

关系型数据源-Oracle TimesTen数据连接

1 概述

TimesTen的jdbc连接，如果是远程连接服务器的timesten必须要在客户端机器安装timesten客户端配置odbc才能连接。
本文将介绍如何在smartbi V9.5版本中连接Oracle TimesTen数据库。

2 数据连接

2.1 配置信息

驱动程序类	连接字符串	驱动程序存放目录	支持数据库版本
com.timesten.jdbc.TimesTenClientDriver	jdbc:timesten:client:dsn={dsnname}	自定义	TimesTen 11.2.2

添加自定义驱动方法：

- a、首先进入到%Smartbi%\Tomcat\bin\dynamicLibraryPath文件夹下，手动添加TimesTen文件夹。
- b、然后进入TimesTen文件夹下，添加TimesTen驱动（驱动包可以从数据库官网获取或向数据库管理员获取）。



- c、最后在数据源连接时需要点击自定义选项，选择TimesTen。



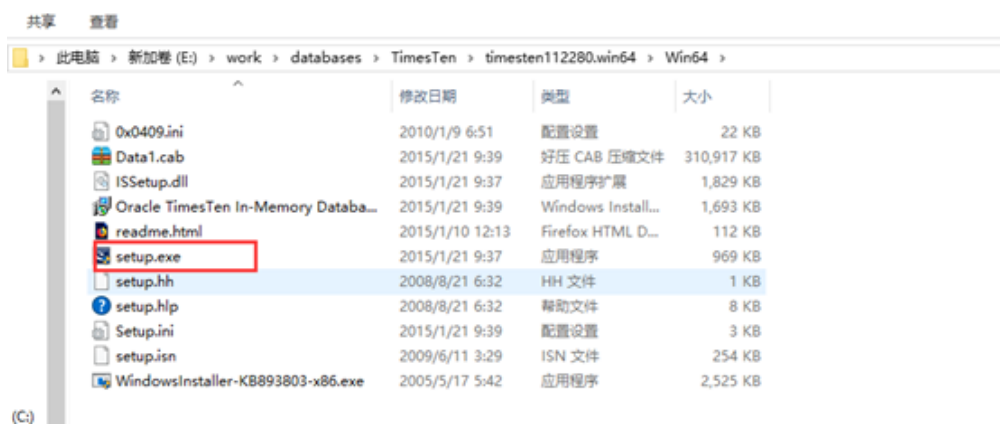
2.2 Windows安装TimesTen客户端

1) 获取安装包

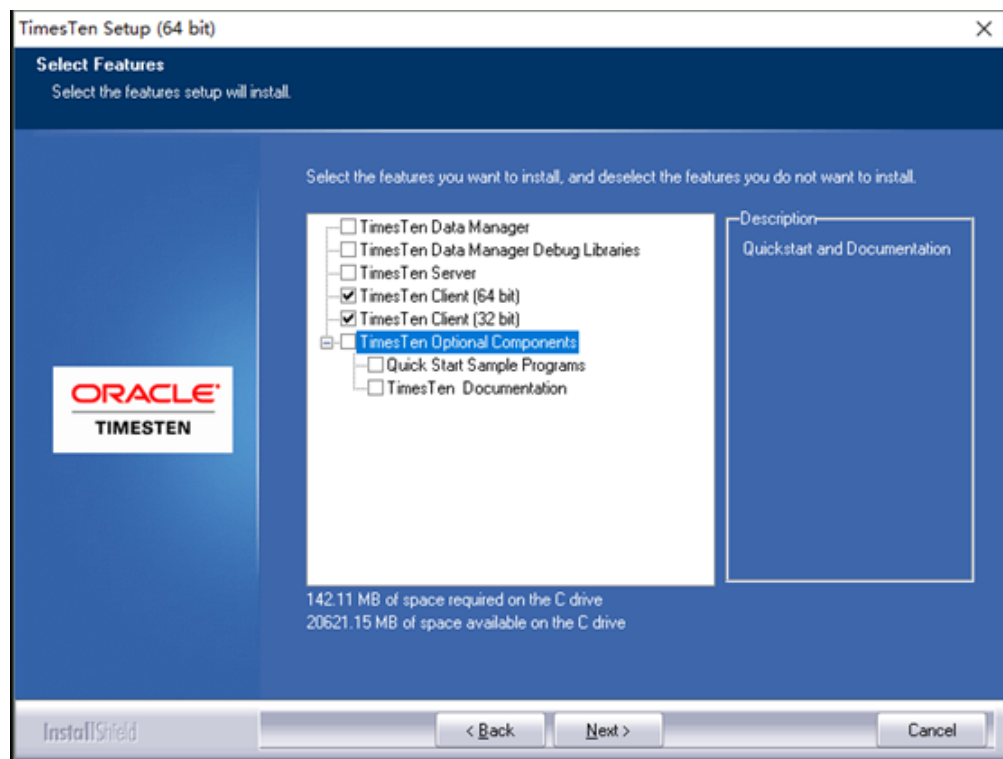
一般向数据库管理员获取Window安装包timesten112280.win64.zip。

