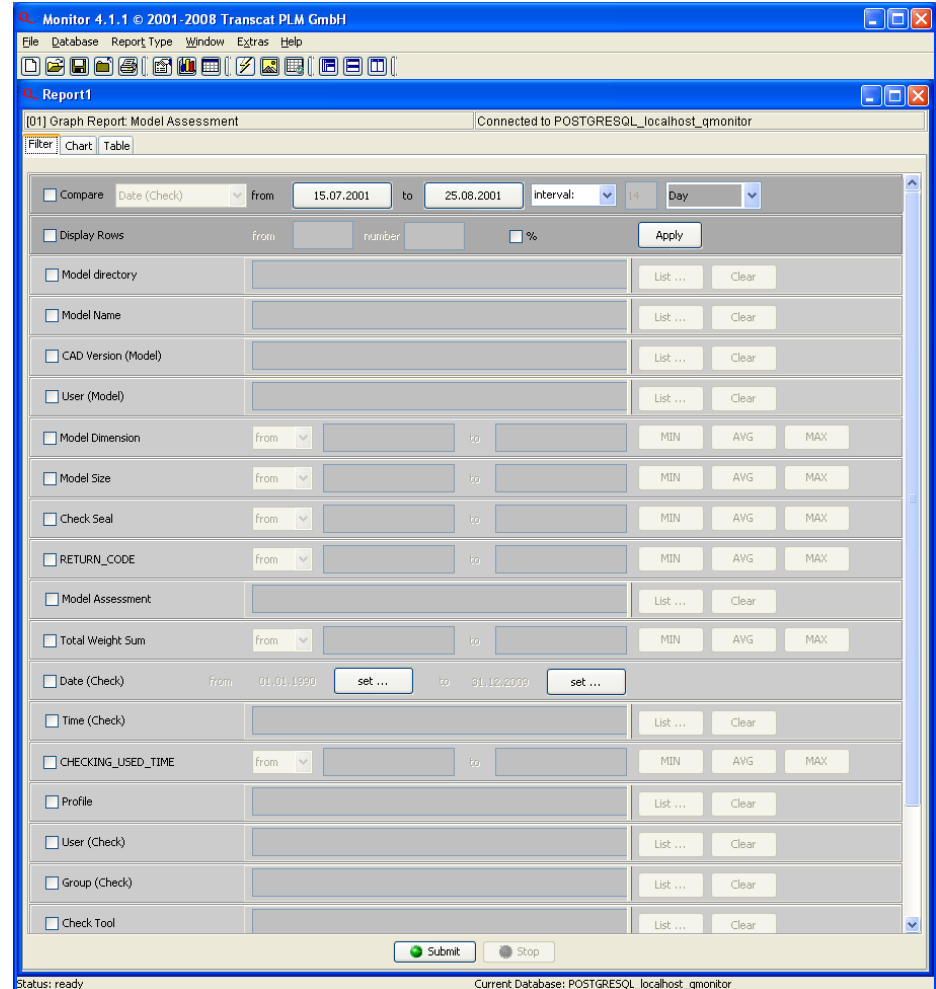
Installation of Q-Monitor

- Make a new query
(File – New)
- Choose first query
- Click OK



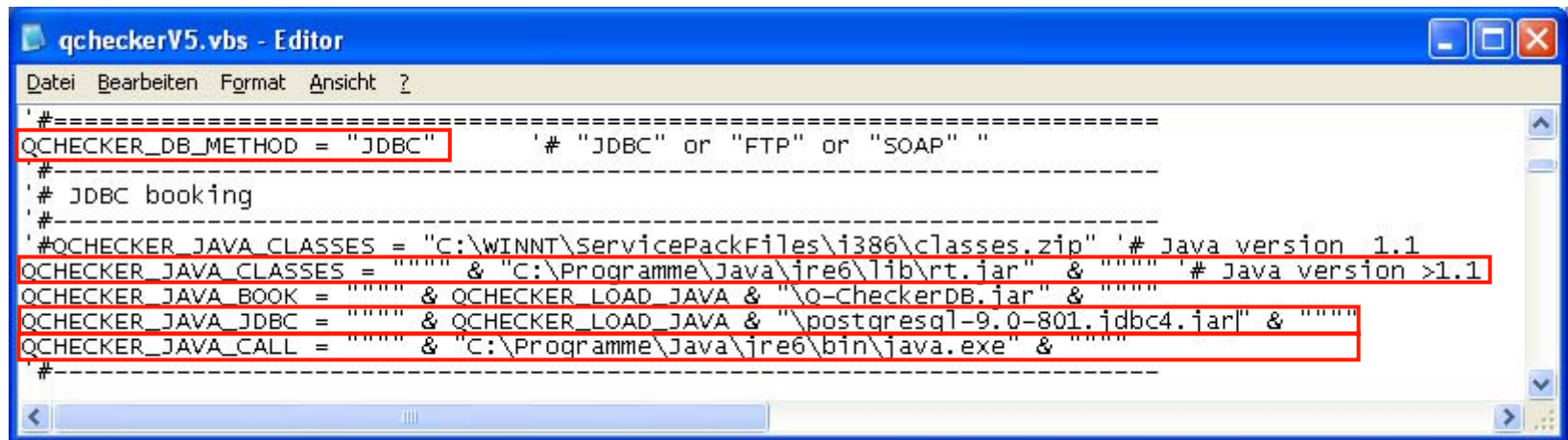
Installation of Q-Monitor

- Start the query by clicking on „Submit“
- Q-Monitor will show an empty graph as long as no Q-Checker reports are checked in



Adapting Q-Checker to the database

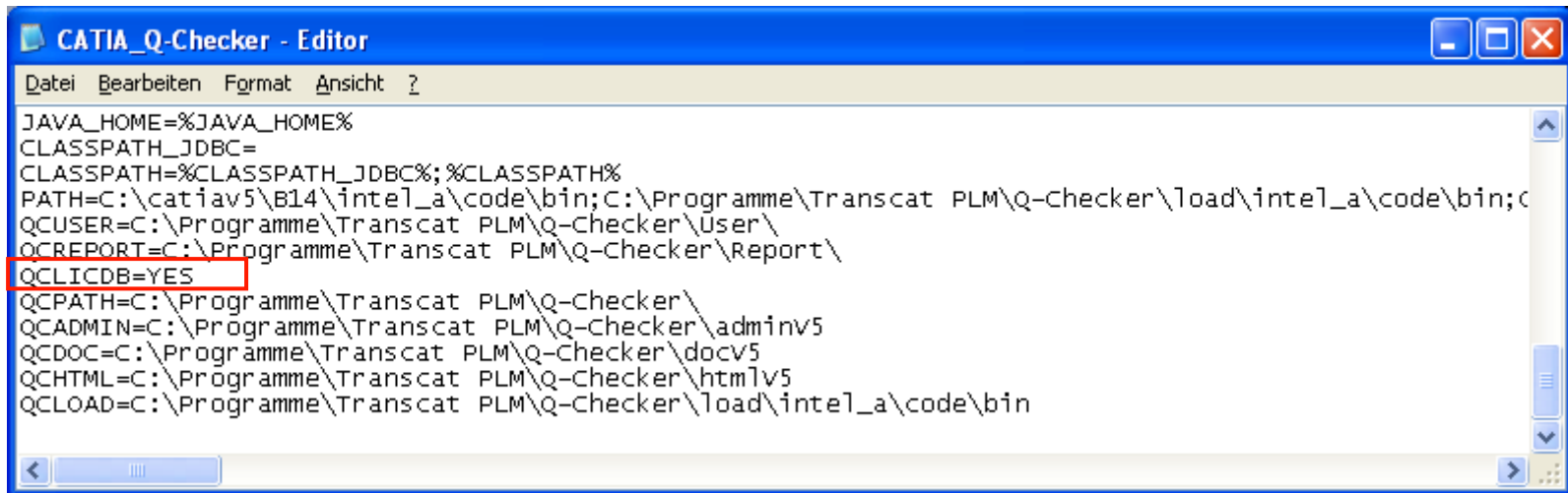
- Copy the JDBC driver (*postgresql-9.0-801.jdbc4.jar*) from the PostgreSQL installation into the Q-Checker installation directory (e.g. *C:\Programme\Transcat PLM\Q-Checker\load*)
- Adapt the following lines in the file: *<Q-CheckerInstallationDir>\qcheckerV5.vbs* to your local installation of Java.



```
qcheckerV5.vbs - Editor
Datei Bearbeiten Format Ansicht ?
' #-----
QCHECKER_DB_METHOD = "JDBC"          '# "JDBC" or "FTP" or "SOAP" "
' #-----
' # JDBC booking
' #-----
' #QCHECKER_JAVA_CLASSES = "C:\WINNT\ServicePackFiles\i386\classes.zip" '# Java version 1.1
QCHECKER_JAVA_CLASSES = "" & "C:\Programme\Java\jre6\lib\rt.jar" & "" '# Java version >1.1
QCHECKER_JAVA_BOOK = "" & QCHECKER_LOAD_JAVA & "\\O-CheckerDB.jar" & ""
QCHECKER_JAVA_JDBC = "" & QCHECKER_LOAD_JAVA & "\\postgresql-9.0-801.jdbc4.jar" & ""
QCHECKER_JAVA_CALL = "" & "C:\Programme\Java\jre6\bin\java.exe" & ""
' #-----
```

