

Squirrel对接FusionInsight

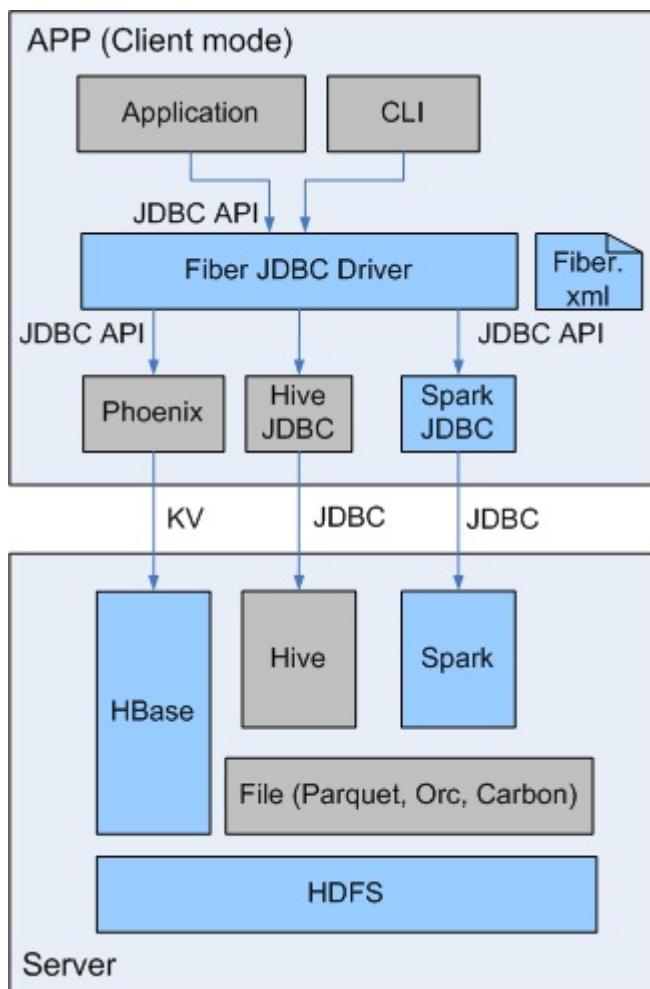
适用场景

Squirrel3.7.1 <-> FusionInsightV100R002C60U20

说明

SQL开发工具，如DbVisualizer、DBeaver、Squirrel是数据库开发的常用选择，虽然这些工具大多不提供原生Hive、SparkSQL、Phoenix的支持，但是通过它们支持的自定义JDBC的能力，我们可以与FusionInsight提供的Fiber组件的JDBC接口进行对接，实现对Hive、SparkSQL、Phoenix组件的统一SQL查询。

- Fiber架构图



本文介绍了Squirrel与FusionInsight的Fiber对接的操作步骤

Squirrel安装

- 安装jdk1.8，配置环境变量。
- 参考FusionInsight产品文档安装FusionInsight客户端，位置 `/opt/hadoopclient`。
- 修改 `C:\Windows\System32\drivers\etc\hosts` 文件，加入FusionInsight集群信息。

```
162.1.93.101 162-1-93-101
162.1.93.102 162-1-93-102
162.1.93.103 162-1-93-103
```

- 在本地PC机上新建一个目录，将FusionInsight客户端下的fiber客户端文件夹Fiber拷贝至本地，例如 `C:\Fiber`。
- 参考FusionInsight产品文档创建用户test，并赋予足够的权限，下载test的keytab文件user.keytab，拷贝到 `C:\Fiber\conf` 文件夹下。
- 将FusionInsight客户端下jaas.conf文件和krb5.conf拷贝到 `C:\Fiber\conf` 目录下，文档内容如下，principal和keytab按实际填写：

```
Client {
    com.sun.security.auth.module.Krb5LoginModule required
```

```
useKeyTab=true
keyTab="C:\\Fiber\\conf\\user.keytab"
principal="test"
useTicketCache=false
storeKey=true
debug=true;
};
```

- 修改fiberxml文件配置，位置 [C:\\Fiber\\conf\\fiber.xml](#)。

Hive的JDBC连接：

```
<jdbc>
<identify>hive</identify>
<describe>hive jdbc configuration</describe>
<driverClass>org.apache.hive.jdbc.HiveDriver</driverClass>
<securityClass>com.huawei.fiber.DefaultAuthenticationCallback</securityClass>

<classPath>C:\\Fiber\\Hive\\config;C:\\Fiber\\Hive\\Beeline\\lib;C:\\Fiber\\Hive\\Beeline\\conf</classPath>
<jdbcUrl>jdbc:hive2://162.1.93.103:24002,162.1.93.102:24002,162.1.93.101:24002;serviceDiscoveryMode=zooKeeper;zooKeeperNamespace=
hiveserver2;sasl.qop=auth-
conf;auth=KERBEROS;principal=hive/hadoop.hadoop.com@HADOOP.COM;user.principal=test;user.keytab=C:/Fiber/conf/user.keytab</jdbcUrl>
<properties>
<property>
<name>java.security.krb5.conf</name>
<value>C:\\Fiber\\conf\\krb5.conf</value>
</property>
<property>
<name>java.security.auth.login.config</name>
<value>C:\\Fiber\\conf\\jaas.conf</value>
</property>
<property>
<name>zookeeper.server.principal</name>
<value>zookeeper/hadoop.hadoop.com</value>
</property>
<property>
<name>zookeeper.kinit</name>
<value>C:\\Program Files (x86)\\Java\\jdk1.8.0_112\\jre\\bin\\kinit.exe</value>
</property>
</properties>
</jdbc>
```

Spark的JDBC连接：

```
<jdbc>
<identify>spark</identify>
<describe>spark jdbc configuration</describe>
<driverClass>org.apache.hive.jdbc.HiveDriver</driverClass>
<securityClass>com.huawei.fiber.DefaultAuthenticationCallback</securityClass>
<classPath>C:\\Fiber\\Spark\\spark\\conf;C:\\Fiber\\Spark\\spark\\lib</classPath>
<jdbcUrl>jdbc:hive2://ha-cluster/default;saslQop=auth-
conf;auth=KERBEROS;principal=spark/hadoop.hadoop.com@HADOOP.COM;user.principal=test;user.keytab=C:/Fiber/conf/user.keytab</jdbcUrl>
<properties>
<property>
<name>java.security.krb5.conf</name>
<value>C:\\Fiber\\conf\\krb5.conf</value>
</property>
<property>
<name>java.security.auth.login.config</name>
<value>C:\\Fiber\\conf\\jaas.conf</value>
</property>
<property>
<name>zookeeper.server.principal</name>
<value>zookeeper/hadoop.hadoop.com</value>
</property>
<property>
<name>zookeeper.kinit</name>
<value>C:\\Program Files (x86)\\Java\\jdk1.8.0_112\\jre\\bin\\kinit.exe</value>
</property>
</properties>
</jdbc>
```