2) 安装客户端

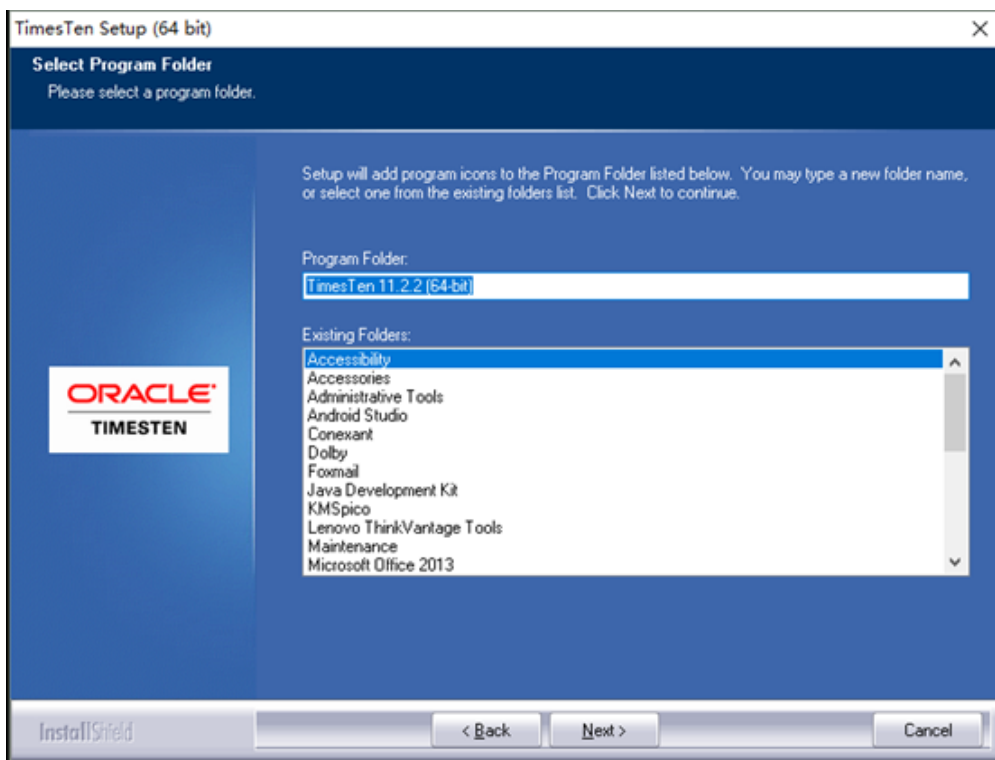
进入解压后的目录，双击 setup.exe



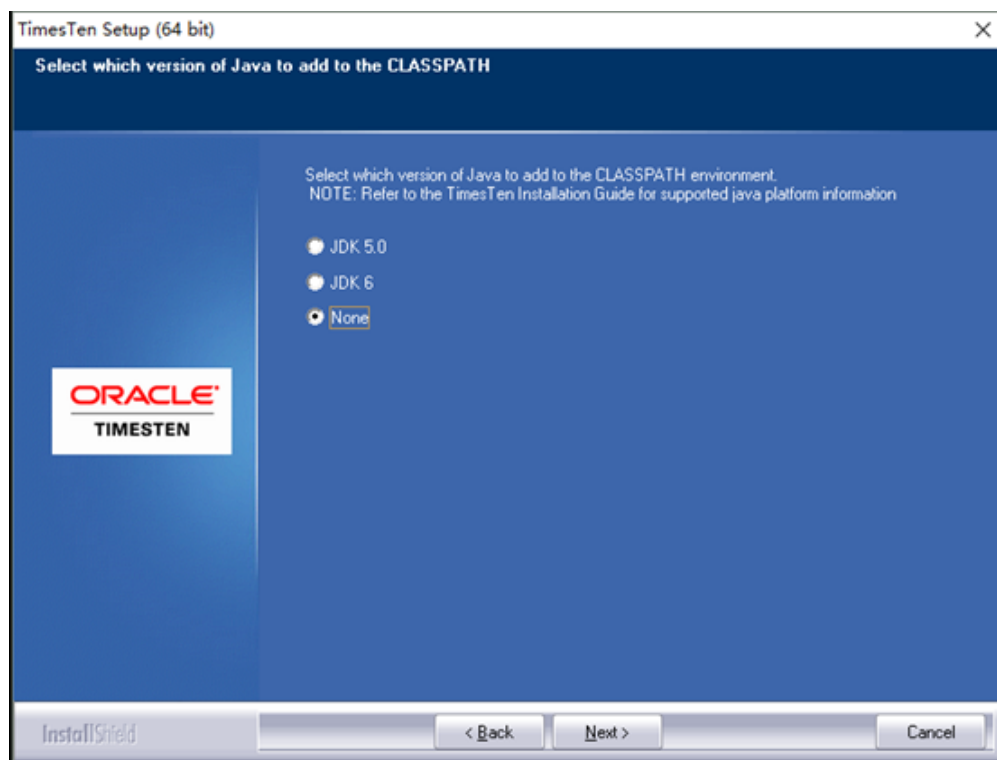
选择安装目录之后点击 **下一步**，然后选择需要安装的组件，除了客户端勾选，其他的服 务，文档demo程序等都不勾选。

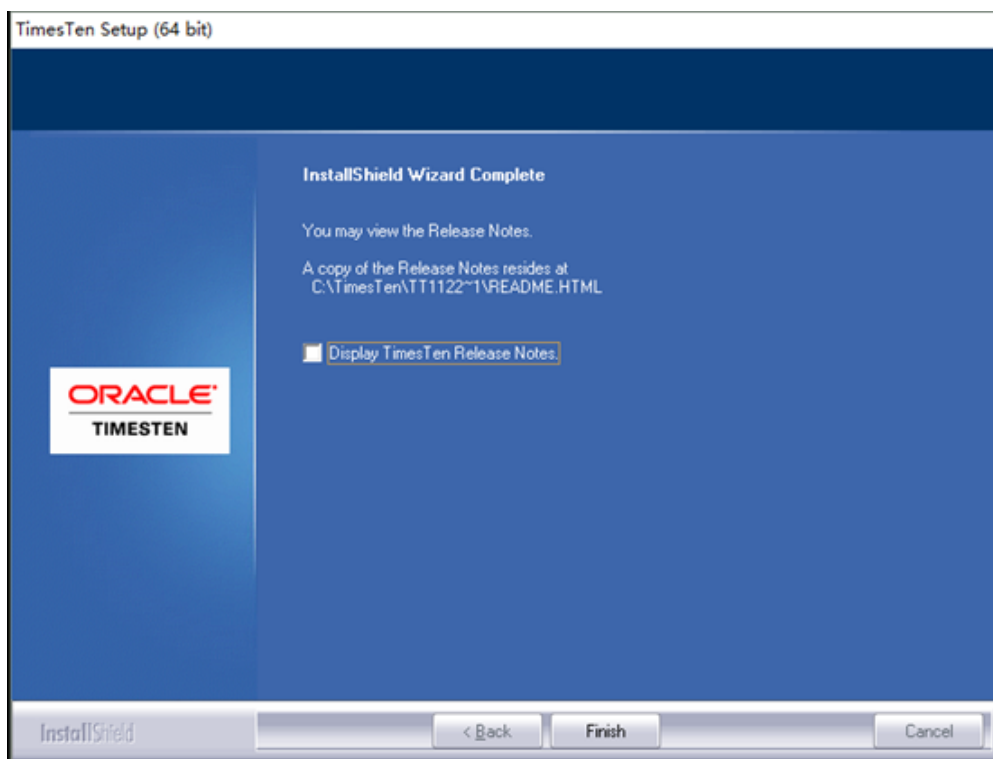
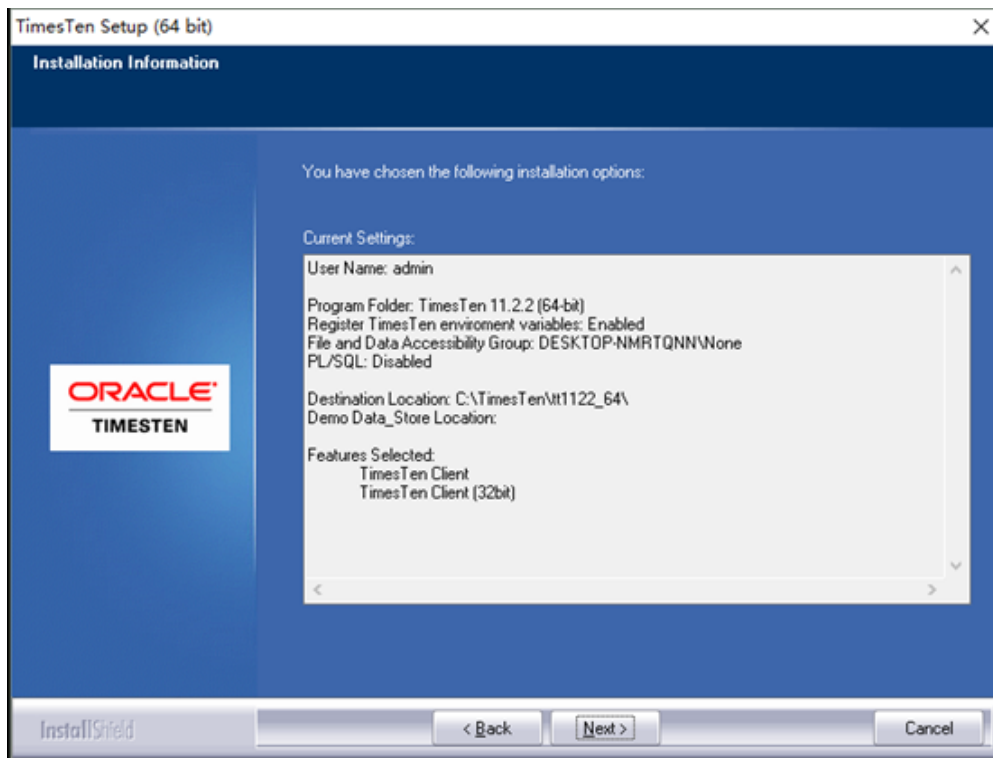