Adapting Q-Checker to the database

- Adapt the CATIA environment text file (by default it is located in **C:\Documents and Settings\All Users\Application Data\DassaultSystemes\CATEnv**) and enable the **Q-Checker Database License (QCLICDB=YES)**
NOTE: The license TC-qcheckerV5-DB must be available!



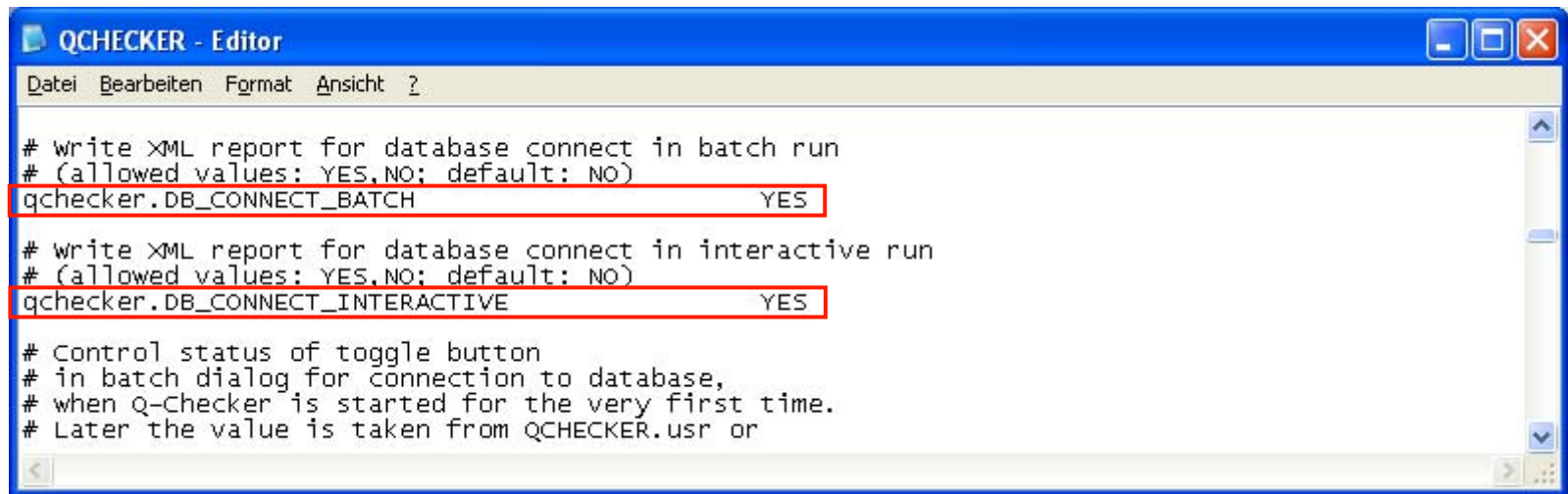
```

Datei Bearbeiten Format Ansicht ?
JAVA_HOME=%JAVA_HOME%
CLASSPATH_JDBC=
CLASSPATH=%CLASSPATH_JDBC%;%CLASSPATH%
PATH=C:\catia\v5\B14\intel_a\code\bin;C:\Programme\Transcat PLM\Q-Checker\load\intel_a\code\bin;c
QUSER=C:\Programme\Transcat PLM\Q-Checker\User\
QCREPORT=C:\Programme\Transcat PLM\Q-Checker\Report\
QCLICDB=YES
QCPATH=C:\Programme\Transcat PLM\Q-Checker\
QADMIN=C:\Programme\Transcat PLM\Q-Checker\admin\v5
QDOC=C:\Programme\Transcat PLM\Q-Checker\doc\v5
QHTML=C:\Programme\Transcat PLM\Q-Checker\html\v5
QLOAD=C:\Programme\Transcat PLM\Q-Checker\load\intel_a\code\bin