Phoenix的JDBC连接，需要增加属性 **hbase.myclient.keytab** 和 **hbase.myclient.principal**：

```
<jdbc>
<identify>phoenix</identify>
<describe>phoenix jdbc configuration</describe>
<driverClass>org.apache.phoenix.jdbc.PhoenixDriver</driverClass>
<securityClass>com.huawei.fiber.DefaultAuthenticationCallback</securityClass>
```

```

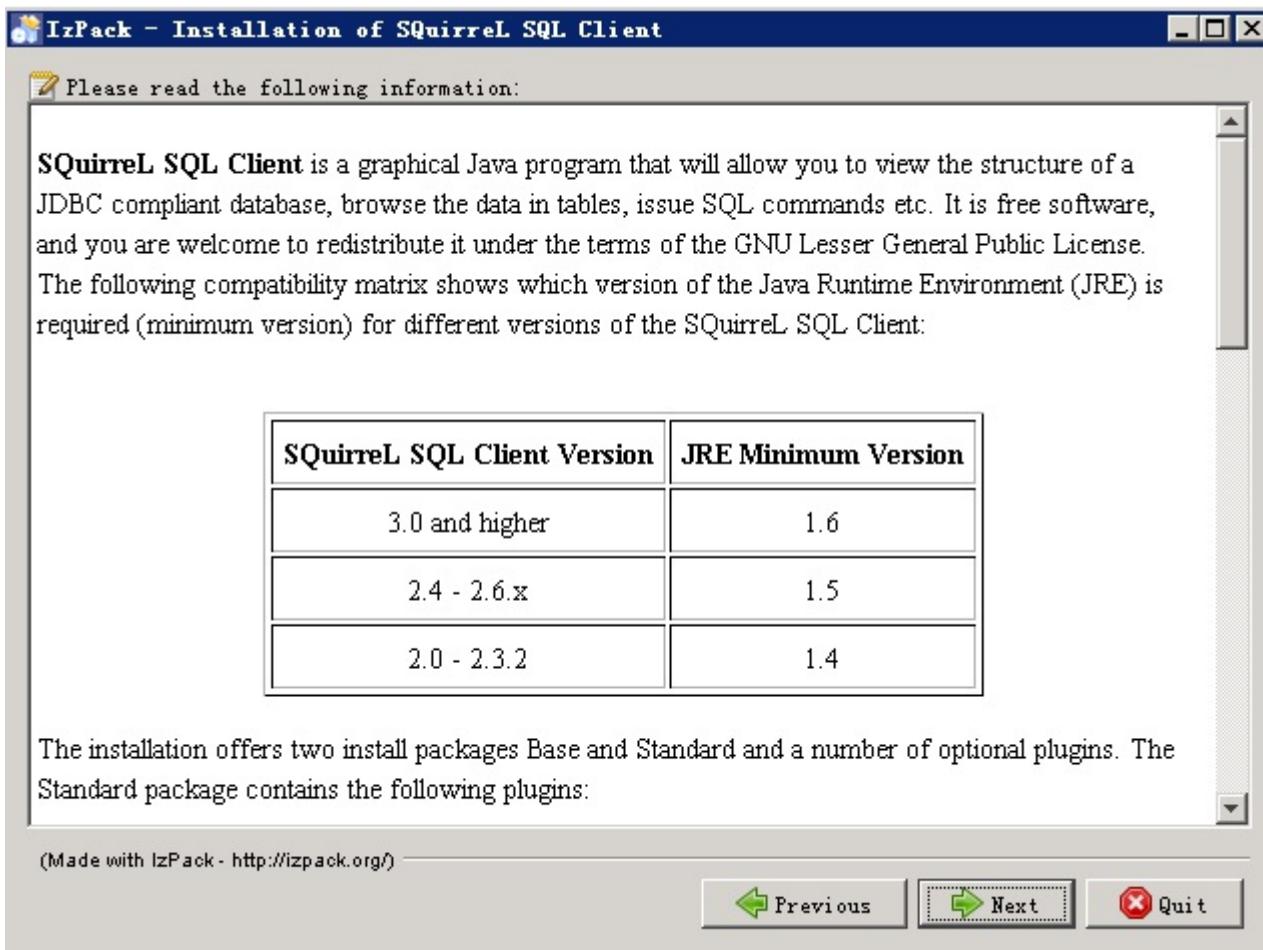
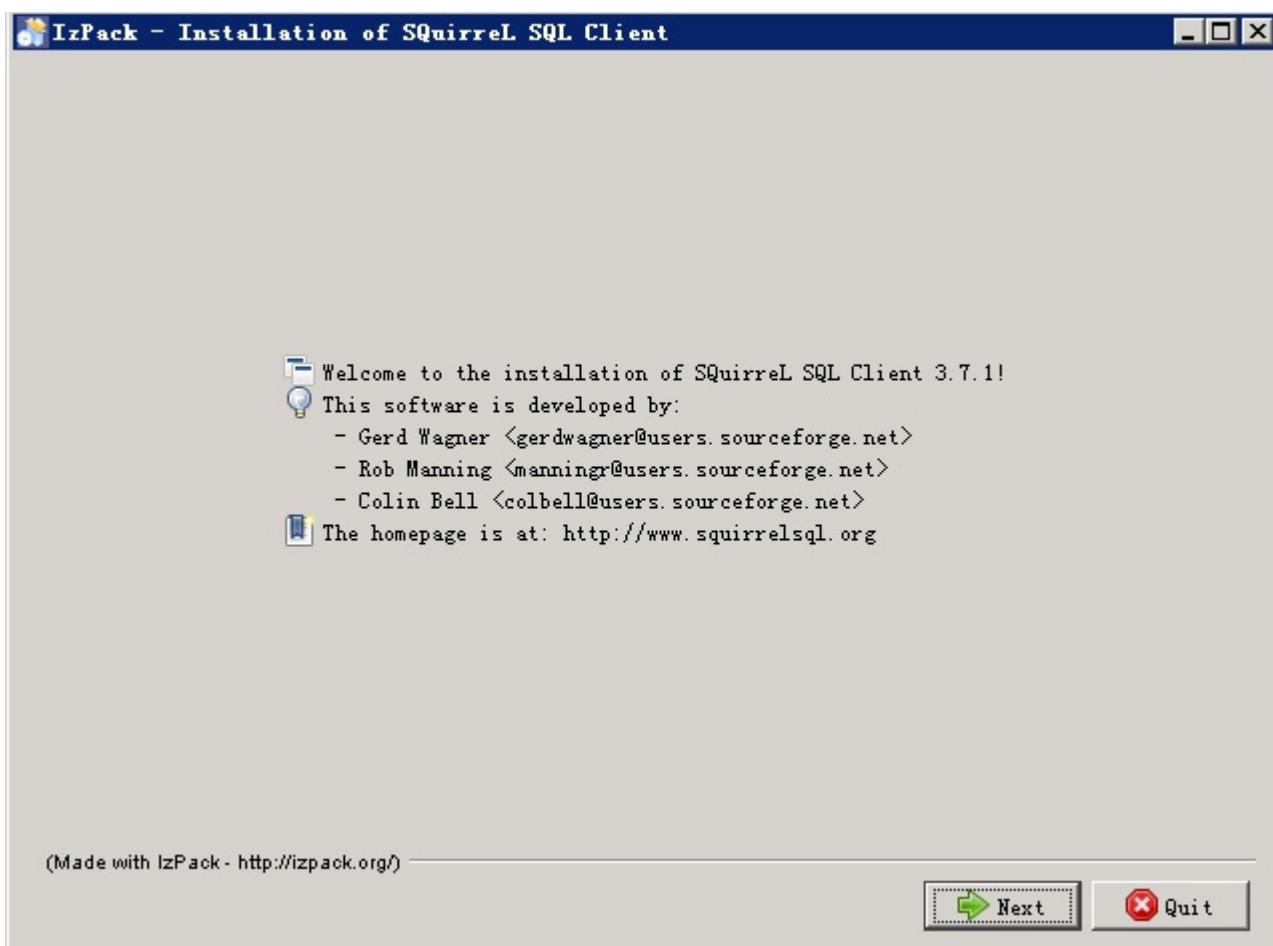
<classPath>C:\\\\Fiber\\\\HBase\\\\hbase\\\\lib;C:\\\\Fiber\\\\HBase\\\\hbase\\\\conf</classPath>
<jdbcUrl>jdbc:phoenix:162.1.93.101,162.1.93.102,162.1.93.103:24002:/hbase</jdbcUrl>
<properties>
    <property>
        <name>java.security.krb5.conf</name>
        <value>C:\\\\Fiber\\\\conf\\\\krb5.conf</value>
    </property>
    <property>
        <name>java.security.auth.login.config</name>
        <value>C:\\\\Fiber\\\\conf\\\\jaas.conf</value>
    </property>
    <property>
        <name>hbase.myclient.keytab</name>
        <value>C:\\\\Fiber\\\\conf\\\\user.keytab</value>
    </property>
    <property>
        <name>hbase.myclient.principal</name>
        <value>test</value>
    </property>
    <property>
        <name>zookeeper.server.principal</name>
        <value>zookeeper/hadoop.hadoop.com</value>
    </property>
    <property>
        <name>zookeeper.kinit</name>
        <value>C:\\\\Program Files (x86)\\\\Java\\\\jdk1.8.0_112\\\\jre\\\\bin\\\\kinit.exe</value>
    </property>
</properties>
</jdbc>

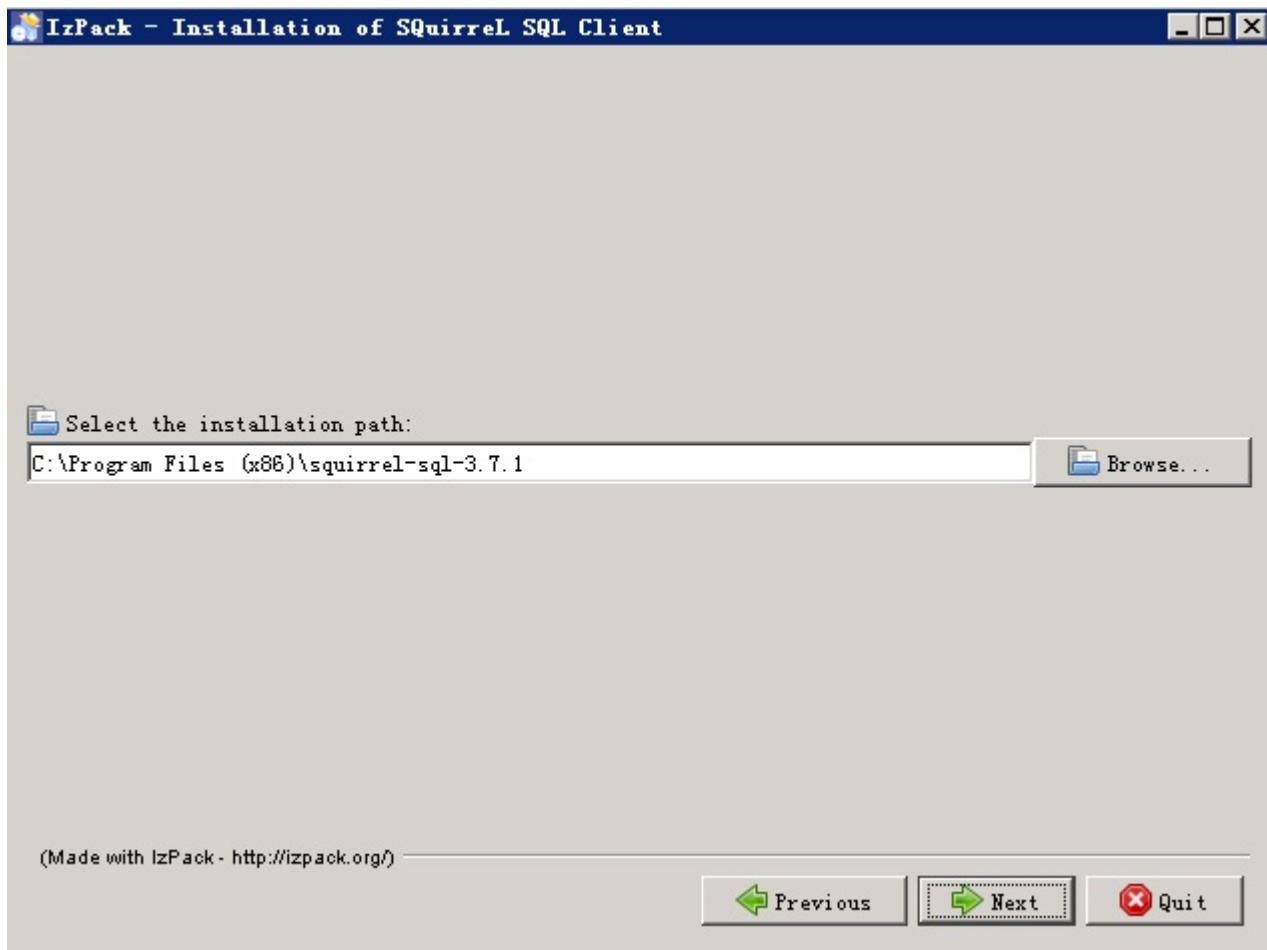
```

- 将Hive、Spark、Phoenix的JDBC配置中classPath中的文件拷贝至Fiber文件夹中。

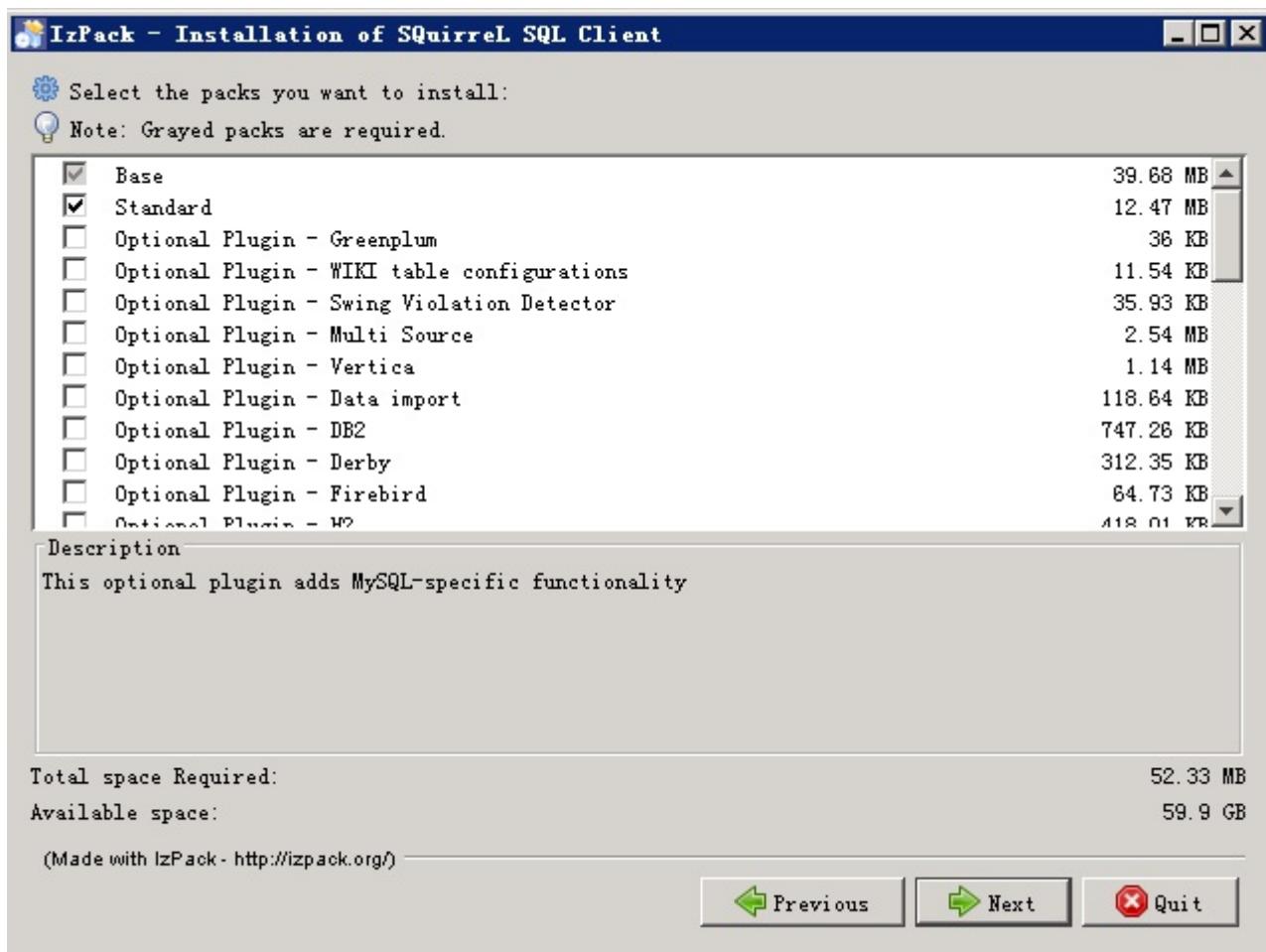
本地磁盘 (C:) ▾ Fiber ▾		
文件夹		
名称	修改日期	类型
bin	2017/6/22 14:57	文件夹
conf	2017/6/22 20:07	文件夹
HBase	2017/6/22 20:24	文件夹
Hive	2017/6/22 15:07	文件夹
lib	2017/6/22 14:57	文件夹
Spark	2017/6/22 20:21	文件夹
component_env	2017/5/20 16:05	文件