点击 **next** 下一步



由于一般我们机器都会自己安装jdk，所以jdk选择 None.

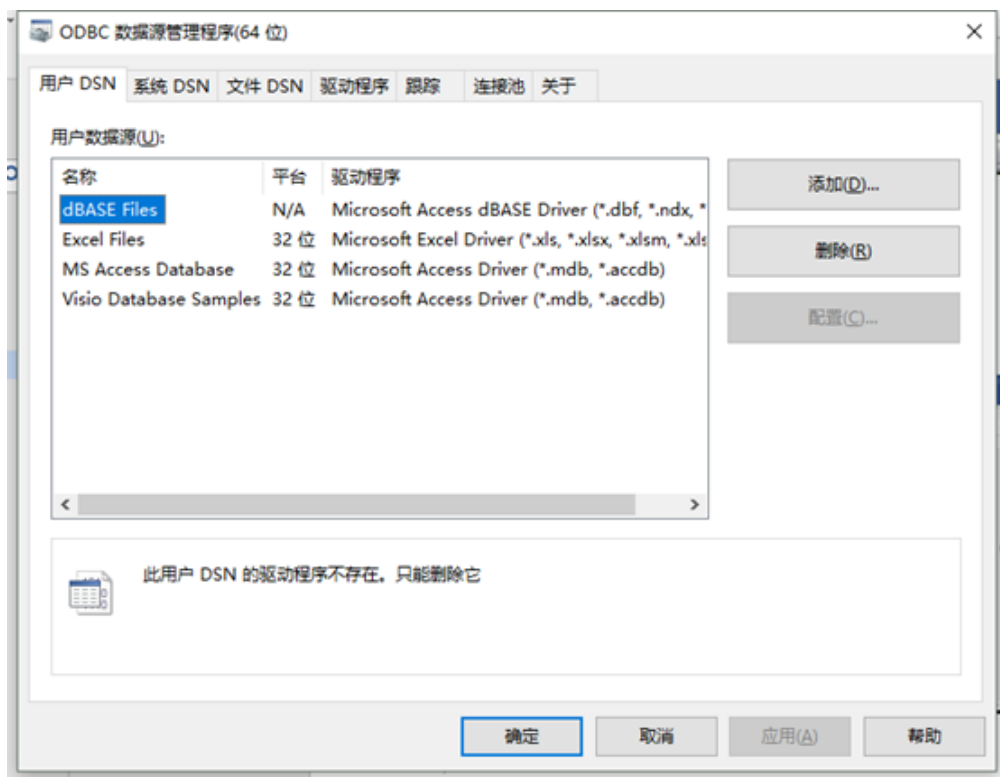




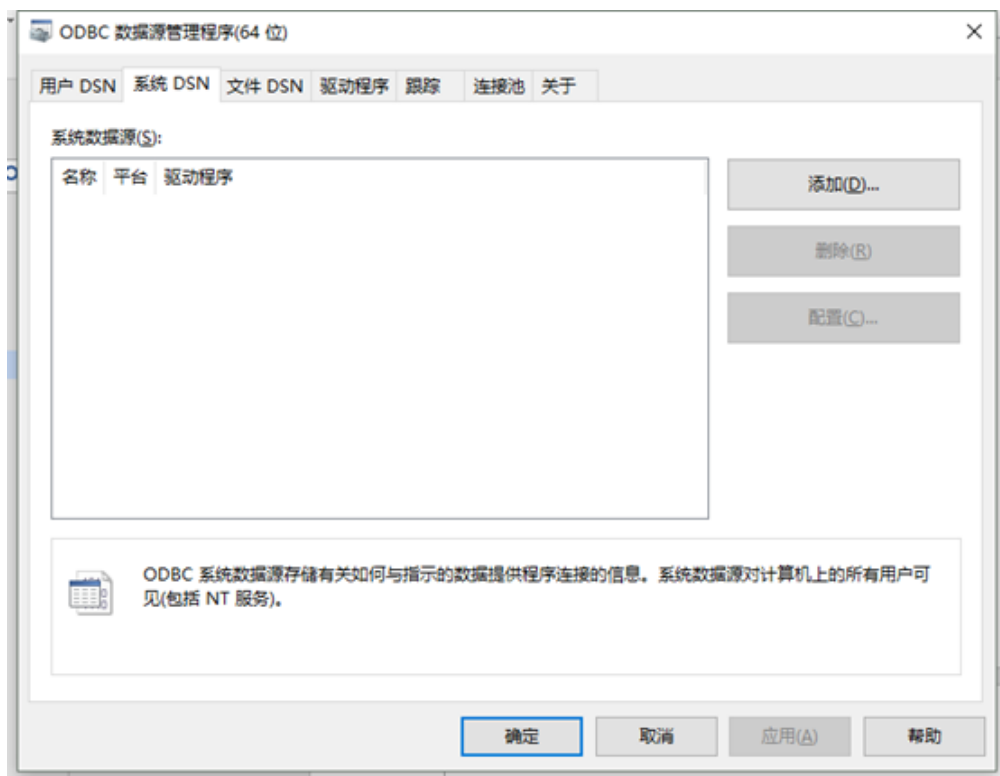
最后点击 **Finish** 完成安装。

配置dsn

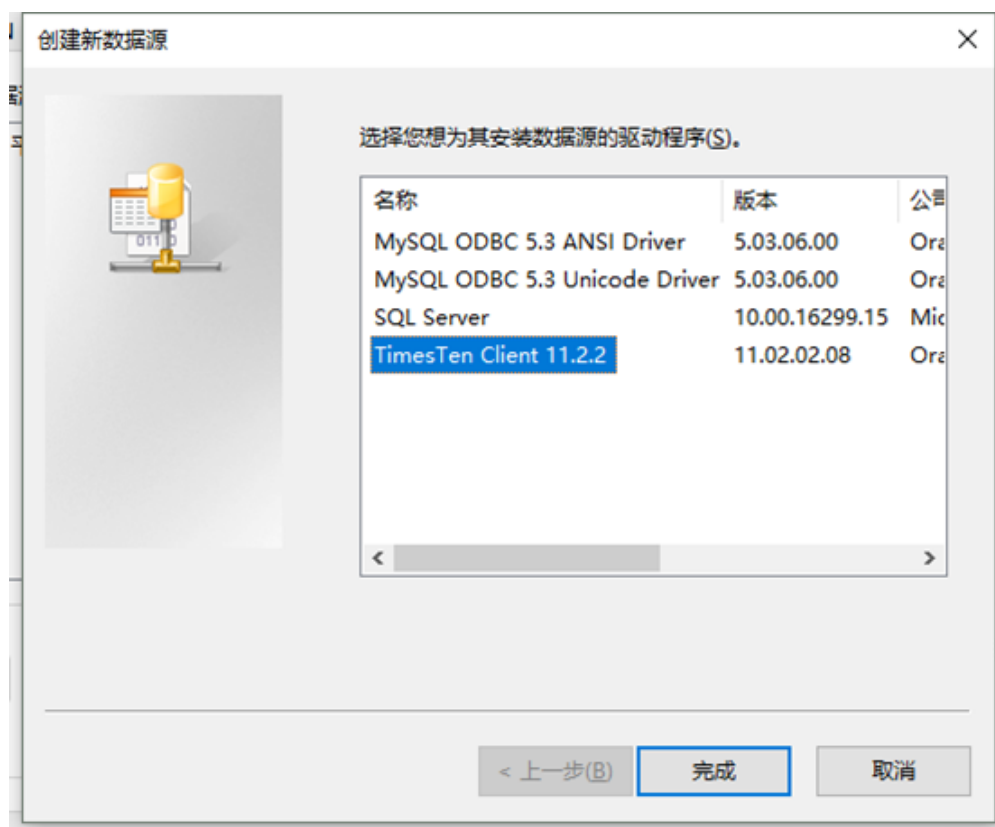
点击开始菜单，输入 odbc



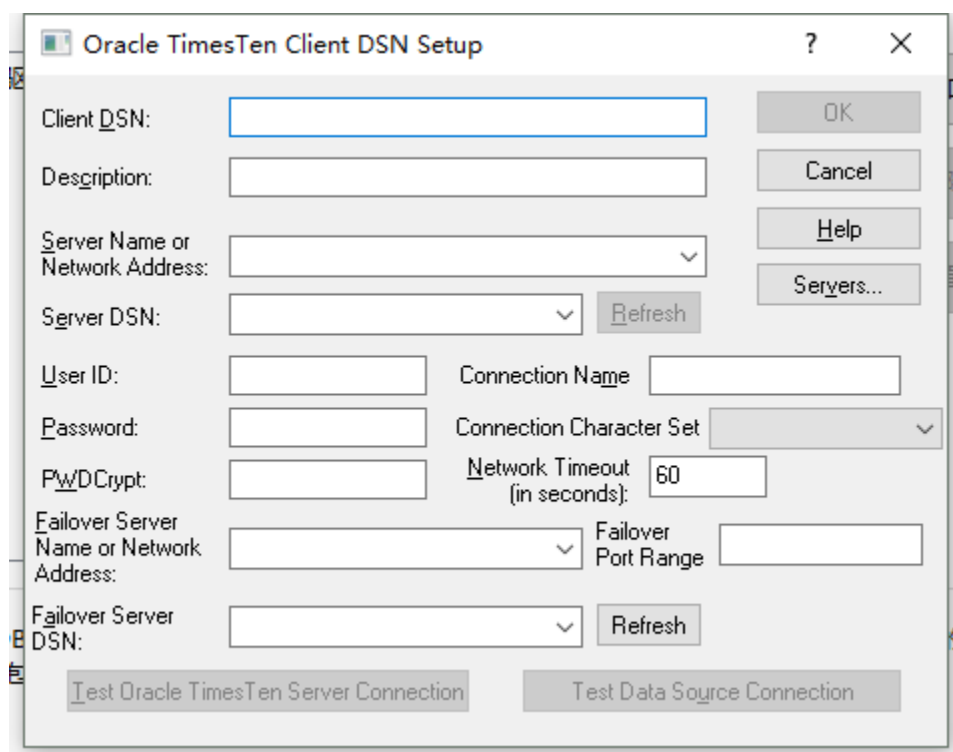
选择系统DSN



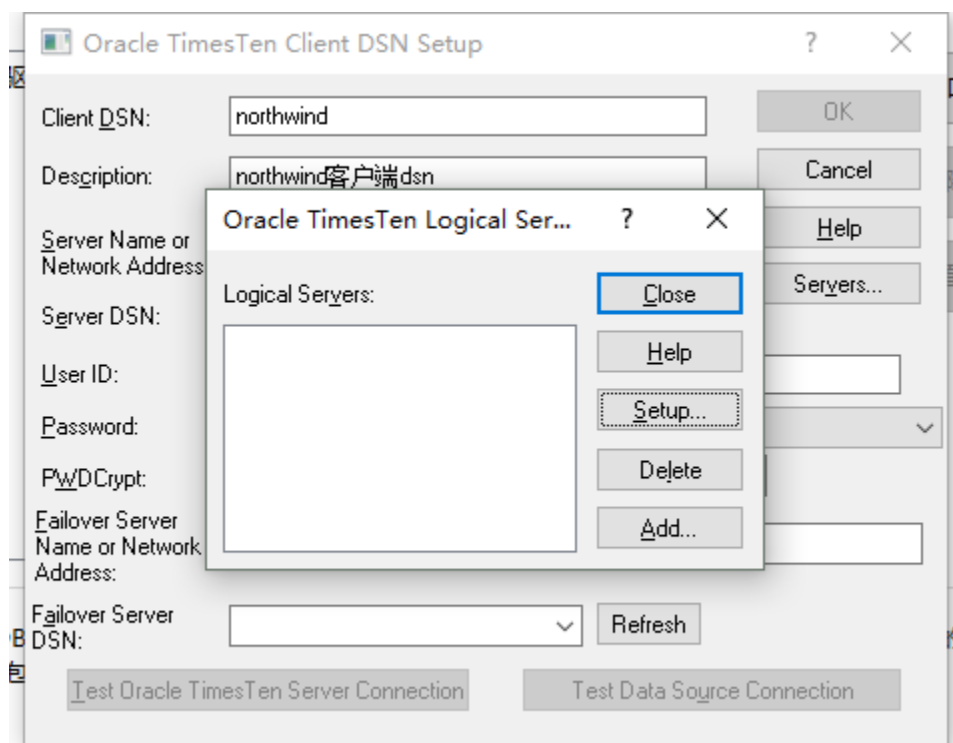
点击 添加



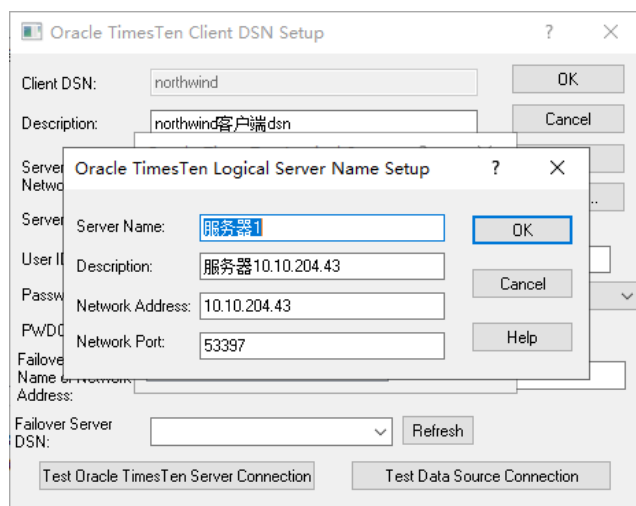
选择 TimesTen Client 11.2.2 然后点击 完成



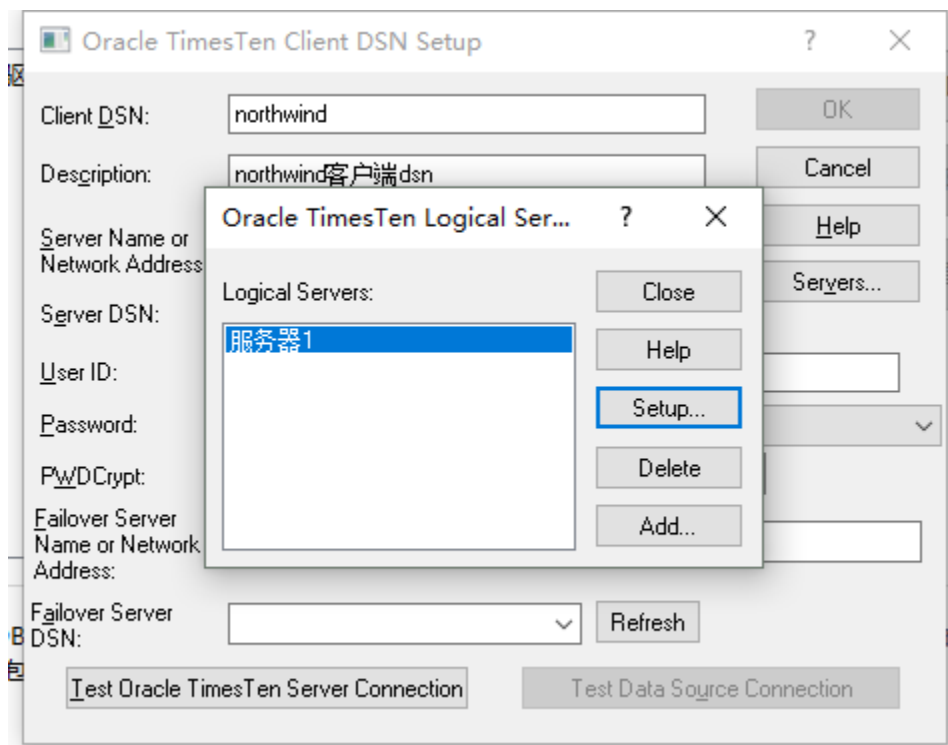
弹出配置选择框，输入dsn名称，描述，点击 servers配置服务器



点击 **Add** 添加服务器配置

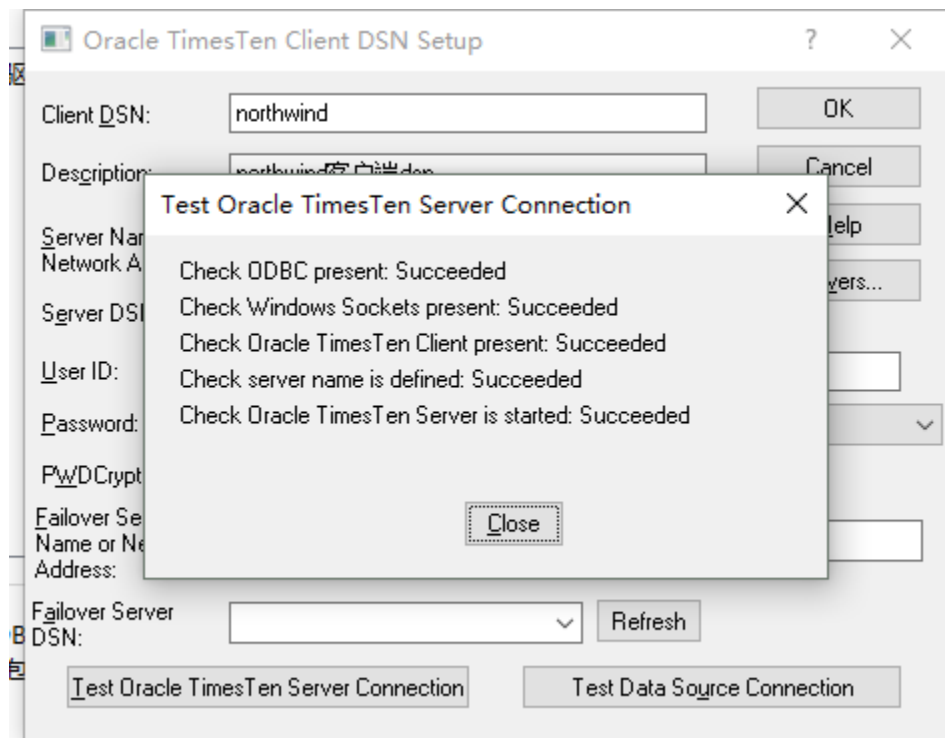


点击 **ok** .



点击 **close** ,关闭服务器列表。

选择 **服务器1**, 点击 **test Oracle TimesTen Server Connection** 测试服务器连接



连接成功后, 点击 **refresh**, 刷新出服务器的DSN列表