```

Adapting Q-Checker to the database

- Adapt the file <Q-CheckerInstallationDir>\adminV5\<Environment>\QCHECKER.par and enable the Database Connection for batch and interactive mode.



The screenshot shows a window titled "QCHECKER - Editor" with a menu bar containing "Datei", "Bearbeiten", "Format", "Ansicht", and "?". The main text area contains the following configuration parameters:

```
# write XML report for database connect in batch run
# (allowed values: YES,NO; default: NO)
qchecker.DB_CONNECT_BATCH YES

# write XML report for database connect in interactive run
# (allowed values: YES,NO; default: NO)
qchecker.DB_CONNECT_INTERACTIVE YES

# Control status of toggle button
# in batch dialog for connection to database,
# when Q-Checker is started for the very first time.
# Later the value is taken from QCHECKER.usr or
```

The two lines defining the database connection parameters are highlighted with red boxes:

- `qchecker.DB_CONNECT_BATCH YES`
- `qchecker.DB_CONNECT_INTERACTIVE YES`

Adapting Q-Checker to the database

- Copy the file QCHECKER.db which was created during the setup of the database by Q-Monitor from `c:\tmp` into the directory `<Q-CheckerInstallationDir>\adminV5\<Environment>\db`
- Open the QCHECKER.db file and verify that the values match with the connection parameters used in Q-Monitor

```
# -----  
# Q-Checker configuration file for database connect.  
# -----  
  
# Define database type  
# ( allowed values: DB2, ORACLE, MSSQL, MSSQL2005, POSTGRESQL, MYSQL, DB2V9 )  
qchecker.DB_TYPE      PostgreSQL  
  
# Define user with write access to database  
qchecker.DB_USER      qmonitor  
  
# Define password of user with write access to database  
qchecker.DB_PASSWORD  @GkpLVwwXGUPm6Yx8cm1eeQ==@  
  
# Define address of database server  
qchecker.DB_SERVER    localhost  
  
# Define database name  
qchecker.DB_NAME      qmonitor  
  
# Define port for remote database access. Default values:  
# ( default for DB2: 8888, default for ORACLE: 1521, default for MSSQL: 1433 )  
# ( default for POSTGRESQL: 5432, MYSQL: 3306 )  
qchecker.DB_PORT      5432  
  
# Define whether runtime measurement results should be written.  
# ( allowed values: YES/NO; default: NO )  
qchecker.DB_WRITE_CHECKING_USED_TIME  YES  
qchecker.DB_WRITE_CRITERION_CHECKING_USED_TIME  YES
```

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The End

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