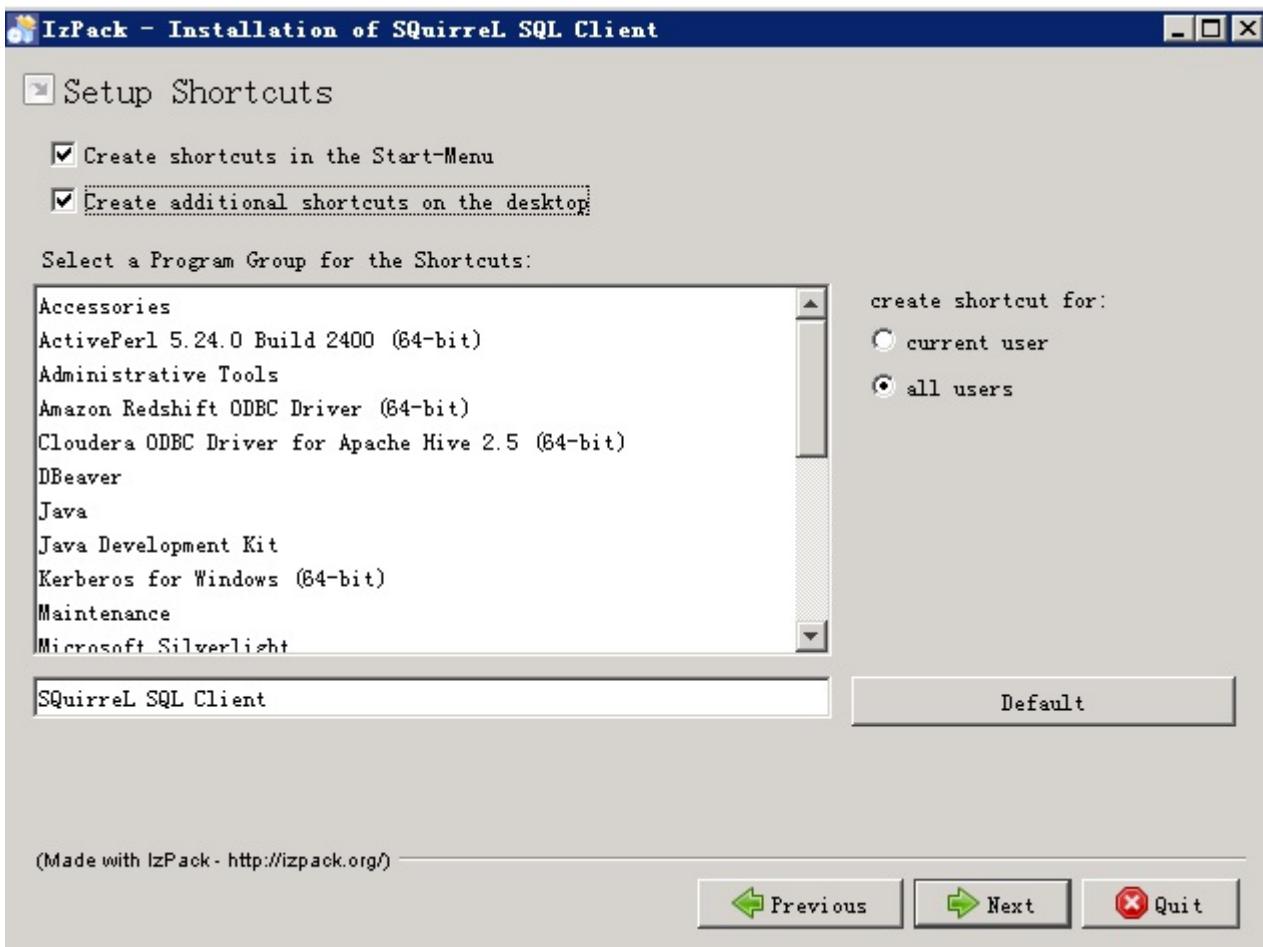
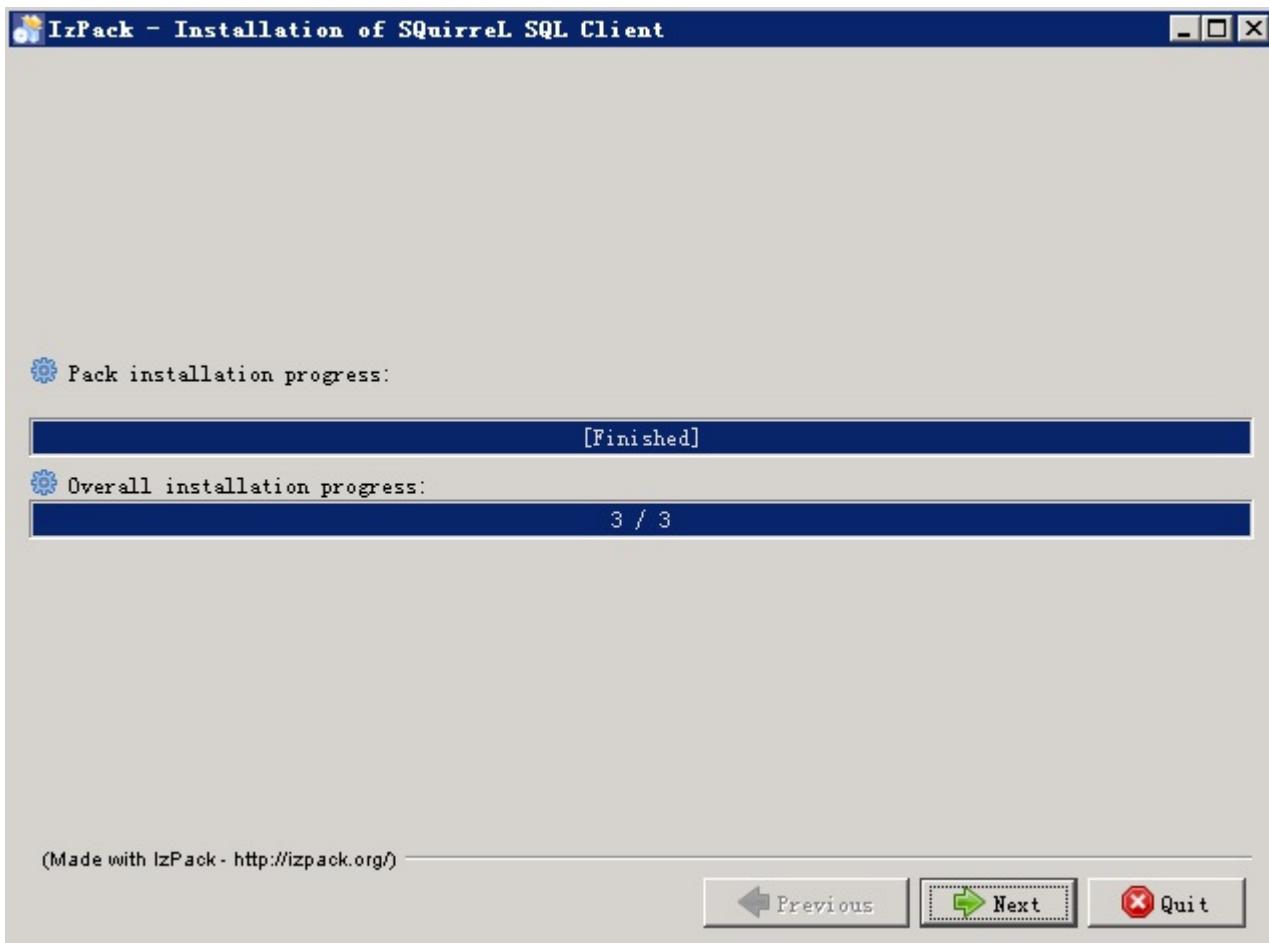
- 下载Squirrel，地址：<http://www.squirrelsql.org/#installation>，选择Install jar of SQuirreL 3.7.1 for Windows/Linux/others，下载软件squirrel-sql-3.7.1-standard.jar
- 双击squirrel-sql-3.7.1-standard.jar安装