Oracle TimesTen Client DSN Setup

Client DSN: northwind

Description: northwind客户端dsn

Server Name or Network Address: 服务器1

Server DSN: cachedb1_1122

User ID:

Password:

PWDCrypt:

Network Timeout (in seconds): 60

Failover Server Name or Network Address:

Failover Port Range:

Failover Server DSN:

Test Oracle TimesTen Server Connection

Test Data Source Connection

选择northwind，填上用户名密码

点击 **test Data Source Connection** 测试数据源链接

Oracle TimesTen Client DSN Setup

Client DSN: northwind

Description: northwind客户端dsn

Server Name or Network Address:

Server DSN:

User ID:

Password:

PWDCrypt:

Failover Server Name or Network Address:

Failover Port Range:

Failover Server DSN:

Test Oracle TimesTen Server Connection

Test Data Source Connection

Test Data Source Connection

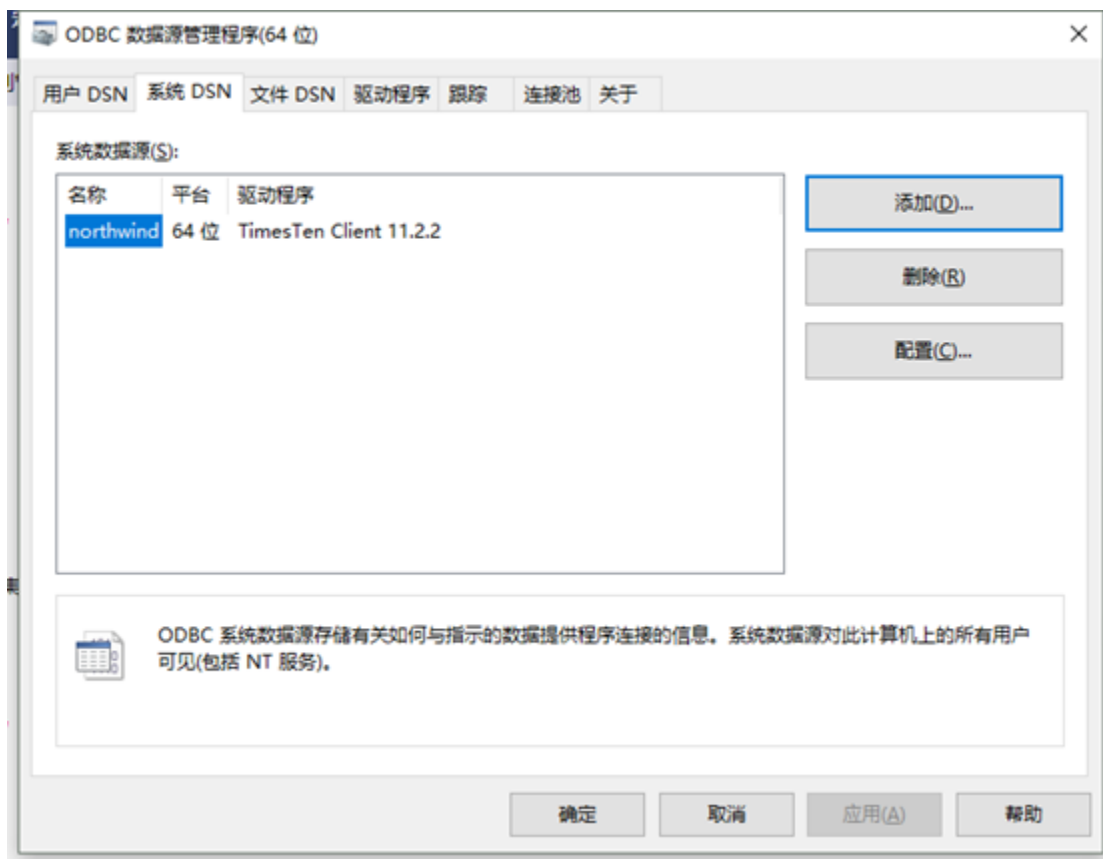
Check Data Source is defined on server: Succeeded

Check can connect to Data Source: Succeeded

Close

测试连接成功。

点击 **ok** 完成



这样客户端就安装好了，smartbi就可以通过jdbc连接TimesTen服务器。

注意：安装完客户端需要重新启动Smartbi才会生效。

2.3 Linux上安装TimesTen

一般向数据库管理员获取linux安装包timesten112280.win64.zip。

1) 解压文件：tar -zxvf timesten112280.linux8664.tar.gz

```
[root@localhost opt]# ls
timesten112280.linux8664.tar.gz
[root@localhost opt]# tar -zxvf timesten112280.linux8664.tar.gz
linux8664/
linux8664/uninst.sh
linux8664/install.pl
linux8664/README.html
linux8664/LINUX8664/
linux8664/LINUX8664/ttpatchinst
linux8664/LINUX8664/unzip
linux8664/LINUX8664/common.tar.bz2
linux8664/LINUX8664/ttclient.tar.bz2
linux8664/LINUX8664/perl
linux8664/LINUX8664/manifest
linux8664/LINUX8664/timesten.tar.bz2
linux8664/LINUX8664/bzip2
linux8664/LINUX8664/ttserver.tar.bz2
linux8664/3rdparty/
linux8664/3rdparty/ant-1.6.2-bin.tar.bz2
linux8664/3rdparty/jms-1_1-fr-apidocs.tar.bz2
linux8664/doc/
linux8664/doc/doc.zip
linux8664/setup.sh
[root@localhost opt]# ls
linux8664 timesten112280.linux8664.tar.gz
[root@localhost opt]# cd linux8664/
[root@localhost linux8664]# ls
3rdparty doc install.pl LINUX8664 README.html setup.sh uninstall.sh
[root@localhost linux8664]#
```