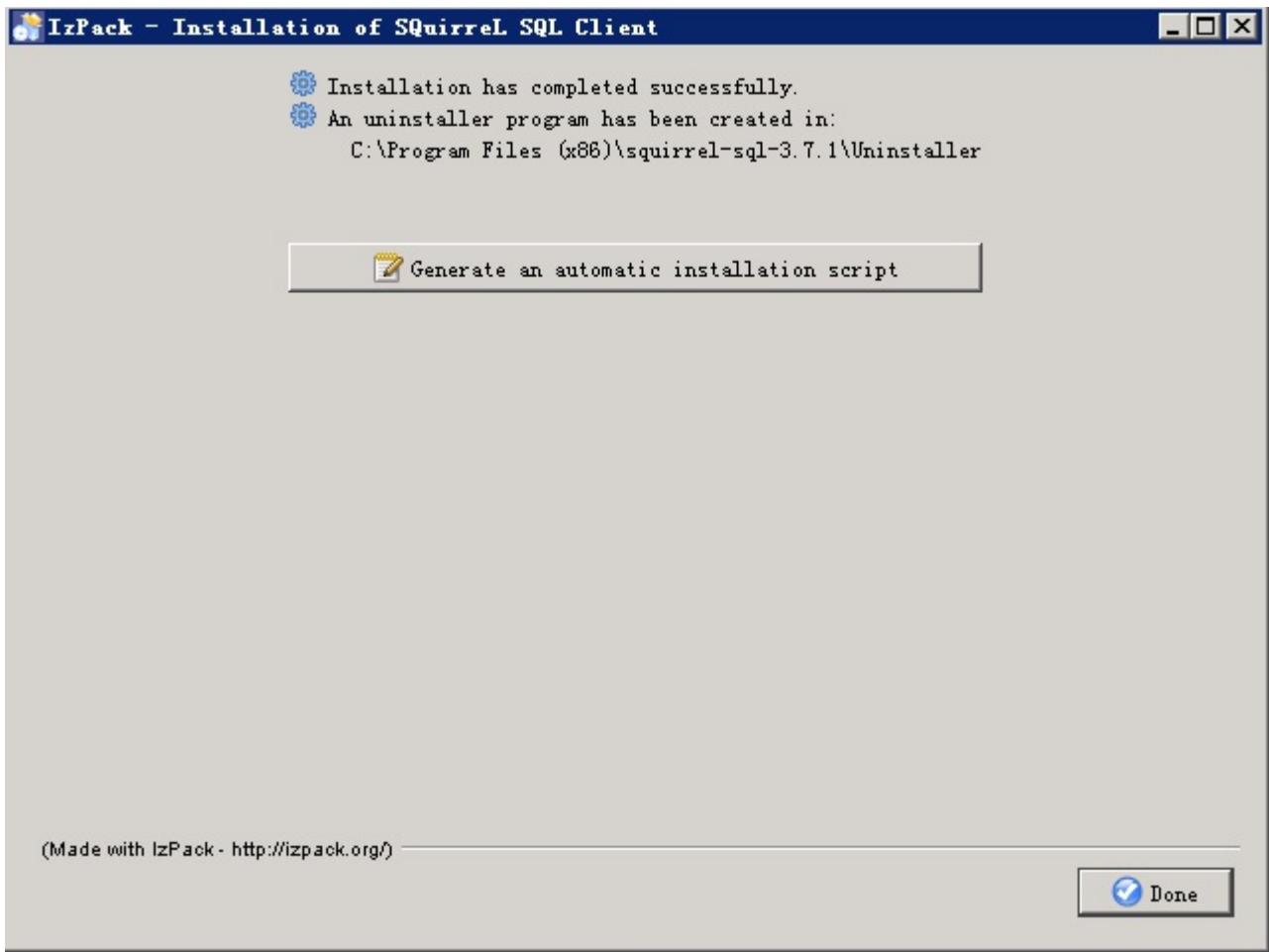




- 在这里可以选择要安装哪些环境，使用的数据库插件，语言包。



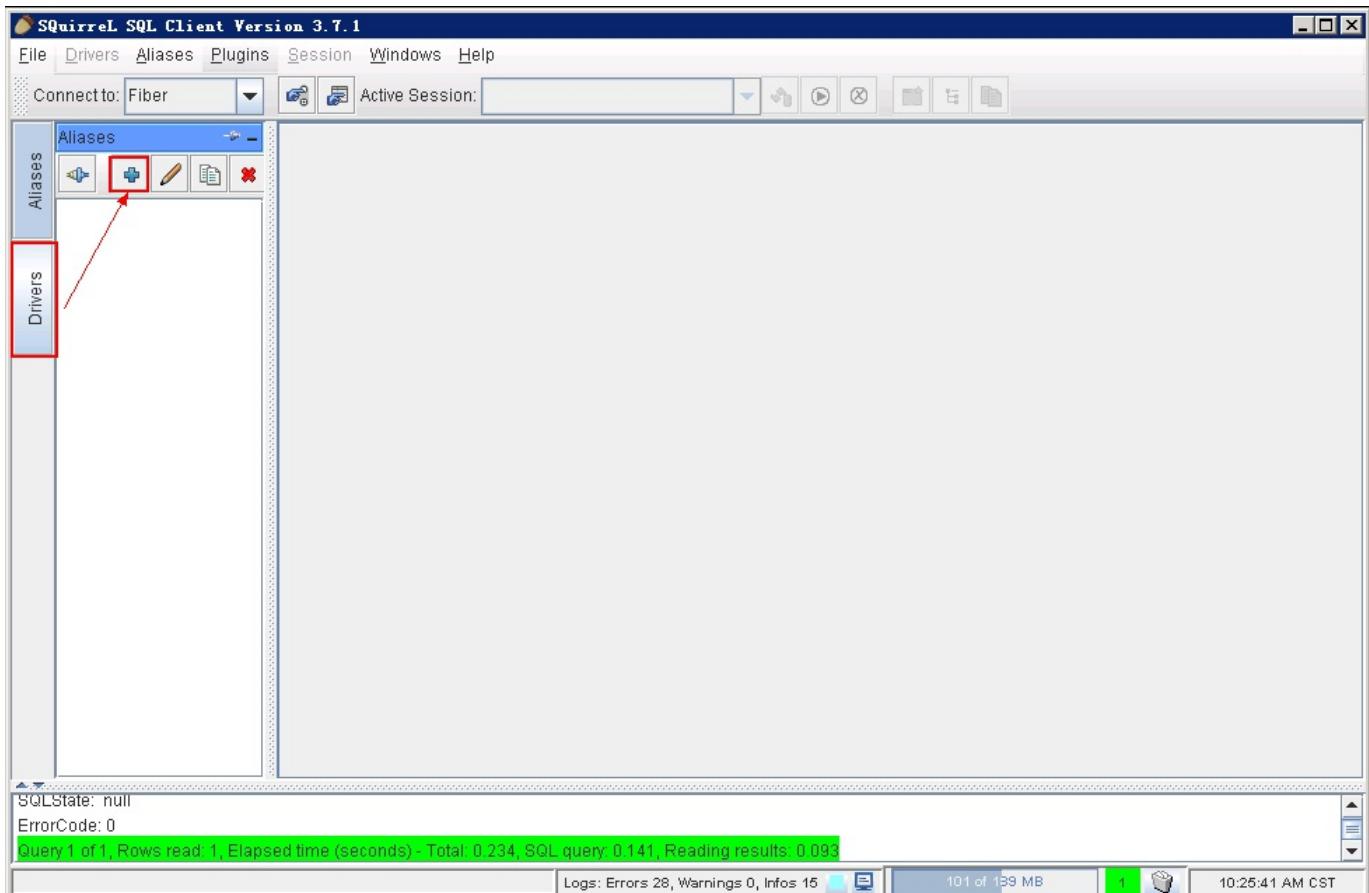




SQuirreL连接Fiber

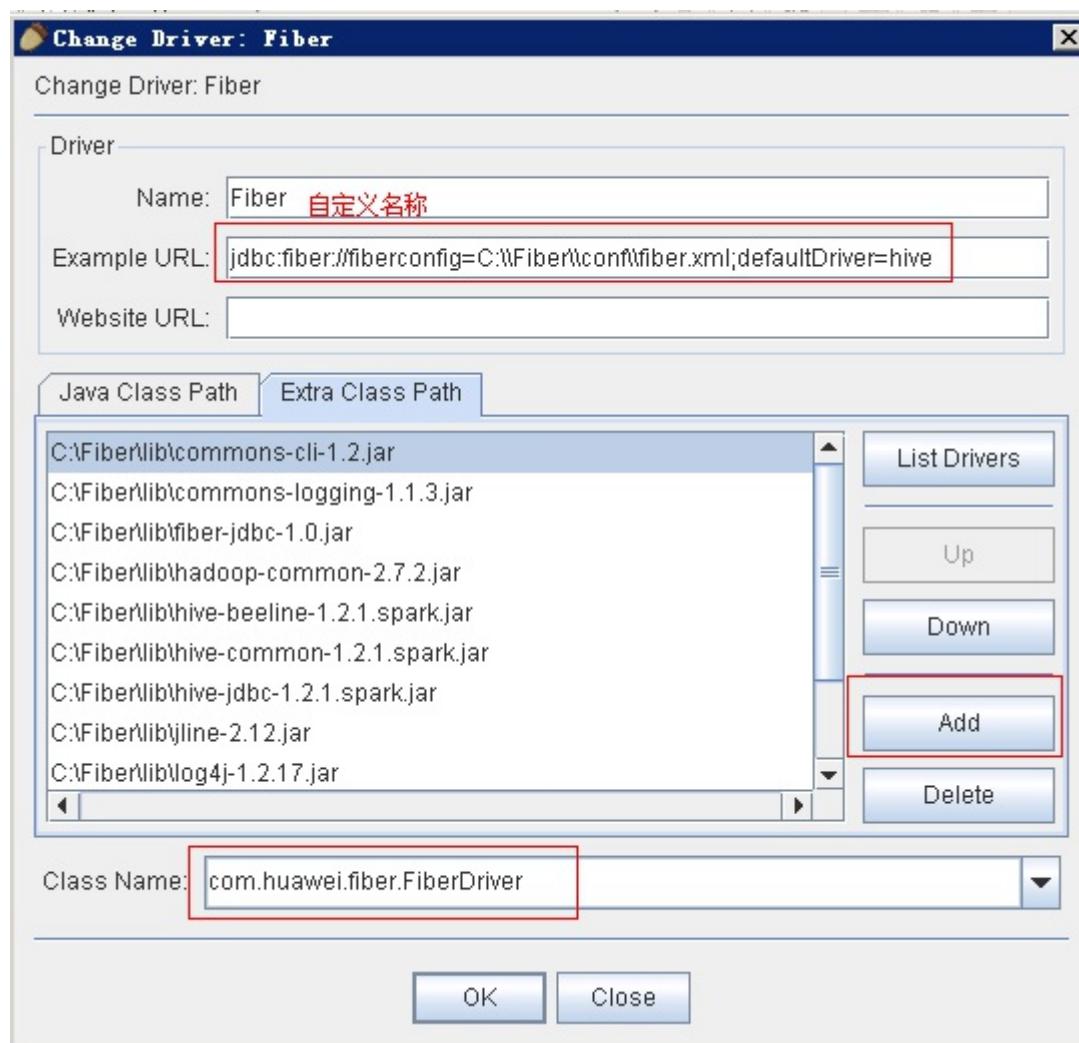
使用SQuirreL SQL Client通过Fiber连接FusionInsight的Hive、SparkSQL、Phoenix组件。

- 打开SQuirreL SQL Client，选择Drivers，点击+。

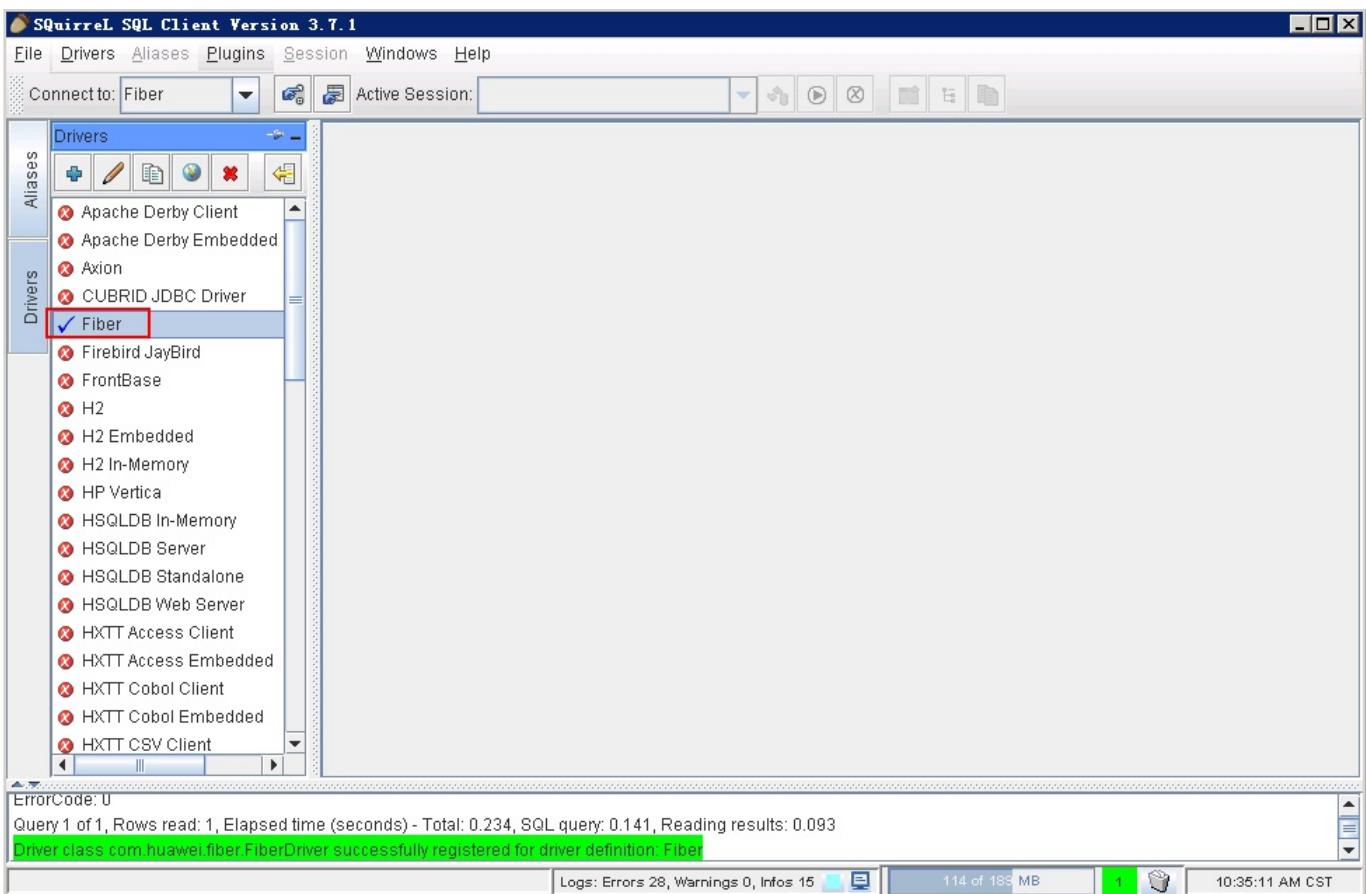


- 填写Driver信息，点击OK。

- Name: Fiber (自定义)
- Example URL: jdbc:fiber://fiberconfig=C:\Fiber\conf\fiberxml;defaultDriver=hive
- Extra Class Path: 将Fiber/lib下的jar包都添加进来
- ClassName: com.huawei.fiber.FiberDriver

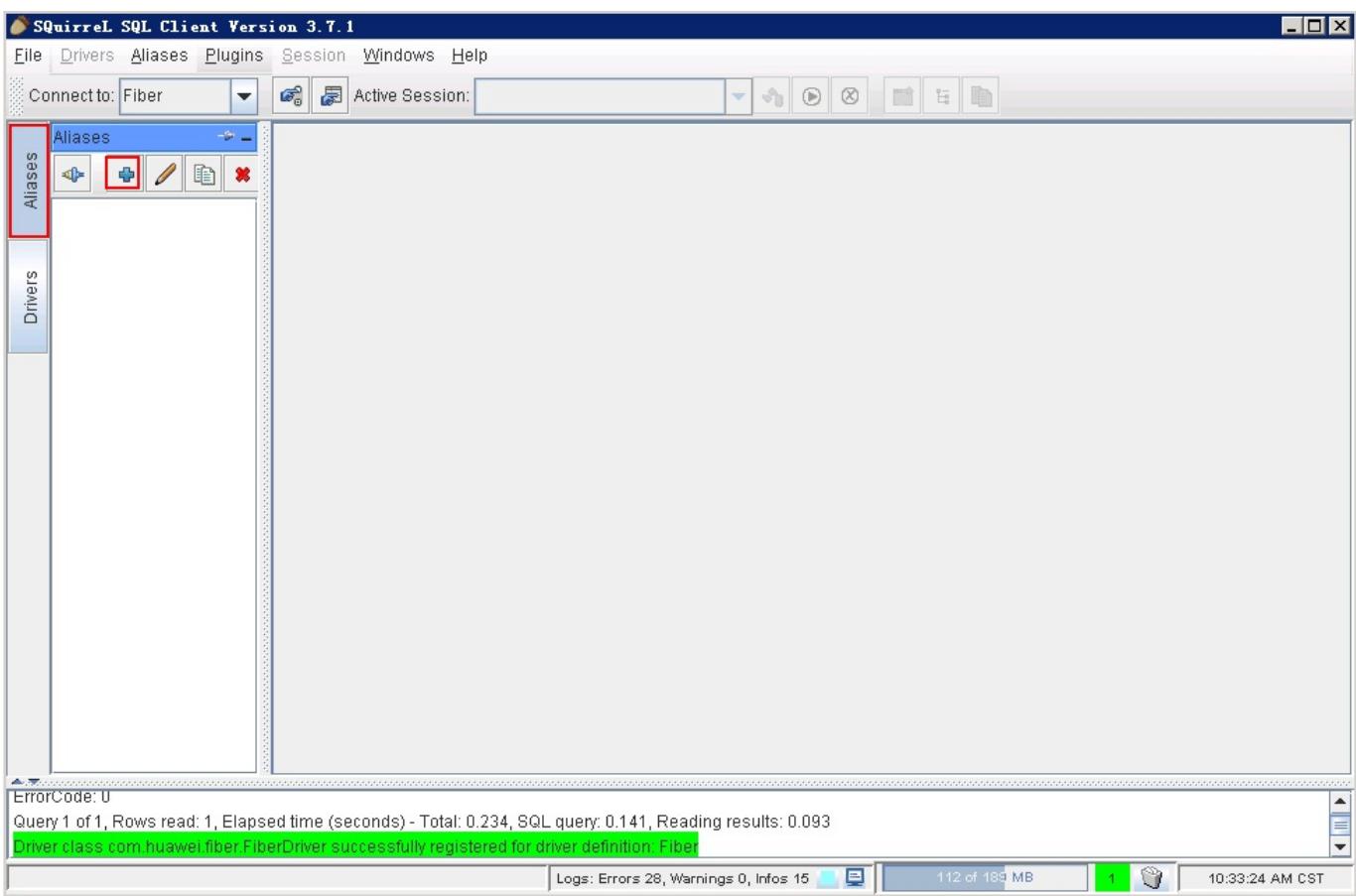


- 可以看到添加完成的Driver Fiber。



对接Hive

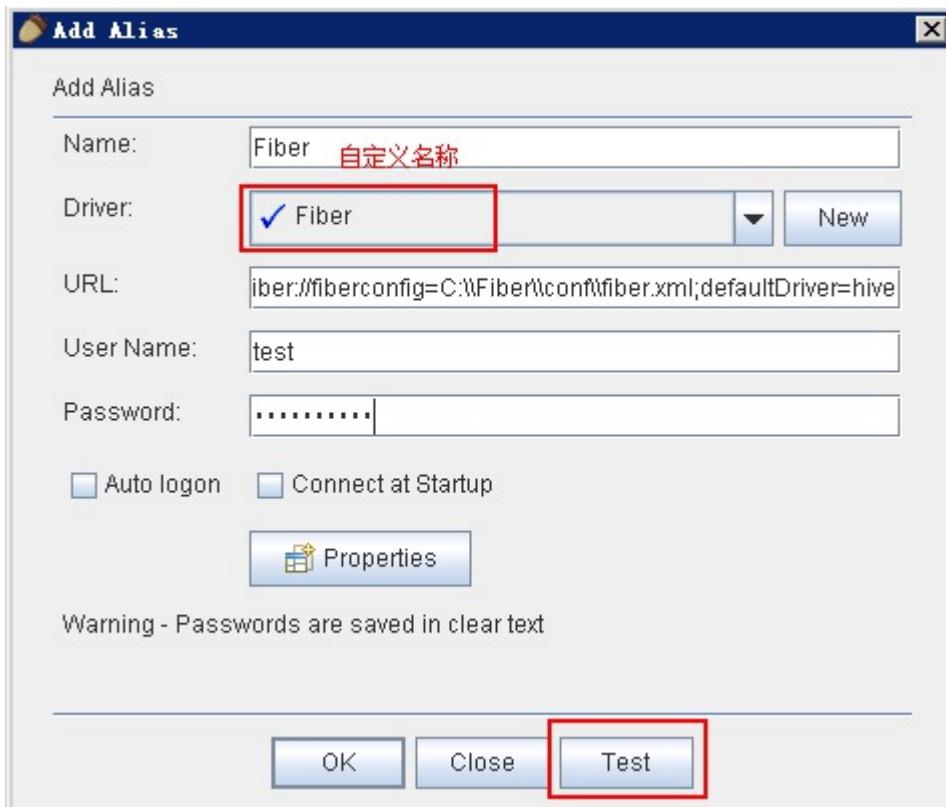
- 点击 Aliases, 点击 +



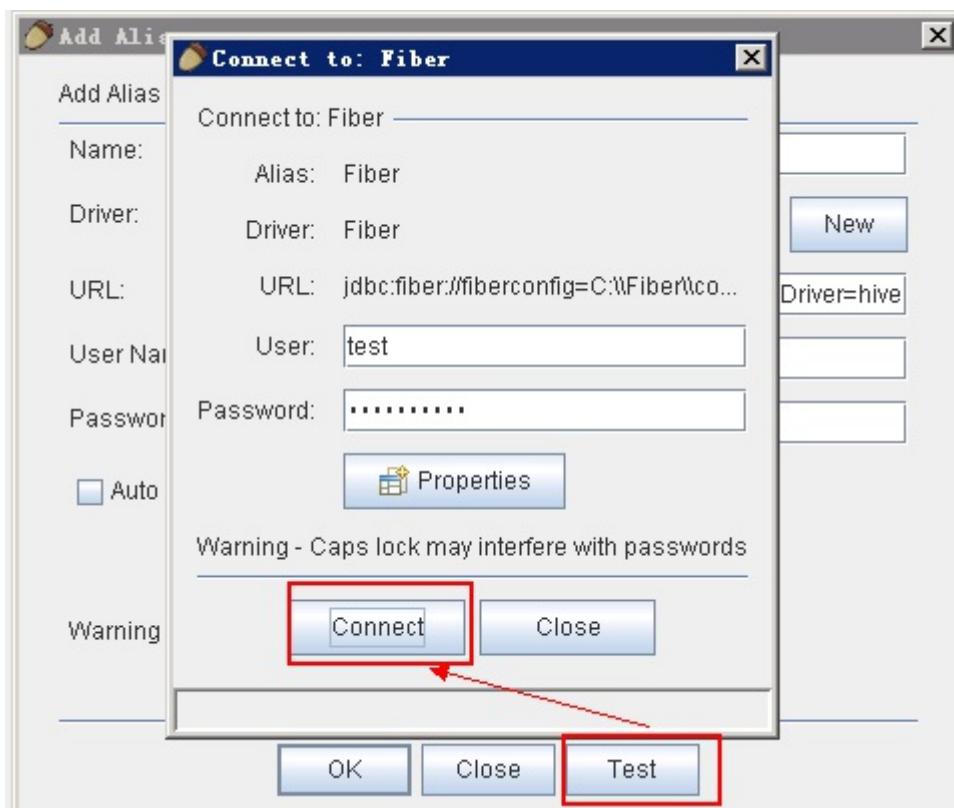
- 在弹出框中填写信息

- Name: Fiber (自定义)
- Driver: 选择Fiber
- User Name: test

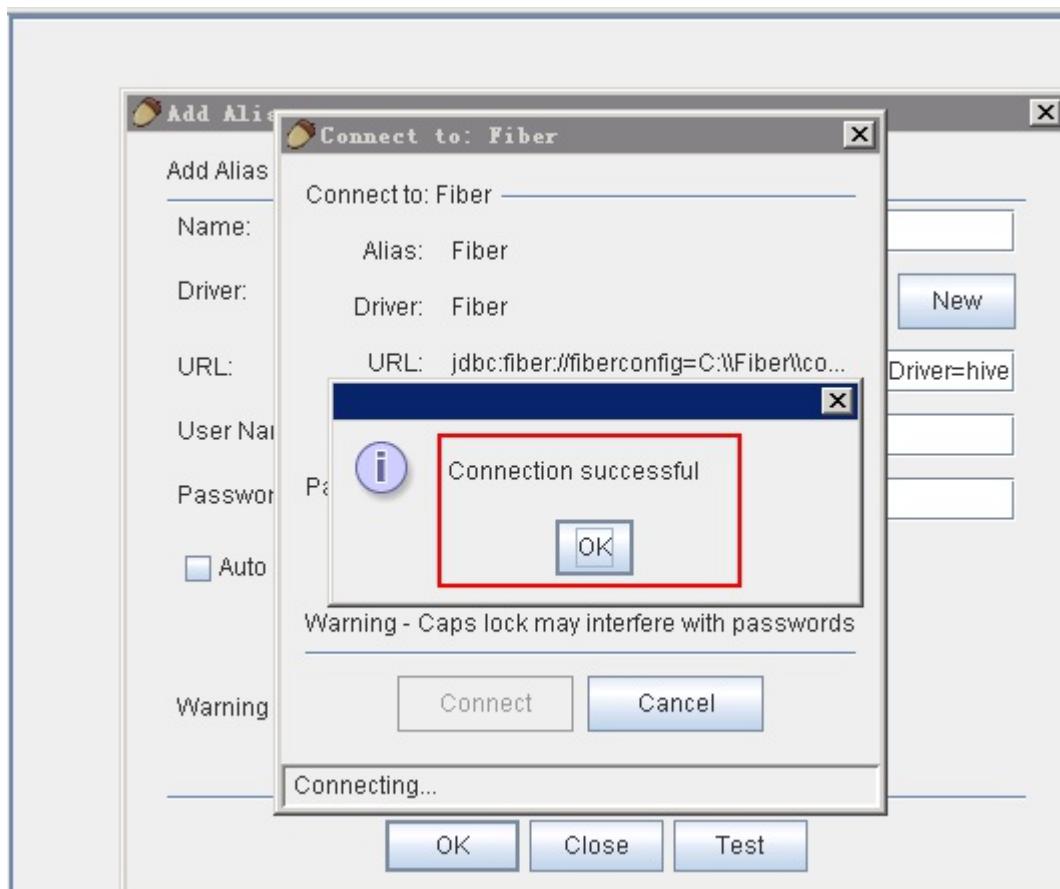
- Password: 密码



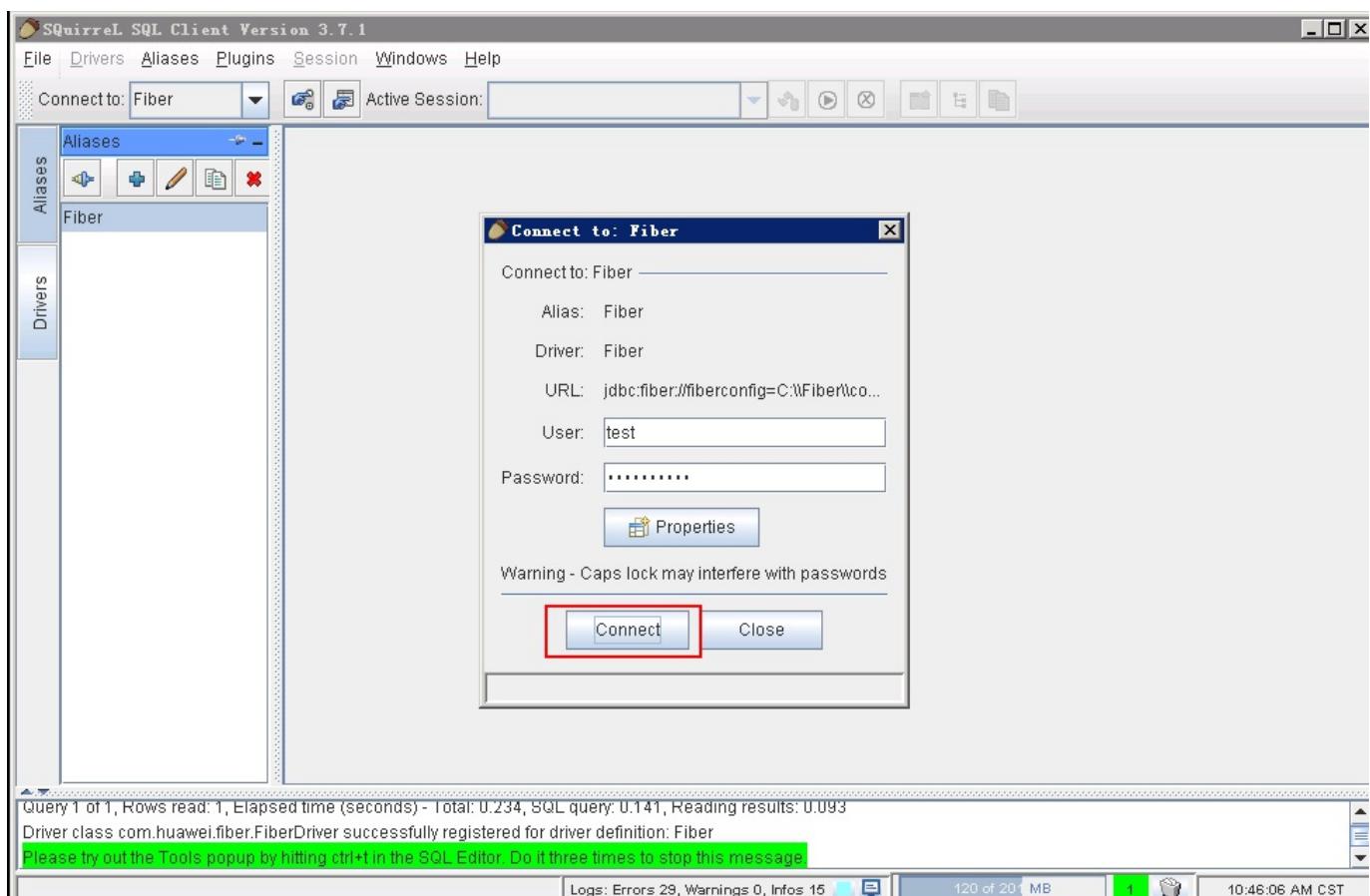
- 点击 Connect



- 连接成功，点击 OK



- 点击 Connect



- 查看hive中数据表

SQuirreL SQL Client Version 3.7.1

File Drivers Aliases Plugins Session Windows Help

Connect to: Fiber Active Session: 3 - Fiber () as test

Aliases Objects SQL

Drivers

Fiber

- default
 - INDEX_TABLE
 - TABLE
 - fiber_test
 - pokes
 - test
 - workers_info**
 - VIEW
 - UDT

Imported Keys		Indexes		Privileges		Column Privileges		Row IDs		Versions	
Info		Content		Row Count		Columns		Primary Key		Exported Keys	
COLUMN_...	TYPE_N...	IS_NULLA...	DECIMAL_DIGI...	COLUMN_...	COLUMN_...	REMA...	DATA_T...	BUFFER_Le...	NUM_I...		
id	INT	YES	0	10	<null>	<null>	4	<null>	10		
name	STRING	YES	<null>	2147483647	<null>	<null>	12	<null>	<null>		
usd_flag	STRING	YES	<null>	2147483647	<null>	<null>	12	<null>	<null>		
salary	DOUBLE	YES	15	15	<null>	<null>	8	<null>	10		
address	STRING	YES	<null>	2147483647	<null>	<null>	12	<null>	<null>		
entrytime	STRING	YES	<null>	2147483647	<null>	<null>	12	<null>	<null>		

/Fiber/default/TABLE/workers_info 1,1 / 1

Driver class com.huawei.fiber.FiberDriver successfully registered for driver definition: Fiber
Please try out the Tools popup by hitting ctrl+t in the SQL Editor. Do it three times to stop this message.
Please try out the Tools popup by hitting ctrl+t in the SQL Editor. Do it three times to stop this message.