2) 执行setup.sh文件：进入解压后的目录，执行./setup.sh

```
[root@localhost linux8664]# ./setup.sh

WARNING: You are about to install TimesTen as root. TimesTen daemon processes will
run with root privileges. See the TimesTen Installation Guide for additional
information.

Are you sure that you want to install as root? [ no ] yes

NOTE: Each TimesTen installation is identified by a unique instance name.
The instance name must be a non-null alphanumeric string, not longer
than 255 characters.

Please choose an instance name for this installation? [ tt1122 ]
Instance name will be 'tt1122'.
Is this correct? [ yes ]

Of the three components:

[1] Client/Server and Data Manager
[2] Data Manager Only
[3] Client Only

Which would you like to install? [ 1 ] 3

Of the following options :

[1] /opt
[2] /opt
[3] Specify a location
[q] Quit the installation

Where would you like to install the tt1122 instance of TimesTen? [ 1 ]
```

根据提问选择:

Are you sure that you want to install as root? [no] yes

由于我是用的root用户安装所以会有警告开始询问是否使用root，选择yes。(生产环境建议新建其他用户安装)。

Please choose an instance name for this installation? [tt1122]

实例名称直接回车用默认的tt1122

Is this correct? [yes]

询问名称正确直接回车

Of the three components: [1] Client/Server and Data Manager [2] Data Manager Only [3] Client Only Which would you like to install? [1] 3

安装选项由于我们直接选择3 (仅仅只安装客户端)

Where would you like to install the tt1122 instance of TimesTen? [1]

安装目录选择直接回车选默认第一个/opt

然后等待安装

```
[q] Quit the installation

Where would you like to install the tt1122 instance of TimesTen? [ 1 ]
Installing into /opt/timesTen/tt1122 ...
Creating /opt/timesTen/tt1122 ...
Uncompressing ...

NOTE: For security, we recommend that you restrict access to the
TimesTen installation to members of a single OS group. Only members of
that OS group will be allowed to perform direct mode connections to
TimesTen, and only members of that OS group will be allowed to perform
operations that access TimesTen data stores, TimesTen files and shared
memory. The OS group defaults to the primary group of the instance
administrator. You can default to this group, choose another OS group
or you can make this instance world-accessible. If you choose to make
this instance world-accessible, all database files and shared memory
are readable and writable by all users.

Restrict access to the TimesTen installation to the group 'root'? [ yes ]

In order to use the 'Oracle TimesTen Application-Tier Database Cache' feature in any databases
created within this installation, you must set a value for the TNS_ADMIN
environment variable. It can be left blank, and a value can be supplied later
using <install dir>/bin/ttModInstall.

Please enter a value for TNS_ADMIN (s=skip)? [ ] s

Do you want to install the Quick Start Sample Programs and the TimesTen Documentation? [ no ]
Would you like to install the documentation (without the Quick Start Sample Programs)? [ yes ]
Where would you like to create the doc directory? [ /opt/timesTen/tt1122/doc ]
The TimesTen documentation has been installed in /opt/timesTen/tt1122/doc.
Installing client components...
What is the name of the host running the TimesTen server? [ localhost.localdomain ] 192.168.4.4
```

安装过程中会询问安装文档安装sample程序等，可以一路回车默认直到询问服务器地址是否为localhost时，我们可以输入服务器地址，也可以默认。这个后面可以配置文件里面修改。

3) 配置连接dsn

进入安装目录下的bin目录，执行./ttisqlcs 进入timesten客户端命令行。

```

Installing TimesTen components ...
What is the name of the host running the TimesTen server? [ localhost.localdomain ] 192.168.4.43
What is the TCP/IP port number that the TimesTen server on 192.168.4.43 is listening on? [ 53397 ]
The 11.2.2.8 Release Notes are located here :
'/opt/TimesTen/tt1122/README.html'

End of TimesTen installation.
[root@localhost linux8994]# cd /opt/TimesTen/
[root@localhost TimesTen]# ls
tt1122
[root@localhost TimesTen]# cd /opt/TimesTen/tt1122/bin/
[root@localhost bin]# ls
envcfg  setup.sh  ttbulkcpCS  ttcapture  ttctxvsh  ttisqlcs  ttisqlCSCmd  ttMigrateCS  ttpatchinst  ttSchemaCS  ttStateCSCmd  ttuser  ttversion  un
README.TXT  ttbulkcpce  ttbulkCPSCmd  ttCapture  ttctxvsh  ttIsqlCS  ttMigrates  ttMigrateCSCmd  ttSchemaCS  ttSchemaCSCmd  ttThunk  ttUser  ttVersion
[root@localhost bin]# ./ttisqlcs

Copyright (c) 1998, 2015, Oracle and/or its affiliates. All rights reserved.
Type ? or "help" for help, type "exit" to quit ttIsql.

Command>

```

执行connect命令连接一个不存在的dns, 会发现提示说在哪个配置文件不存在odbc配置。然后找到该目录下的配置文件修改。

```

Command> connect northwind;
IM002: Cannot find the requested DSN (northwind) in ODBCINI /var/TimesTen/sys.odbc.ini
The command failed.