Logs: Errors 45, Warnings 0, Infos 15 145 of 201 MB 10:47:21 AM CST

点击 SQL面板，编辑SQL语句，点击 执行 按钮，在下方可以看到查询结果。

SQuirreL SQL Client Version 3.7.1

File Drivers Aliases Plugins Session Windows Help

Connect to: Fiber Active Session: 3 - Fiber () as test

Aliases Objects SQL

Drivers

Fiber

SQL Editor:

```
select * from workers_info
select * from workers_info;
```

Results:

workers_info.id	workers_info.name	workers_info.usd_flag
5	Wang	M

SQLState: null
ErrorCode: 0
Query 1 of 1, Rows read 1, Elapsed time (seconds) - Total: 0.25, SQL query: 0.204, Reading results: 0.046

Logs: Errors 53, Warnings 0, Infos 15 116 of 201 MB 10:59:43 AM CST

- Hive增加数据：

编辑数据文件data_input.txt，上传至集群的hdfs目录中，例如 /tmp/ 下，文本内容如下：

```
[root@162-1-93-103 opt]# hdfs dfs -cat /tmp/data_input.txt
1,Zhang,M,12000.22,china:shanghai,2017
```

编辑脚本，点击 执行 按钮：

```
load data inpath '/tmp/data_input.txt' overwrite into table  
workers_info
```

The screenshot shows the SQuirreL SQL Client interface. The top bar displays "SQuirreL SQL Client Version 3.7.1" and the menu bar includes File, Drivers, Aliases, Plugins, Session, Windows, Help. The "Aliases" tab is selected in the sidebar. The main area shows two sessions: "1 - Fiber () as test" and "2 - Fiber () as test". The "SQL" tab is selected in session 2. A red box highlights the SQL command: "load data inpath '/tmp/data_input.txt' overwrite into table workers_info". Below the command, the results of a "select * from workers_info" query are displayed in a table:

workers_info.id	workers_info.name	workers_info.usd_flag
5	Wang	M

The status bar at the bottom shows "SQLState: 42000", "ErrorCode: 40000", and "Query 1 of 1, Rows read: 0, Elapsed time (seconds) - Total: 0.234, SQL query: 0.234, Reading results: 0".

查看结果：

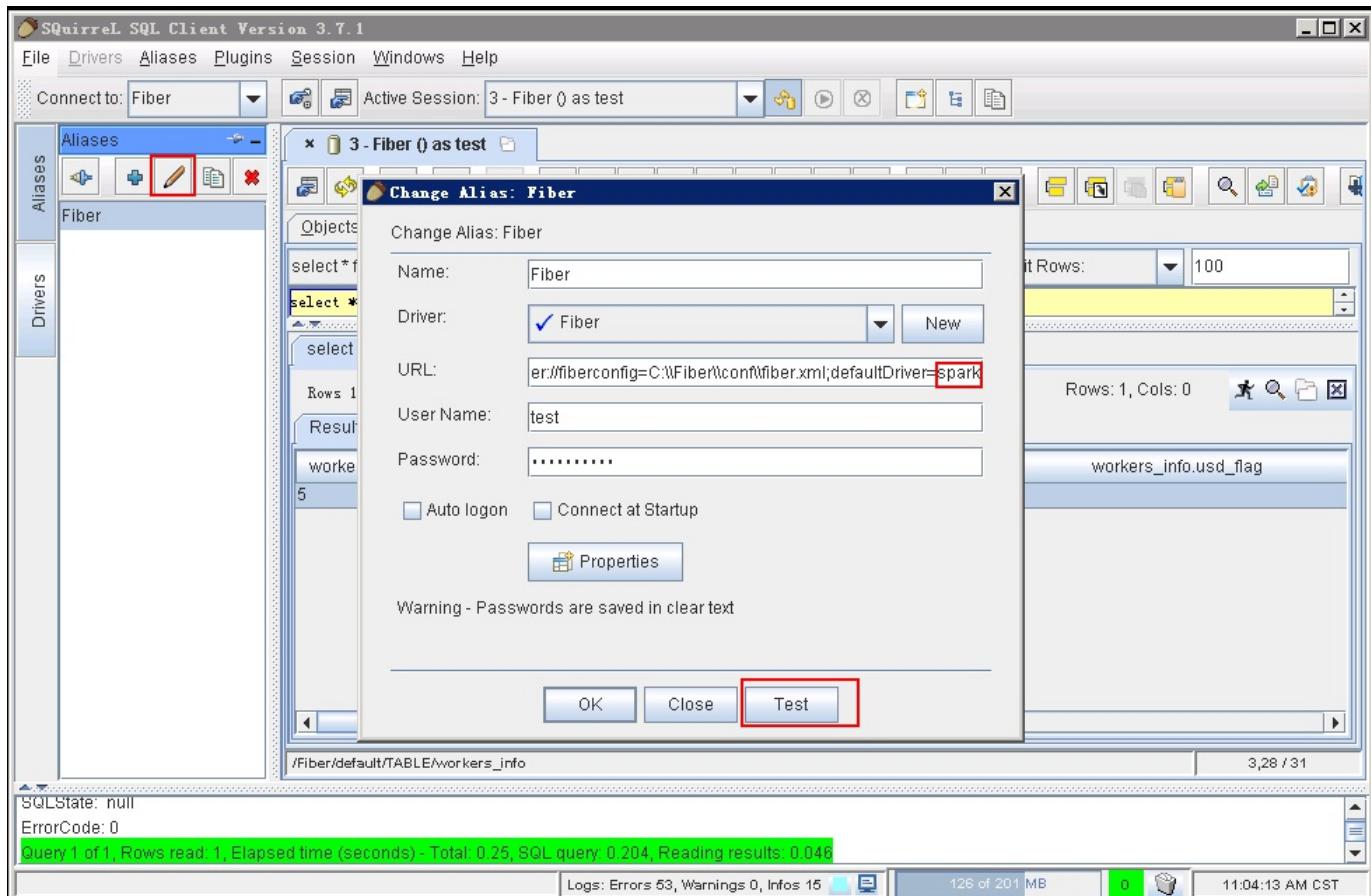
The screenshot shows the SQuirreL SQL Client interface. The top bar displays "SQuirreL SQL Client Version 3.7.1" and the menu bar includes File, Drivers, Aliases, Plugins, Session, Windows, Help. The "Aliases" tab is selected in the sidebar. The main area shows two sessions: "1 - Fiber () as test" and "2 - Fiber () as test". The "SQL" tab is selected in session 2. A red box highlights the SQL command: "select * from workers_info". Below the command, the results of a "select * from workers_info" query are displayed in a table:

workers_info.id	workers_info.name	workers_info.usd_flag
1	Zhang	M

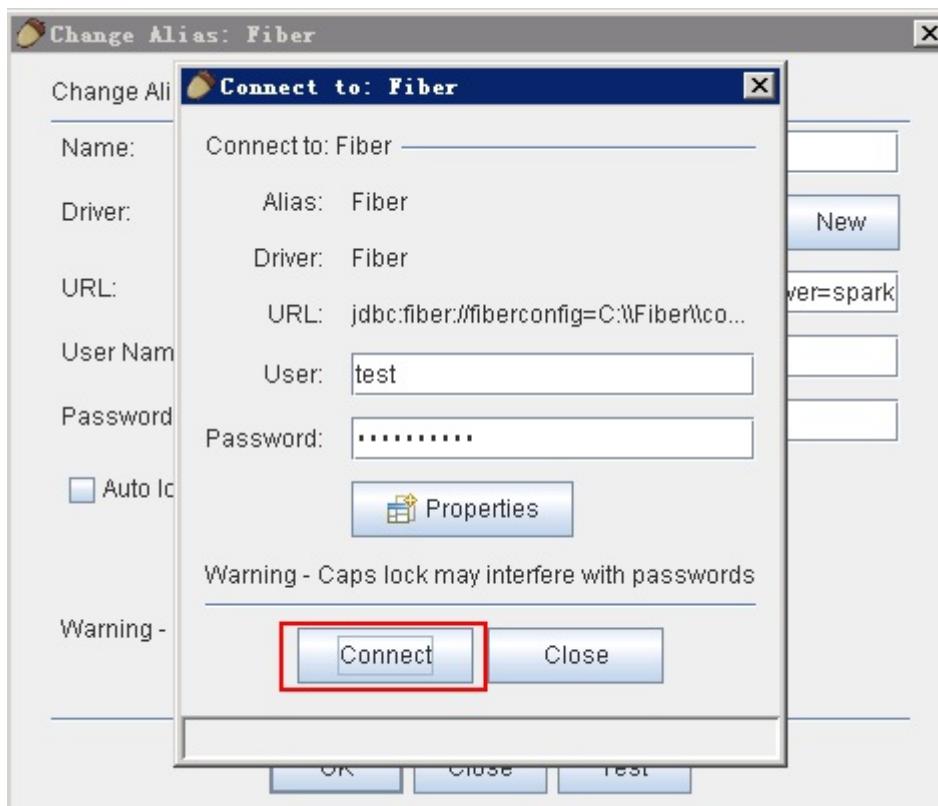
The status bar at the bottom shows "SQLState: null", "ErrorCode: 0", and "Query 1 of 1, Rows read: 1, Elapsed time (seconds) - Total: 0.219, SQL query: 0.157, Reading results: 0.062".

对接SparkSQL

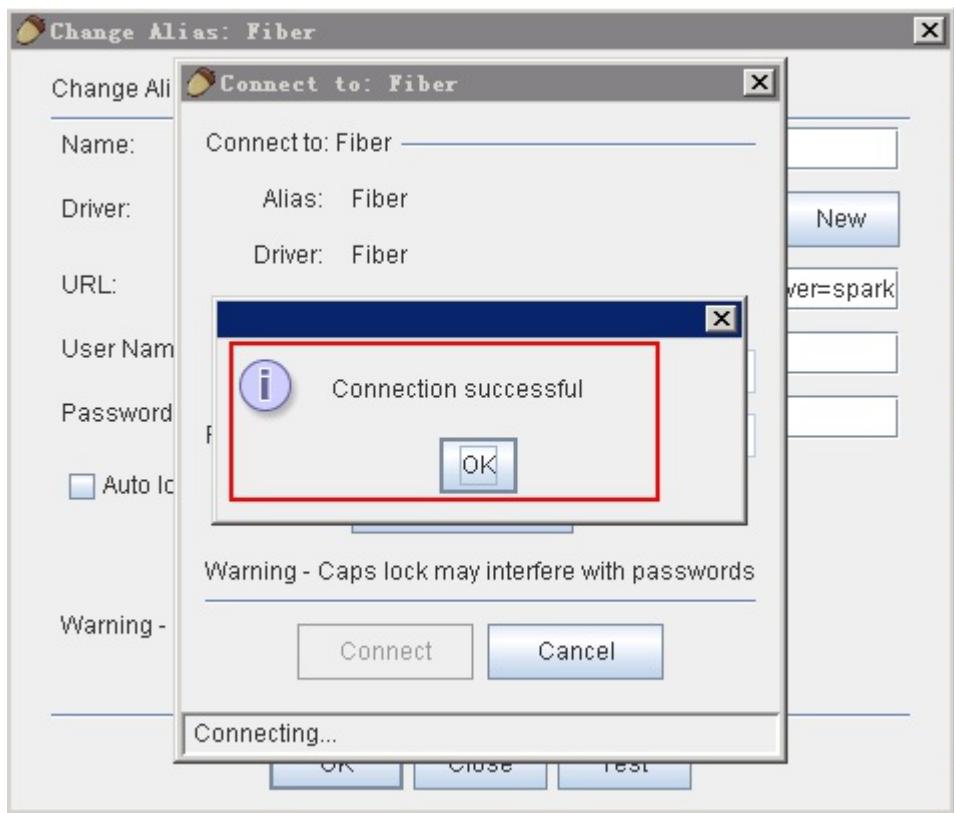
- 将defaultDriver切换为spark，点击 **Test**



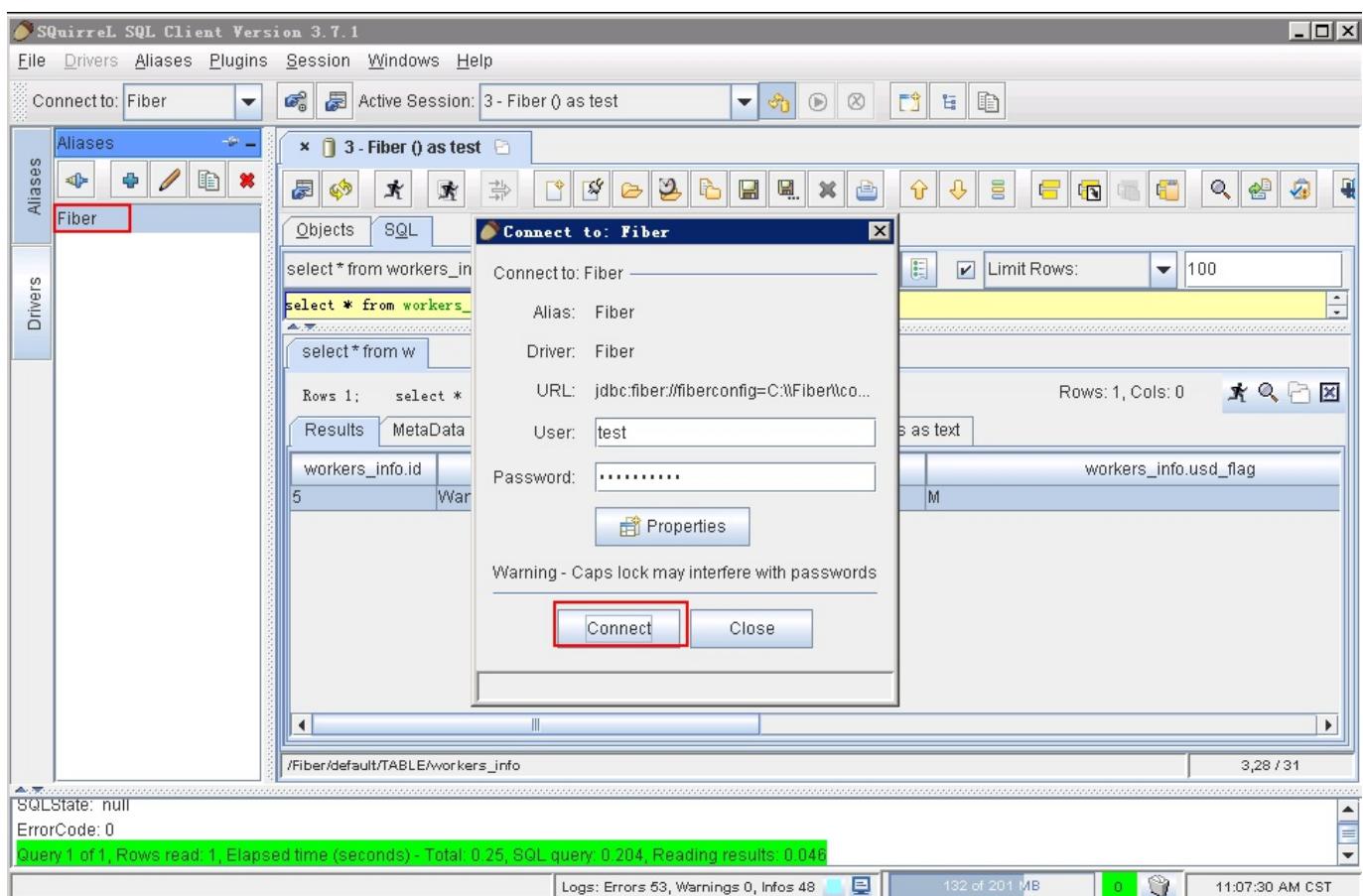
- 点击 **Connect**



- 连接成功，点击 **OK**



- 双击Fiber，点击 Connect，将driver切换为spark



- 可以看到数据表

SQuirreL SQL Client Version 3.7.1

File Drivers Aliases Plugins Session Windows Help

Connect to: Fiber Active Session: 4 - Fiber () as test

Aliases Drivers

Objects SQL

Fiber default INDEX_TABLE TABLE VIEW UDT

TABLE fiber_test pokes test workers_info

Property Name		Value
catalogName	<null>	
childTables	<null>	
exportedKeys	<null>	
importedKeys	<null>	
qualifiedName	default.workers_info	
remarks	<null>	
schemaName	default	
simpleName	workers_info	
type	TABLE	

/Fiber/default/TABLE/workers_info 1,1 / 1

ErrorCode: U

Query 1 of 1, Rows read: 1, Elapsed time (seconds) - Total: 0.25, SQL query: 0.204, Reading results: 0.046

Please try out the Tools popup by hitting ctrl+t in the SQL Editor. Do it three times to stop this message.

Logs: Errors 54, Warnings 0, Infos 81 118 of 201 MB 0 11:08:57 AM CST

- 点击 **SQL面板**，编辑SQL语句，点击 **执行** 按钮，在下方可以看到查询结果。

SQuirreL SQL Client Version 3.7.1

File Drivers Aliases Plugins Session Windows Help

Connect to: Fiber Active Session: 4 - Fiber () as test

Aliases Drivers

Objects SQL

select * from workers_info

Results				Rows: 1, Cols: 0
id	name	usd_flag	salary	
5	Wang	M	12,000.22	

/Fiber/default/TABLE/workers_info 1,27 / 27

Query 1 of 1, Rows read: 1, Elapsed time (seconds) - Total: 0.25, SQL query: 0.204, Reading results: 0.046

Please try out the Tools popup by hitting ctrl+t in the SQL Editor. Do it three times to stop this message.

Logs: Errors 60, Warnings 0, Infos 81 134 of 201 MB 0 11:11:44 AM CST

- Spark增加数据

编辑数据文件data_input.txt，上传至集群的hdfs目录中，例如 `/tmp/` 下，文本内容如下：

```
[root@162-1-93-103 opt]# vi data_input.txt
[root@162-1-93-103 opt]# hdfs dfs -put data_input.txt /tmp
[root@162-1-93-103 opt]# hdfs dfs -cat /tmp/data_input.txt
2,Wang,F,13000.25,china:shanghai,2017
```

编辑脚本，点击 执行 按钮：

```
load data inpath '/tmp/data_input.txt' overwrite into table  
workers_info
```

The screenshot shows the SQuirreL SQL Client interface. The main window has three tabs at the top: '1 - Fiber () as test', '2 - Fiber () as test', and '3 - Fiber () as test'. The '3 - Fiber () as test' tab is active. The toolbar below the tabs contains various icons, including a red box around the 'Execute' icon (a person running). The 'SQL' tab is selected in the left sidebar. In the central query editor, the following SQL command is entered and highlighted with a red box:

```
load data inpath '/tmp/data_input.txt' overwrite into table workers_info
```

Below the query editor, the results pane shows a table with one row:

ColumnIndex	getColumnName	getColumnTypeName	getPrecision	getScale
1	result	string	2147483647	0

The status bar at the bottom right indicates 'Logs: Errors 26, Warnings 0, Infos 304' and the date '11:33:11 AM CST'.

查看结果：

The screenshot shows the SQuirreL SQL Client interface with the same session tabs and toolbar as the previous screenshot. The 'SQL' tab is selected in the left sidebar. In the central query editor, the following SQL command is entered and highlighted with a red box:

```
select * from workers_info
```

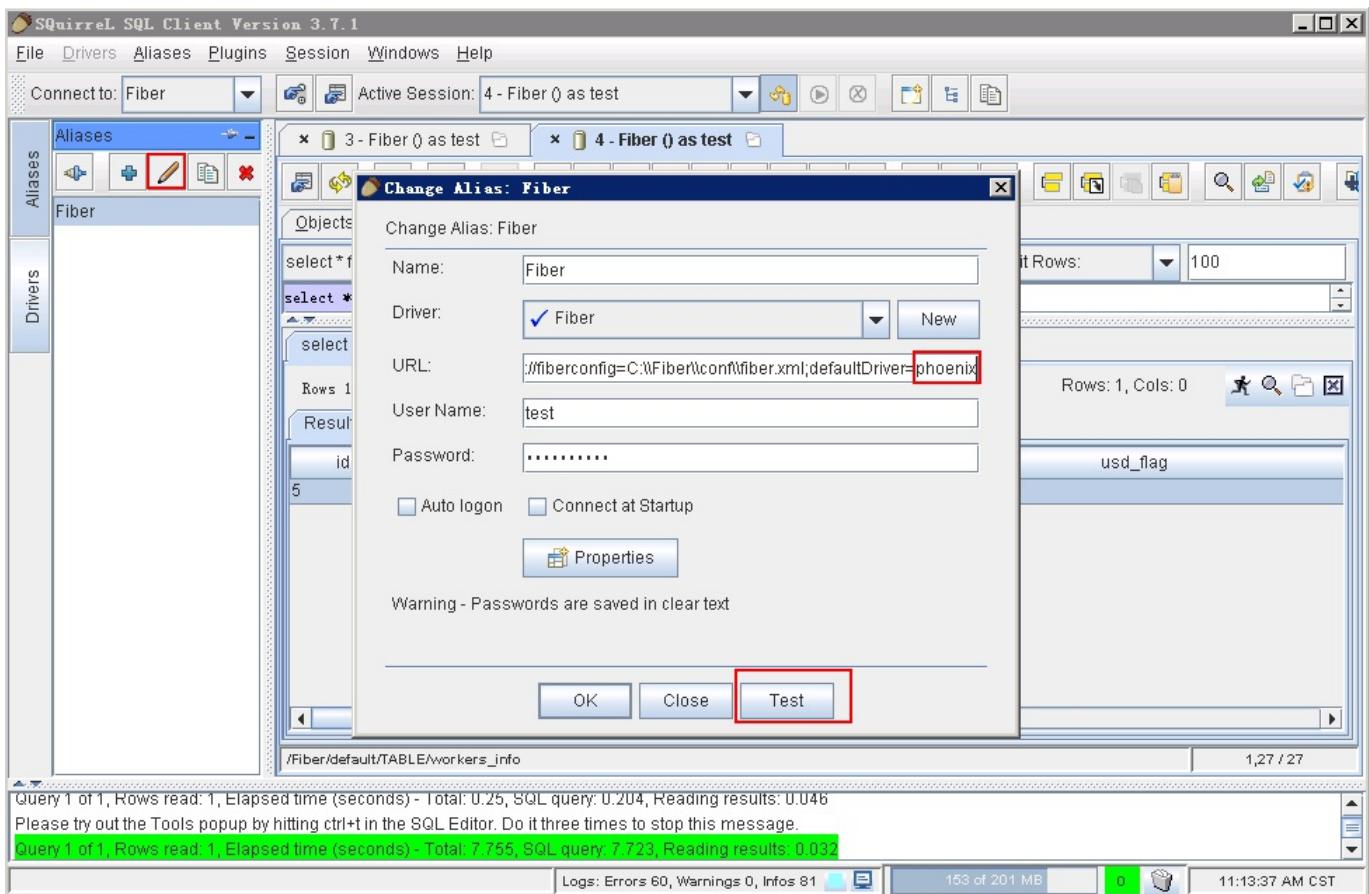
Below the query editor, the results pane shows a table with one row:

id	name	usd_flag	salary
2	Wang	F	13,000.25

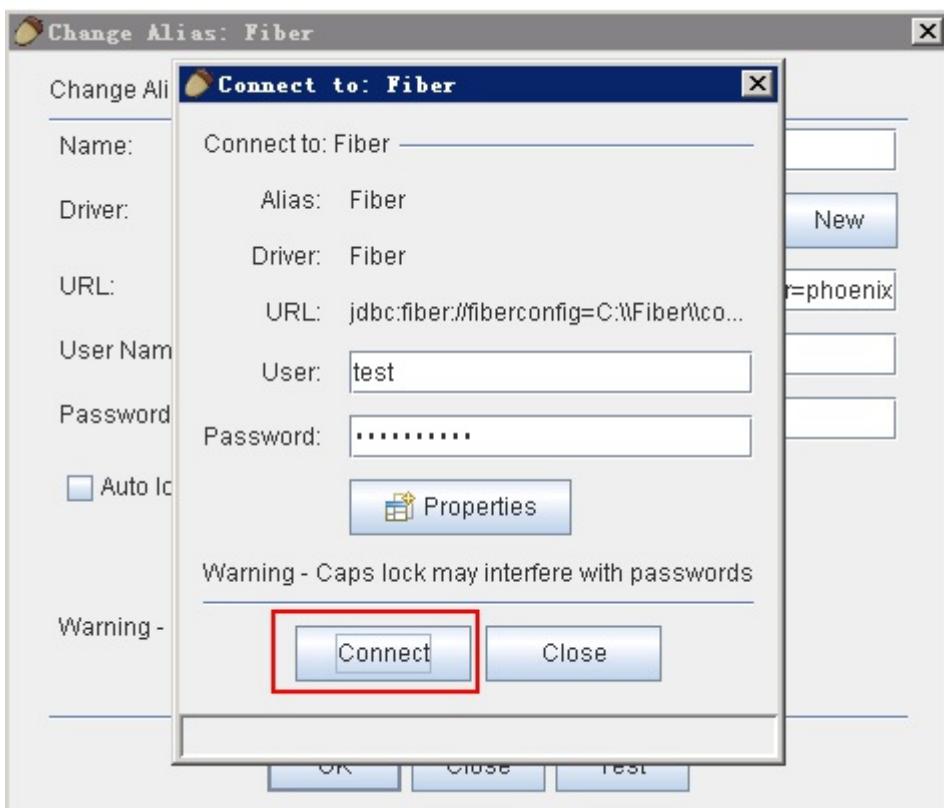
The status bar at the bottom right indicates 'Logs: Errors 32, Warnings 0, Infos 304' and the date '11:33:55 AM CST'.