```

如图所示，安装完成之后的配置文件在/var/TimesTen目录。 找到该目录发现有二个配置文件，其中sys.ttconnect.ini为服务器地址配置文件。sys.odbc.ini为odbc配置文件。

打开sys.ttconnect.ini

```

/var/TimesTen/sys.ttconnect.ini - root@192.168.3.99 - 编辑器 - WinSCP
#####
# This is a sample sys.ttconnect.ini file that is used for the
# TimesTen Client. It contains entries for each server.
#####
[192.168.4.43]
Description=TimesTen Server
Network_Address=192.168.4.43
TCP_PORT=53397

```

服务器的配置格式如下：

[192.168.4.43] #起个名称方便其他配置文件引用

Description=TimesTen Server #描述

Network_Address=10.10.204. #TimesTen服务器地址

TCP_PORT=53397 # TimesTen服务器

打开可以根据实际情况修改名称、描述、IP地址和端口。

编辑sys.odbc.ini, 添加一个odbc配置。

```
./var/TimesTen/sys.odb.ini - root@192.168.3.99 - 编辑器 - WeSCP

# Copyright (c) 1999, 2011, Oracle and/or its affiliates. All rights reserved.

#####
# This following sample definitions should be in the .odb.ini file
# that is used for the TimesTen 11.2.2 Client.
# The Server Name is set in the TTC_SERVER attribute.
# The Server DSN is set in the TTC_SERVER_DSN attribute.
#####

[ODBC Data Sources]
#sampledbCS_1122=TimesTen 11.2.2 Client Driver
#cachedbCS_1122=TimesTen 11.2.2 Client Driver
#repdbCS_1122=TimesTen 11.2.2 Client Driver
#repdbCS_1122=TimesTen 11.2.2 Client Driver
northwind=TimesTen 11.2.2 Client Driver

[northwind]
TTC_SERVER=192.168.4.43
TTC_SERVER_DSN=northwind
uid=northwind
pwd=northwind

#[sampledbCS_1122]
#TTC_SERVER=192.168.4.43
#TTC_SERVER_DSN=sampledb_1122

#[cachedbCS_1122]
#TTC_SERVER=192.168.4.43
#TTC_SERVER_DSN=sampledb_1122

#repdbCS_1122
#TTC_SERVER=192.168.4.43
#TTC_SERVER_DSN=sampledb_1122
```

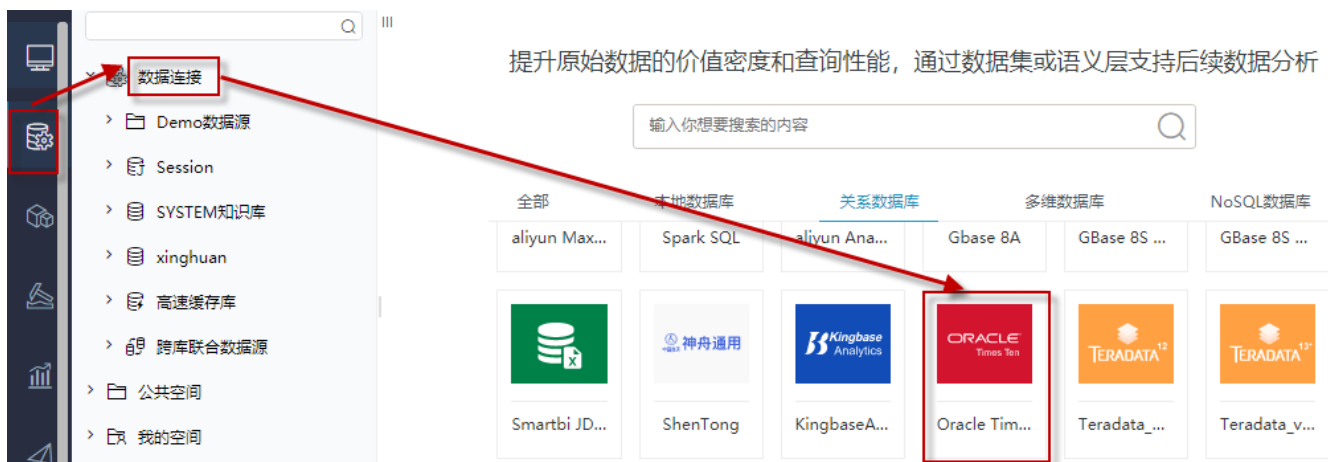
配置完成后保存文件。

再执行connect northwind;则连接成功。

```
oracle> connect northwind;
Connection successful. DSN=northwind(TTC_SERVER=192.168.4.43;TTC_SERVER_DSN=northwind;UID=northwind;DATA_SOURCE=/usr/timesTen/11.2.2/client/odbc/northwind;CONNECT_CHARACTERSET=UTF8;CONNECT_CHARACTERSET=UTF8);
Default setting AutoCommit=1
oracle>
```

2.4 连接步骤

1) 登录Smartbi企业报表分析平台，选择 **数据连接>关系数据库**，点击 **Oracle TimesTen** 图标进入数据库连接界面。如下图所示：



2) 输入数据库对应的信息。如下图所示：

新建关系数据源

名称*

TimesTen

别名

驱动程序类型*

Oracle TimesTen

☐ 允许加载Excel数据

驱动程序存放目录

☐ 产品内置 ☒ 自定义 TimesTen

驱动程序类*

com.timesten.jdbc.TimesTenClientDriver

连接字符串*

jdbc:timesten:client:dsn=northwind

验证类型

☒ 静态 ☐ 动态

用户名

northwind

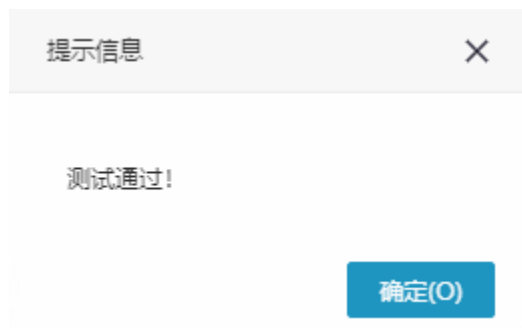
密码

说明：

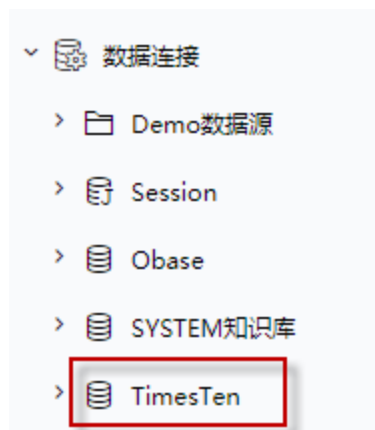
- a、名称是数据连接名称，用户可以自定义，不可为空。
- b、用户名和密码是连接字符串中配置的数据库的连接用户名和密码，一般可以联系数据库管理员获取。

2.5 测试连接

- 1) 信息正确输入后，点击 **测试连接**，若出现如下图的 **测试通过** 弹出框，则表示可以成功连接上数据库。如下图所示：



- 2) 测试连接成功后，点击右下角的 **保存** 按钮，选择数据源的保存位置，保存成功后，该数据连接即添加成功。如下图所示：



- 3) 数据库连接成功后，可以参考[快速新建透视分析](#)、[快速新建即席查询](#)、[快速新建电子表格](#)、等[快速入门](#)使用方式查看数据。