对接Phoenix

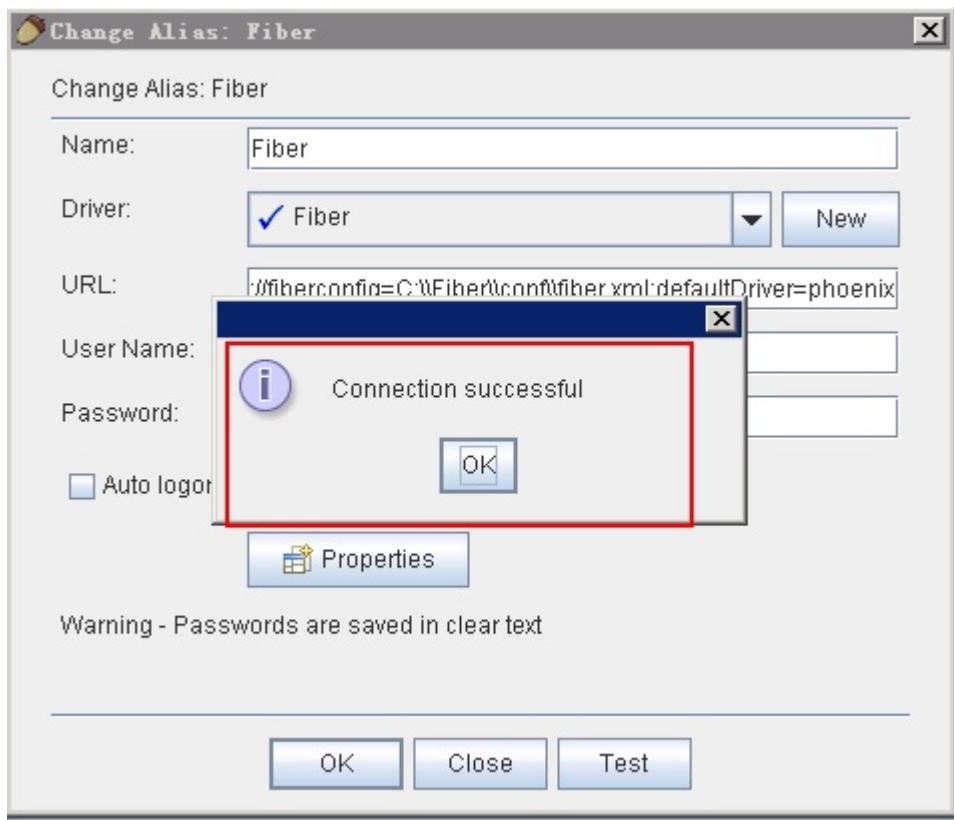
- 将defaultDriver切换为phoenix，点击 **Test**



- 点击 **Connect**



- 连接成功，点击 **OK**



- 双击 Fiber，点击 Connect，将driver切换为phoenix

Query 1 of 1, Rows read: 1, Elapsed time (seconds) - Total: 0.25, SQL query: 0.204, Reading results: 0.046
Please try out the Tools popup by hitting ctrl+t in the SQL Editor. Do it three times to stop this message.
Query 1 of 1, Rows read: 1, Elapsed time (seconds) - Total: 7.755, SQL query: 7.723, Reading results: 0.032

- 可以看到数据phoenix表

SQuirreL SQL Client Version 3.7.1

File Drivers Aliases Plugins Session Windows Help

Connect to: Fiber Active Session: 5 - Fiber 0 as test

Aliases Drivers Objects SQL

Fiber

- INDEX
- PROJECTED
- SUBQUERY
- SYSTEM TABLE
 - TABLE
 - TB_PHOENIX
 - TEST
 - TEST25
 - VIEW
 - UDT

Imported Keys		Indexes	Privileges	Column Privileges	Row IDs	Versions
Info	Content	Row Count	Columns	Primary Key	Exported Keys	
catalogName	<null>					
childTables	<null>					
exportedKeys	<null>					
importedKeys	<null>					
qualifiedName	"TB_PHOENIX"					
remarks	<null>					
schemaName	<null>					
simpleName	TB_PHOENIX					
type	TABLE					

/Fiber/TABLE/TB_PHOENIX 1,1 / 1

Please try out the Tools popup by hitting ctrl+t in the SQL Editor. Do it three times to stop this message.

Query 1 of 1, Rows read: 1, Elapsed time (seconds) - Total: 7.755, SQL query: 7.723, Reading results: 0.032

Please try out the Tools popup by hitting ctrl+t in the SQL Editor. Do it three times to stop this message.

Logs: Errors 60, Warnings 0, Infos 515 184 of 214 MB 0 11:16:17 AM CST

- 点击 **SQL面板**，编辑SQL语句，点击 **执行** 按钮，在下方可以看到查询结果。

```
select * from tb_phoenix
```

SQuirreL SQL Client Version 3.7.1

File Drivers Aliases Plugins Session Windows Help

Connect to: Fiber Active Session: 5 - Fiber 0 as test

Aliases Drivers Objects SQL

select * from tb_phoenix

select * from tb_phoenix

select * from t

Rows 3; select * from tb_phoenix Rows: 1, Cols: 0

Results MetaData Info Overview / Charts Rotated table Results as text

ID	NAME	COMPANY
101	phoenix_user1	company1
102	phoenix_user2	company2
103	phoenix_user3_up	company3_up

/Fiber/TABLE/TB_PHOENIX 1,25 / 25

Query 1 of 1, Rows read: 1, Elapsed time (seconds) - Total: 7.755, SQL query: 7.723, Reading results: 0.032

Please try out the Tools popup by hitting ctrl+t in the SQL Editor. Do it three times to stop this message.

Query 1 of 1, Rows read: 3, Elapsed time (seconds) - Total: 0.119, SQL query: 0.085, Reading results: 0.034

Logs: Errors 61, Warnings 0, Infos 515 139 of 214 MB 0 11:17:09 AM CST

- 点击 **SQL面板**，编辑SQL语句，向phoenix表中增加一条数据，点击 **执行** 按钮。

```
UPSERT INTO TB_PHOENIX(Id, Name, Company) values (108, 'phoenix_user8', 'company8')
```

SQuirreL SQL Client Version 3.7.1

File Drivers Aliases Plugins Session Windows Help

Connect to: Fiber Active Session: 1 - Fiber () as test

Aliases

Fiber

SQL

UPDATER INTO TB_PHOENIX(Id, Name, Company) values (109, 'phoenix_user9', 'company9')

select * from tb_phoenix

ID	NAME	COMPANY
101	phoenix_user1	company1
102	phoenix_user2	company2
103	phoenix_user3_up	company3_up
104	phoenix_user4	company4
105	phoenix_user5	company5
106	phoenix_user6	company6
107	phoenix_user7	company7
108	phoenix_user8	company8
109	phoenix_user9	company9

Query 1 of 1, Rows read: 8, Elapsed time (seconds) - Total: 0.031, SQL query: 0, Reading results: 0.031

Query 1 of 1, Rows read: 0, Elapsed time (seconds) - Total: 0.047, SQL query: 0.047, Reading results: 0

Logs: Errors 1, Warnings 0, Infos 234 48 of 70 MB 0 10:55:29 AM CST

- 查询结果:

File Drivers Aliases Plugins Session Windows Help

Connect to: Fiber Active Session: 1 - Fiber () as test

Aliases

Fiber

SQL

select * from tb_phoenix

select * from tb_phoenix

select * from t

Rows 9; select * from tb_phoenix

ID	NAME	COMPANY
101	phoenix_user1	company1
102	phoenix_user2	company2
103	phoenix_user3_up	company3_up
104	phoenix_user4	company4
105	phoenix_user5	company5
106	phoenix_user6	company6
107	phoenix_user7	company7
108	phoenix_user8	company8
109	phoenix_user9	company9

Query 1 of 1, Rows read: 0, Elapsed time (seconds) - Total: 0.047, SQL query: 0.047, Reading results: 0

Query 1 of 1, Rows read: 9, Elapsed time (seconds) - Total: 0.016, SQL query: 0.016, Reading results: 0

Logs: Errors 1, Warnings 0, Infos 234 53 of 70 MB 0 10:56:08 AM CST

- 点击 **SQL** 面板，编辑SQL语句，删除一条数据，点击 **执行** 按钮。

```
delete from TB_PHOENIX where ID=109;
```

The screenshot shows the SQuirreL SQL Client interface. The top menu bar includes File, Drivers, Aliases, Plugins, Session, Windows, and Help. The 'Aliases' tab is selected in the sidebar. The main window has tabs for 'Aliases' and 'Drivers'. An active session titled '1 - Fiber () as test' is shown. The SQL editor contains the query: `delete from TB_PHOENIX where ID=109;`. Below the editor, a results grid displays data from the 'tb_phoenix' table, with columns ID, NAME, and COMPANY. The data shows rows from 101 to 109. A message at the bottom indicates '1 Row(s) Deleted'. The status bar at the bottom right shows the date and time as 10:58:10 AM CST.

- 查看结果：

```
select * from tb_phoenix
```

The screenshot shows the SQuirreL SQL Client interface. The top menu bar includes File, Drivers, Aliases, Plugins, Session, Windows, and Help. The 'Aliases' tab is selected in the sidebar. The main window has tabs for 'Aliases' and 'Drivers'. An active session titled '1 - Fiber () as test' is shown. The SQL editor contains the query: `select * from tb_phoenix`. Below the editor, a results grid displays data from the 'tb_phoenix' table, with columns ID, NAME, and COMPANY. The data shows rows from 101 to 108. A message at the bottom indicates 'Row(s) Deleted'. The status bar at the bottom right shows the date and time as 10:59:37 AM CST.

- 点击 SQL面板，编辑SQL语句，更新一条数据，点击 执行 按钮。

```
UPSERT INTO TB_PHOENIX(Id, Name,Company) values (108,'phoenix_user8_up','company8_up')
```

SQuirreL SQL Client Version 3.7.1

File Drivers Aliases Plugins Session Windows Help

Connect to: Fiber Active Session: 1 - Fiber () as test

Aliases Fiber Drivers

SQL

UPSERT INTO TB_PHOENIX(Id, Name,Company) values (108,'phoenix_user8_up','company8_up')

select * from t

Rows 8: select * from tb_phoenix Rows: 1, Cols: 0

Results MetaData Info Overview / Charts Rotated table Results as text

ID	NAME	COMPANY
101	phoenix_user1	company1
102	phoenix_user2	company2
103	phoenix_user3_up	company3_up
104	phoenix_user4	company4
105	phoenix_user5	company5
106	phoenix_user6	company6
107	phoenix_user7	company7
108	phoenix_user8	company8

/Fiber 15,87 / 397

Query 1 of 1, Rows read: 8, Elapsed time (seconds) - Total: 0.031, SQL query: 0.016, Reading results: 0.015

Logs: Errors 1, Warnings 0, Infos 238 40 of 70 MB 0 11:01:41 AM CST

- 查看结果

SQuirreL SQL Client Version 3.7.1

File Drivers Aliases Plugins Session Windows Help

Connect to: Fiber Active Session: 1 - Fiber () as test

Aliases Fiber Drivers

SQL

select * from tb_phoenix

select * from tb_phoenix

Rows 8: select * from tb_phoenix Rows: 1, Cols: 0

Results MetaData Info Overview / Charts Rotated table Results as text

ID	NAME	COMPANY
101	phoenix_user1	company1
102	phoenix_user2	company2
103	phoenix_user3_up	company3_up
104	phoenix_user4	company4
105	phoenix_user5	company5
106	phoenix_user6	company6
107	phoenix_user7	company7
108	phoenix_user8_up	company8_up

/Fiber 17,25 / 423

Query 1 of 1, Rows read: 0, Elapsed time (seconds) - Total: 0.062, SQL query: 0.062, Reading results: 0

Query 1 of 1, Rows read: 8, Elapsed time (seconds) - Total: 0.016, SQL query: 0.016, Reading results: 0

Logs: Errors 1, Warnings 0, Infos 238 46 of 70 MB 0 11:02:26 AM CST