Using JDBC Data Source with Microsoft SQL Server 2005

Elixir Repertoire support connectivity to Microsoft SQL Server 2005 via Microsoft SQL Server 2005 JDBC driver.

Prerequisite

Below list the prerequisite that is need to ensure a successful connection to Microsoft SQL Server.

1) You need to enable mixed mode security when you install the server so that you can connect using user name and password.

2) The JDBC provider only works with the TCP/IP protocol which is disabled by default on Sql Express. You need to enable the TCP/IP Protocol from the SQL Server Configuration Manager that ships with SqlExpress and re-start the server. Look under SQL Server 2005 Network Configuration -> Protocols for SQLEXPRESS-> TCP/IP->Enable.

SQL Server Configuration Manager				_ 🗆 🗙	
Image: Construction of the system Image: Construction of the system	Protocol Name Shared Memory Named Pipes TCP/IP VIA	Status Enabled Enabled Enabled Enabled Prot	IP Properties ocol IP Addresses P1 ctive nabled P Address CP Dynamic Ports CP Port P2 ctive nabled P Address CP Dynamic Ports CP Port PAII CP Dynamic Ports CP Port CP Por	Yes No 192.168.1.25 0 1433 Yes No 127.0.0.1 0 1433 1433	? ×
		Act	ive cates whether the selected IP Addr	ress is active.	
			ОК С	ancel Apply	Help

3) Change TCP dynamic port to use static port.

You may set the static TCP port. Default port is 1433.

This is done by unset the IP addresses->TCP Dynamic->Ports as show in the location above.

SQL Server Configuration Manager				
File Action View Help				
🛞 SQL Server Configuration Manager (Local)	Name	State	Start Mode	Log On As
□ SQL Server 2005 Services □ Q SQL Server 2005 Network Configuration □ Q □ Q Protocols for SQLEXPRESS □ Q SQL Native Client Configuration	SQL Server (SQLEXPRESS)	Running Running	Automatic Automatic	NT AUTHORITY\Netv
	•			F
	-			

4) Ensure that the SQL Server services are started

5) Download the MS SQL Server JDBC driver from Microsoft web site.

The last known location is at

"http://www.microsoft.com/downloads/details.aspx?familyid=e22bc83b-32ff-4474-a44a-22b6ae2c4e17&displaylang=en"

or you can do a Google search for Microsoft S SQL Server 2005 JDBC driver download.

6) Test Connection (Optional)

You can test the connection by write a simple Java code as

import java.sql.*;

public class TestMSJDBCDriver{

```
public static void main(String[] args) {
    try{
        java.lang.Class.forName("com.microsoft.sqlserver.jdbc.SQLServerDriver");
        Connection c =
            java.sql.DriverManager.getConnection(
                "jdbc:sqlserver://localhost\\SQLEXPRESS;user=myuser;password=mypass;");
        System.out.println("Connected!");
        fcatch(Exception ex){
        ex.printStackTrace();
        }
    }
}
```

7) Deploy the driver into Elixir Repertoire ext directory. You have to the same if you are using Elixir Repertoire Server.

Address 🛅 C:\Program Files\Elixir Reperto	ire 1.5	.0\ext		💌 🄁 Go	Nor	ton AntīVirus 😣 🔻
Folders	×	Name 🔺	Size	Туре		Date Modified
 □ □ Elixir Repertoire 1.5.0 □ □ bin □ config □ docs □ ext □ help □ lib □ license ① resources ① runtime ① samples 		₿ dir.txt	1 KB 227 KB	Text Document Executable Jar F	File	5/28/2006 11:56 PI 1/17/2006 2:36 PM

8) You can view the tables in Microsoft SQL Server 2005 Management Studio

File Edit View Table Designer Tools Window Community Help 1 <td< th=""><th></th></td<>	
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Object Explorer - T × Table - dbo.Test Summary - X Properties	- ₽ ×
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🗉 🦲 System Tables Server Name exnihilo/sqlex	press
🗉 🖬 dbo.Test	
🗉 🦢 Columns Identity Column	
🗉 🧰 Keys 🛛 👘 Indexable 🔤 Yes	
E Constraints B Regular Data Spa PRIMARY	
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Rev GUID Colum	
B Statistics	
Wirdows Server System	
B System Stored Procedures	
E Inctions Server type: Database Engine	
Database Triggers Server name: EXNIHILO\SQLEXPRESS	
🗄 🦢 Assemblies	
Types Authentication: JSLL Server Authentication	
🗄 🖻 Rules Login: elixir	
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B Security rassword.	
E Security Remember password	
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B Server Roles	
Connect Cancel Help Options >>	
B Server Objects	
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Linked Servers (Identity)	
Backup Devices Devic	

Creating a JDBC Data Source in Elixir Repertoire

These are the following step to create JDBC Data Source in Elixir Repertoire.

1) Obtain the JDBC connection parameters

They are the Microsoft server database location, database name, port (1433 default), user name and password. Please note the driver name and URL has been modified in SQL Server 2005.

Here is the different show in the table.

Server	MS SQL Server 2005	MS SQL Server 2000
JDBC Driver	com.microsoft.sqlserver.jdbc.SQLServerDriver	com.microsoft.jdbc.sqlserver.SQL ServerDriver
URL	jdbc:sqlserver://	jdbc:microsoft:sqlserver://

Please refer to the driver read me information for reasons for the change.

💐 Dataso	urce Wiz	ard 🔀
Define JI Enter JDI	DBC Dat BC datason	asource arce parameters
Name:	MSSQL	SQLServer 2005 Data Source
Description:		
JDBC	JNDI	
Driver Sug Driver: URL:	gestions:	com.microsoft.sqlserver.jdbc.SQLServerDriver jdbc:sqlserver://EXNIHILO:1433;DatabaseName=Test
User:	elixir	
Password:	*****	✓ Hide Password
		Previous Next Finish Cancel

2) Step to the next page to obtain the SQL Statement as

[] [· · · · · · · · ·]		
	🗶 Elixir Query Builder	×
	Show Views	Select Distinct
🔄 Datasource Wizard	I Tables	
Define JDBC Datasource	dtproperties	
Enter SQL or use the Query Builder	Relationships	
SQL Callable select * from test	Column Table Alias Sort Where Aggregate Having Details SQL	
		Ok Cancel
Callable Statement	Query Builder Edit SQL	
Previous	Next Finish Cancel	

3) Infer the schema

🔓 Data	source	Wizard	×
Define Enter	schema (Datasource or infer from a data query	
		Infer Schema	
	Column	Name	Туре
1 AP	1	SNO Name	String String
	2	INGINE	oung
\square			
	1		
		Previous	Next Finish Cancel

4) Finally you test the result of the SQL Statement in the Data->Load Data.

Data		
[Result]		🔽 🧾 🧄 🔚 🚔 har Showing 4 records 🗌 Count All Records
sno	Name	
(String)	(String)	
1	Janice	
2	Peter	
3	Jon	
4	Jone	

Using SQL Server Store Procedure

You can use SQL Server store procedure with Elixir Repertoire JDBC data source.

```
1) Define the Store Procedure as
set ANSI NULLS ON
set QUOTED IDENTIFIER ON
GO
-- Author:
                    Elixir
-- Create date:
-- Description:
-- ======
         ______
ALTER PROCEDURE [dbo].[sp selecttesttable]
          -- Add the parameters for the stored procedure here
          (aname varchar(256)
AS
BEGIN
          -- SET NOCOUNT ON added to prevent extra result sets from
          -- interfering with SELECT statements.
          SET NOCOUNT ON
 -- Insert statements for procedure here
          SELECT * From Test where name like @name;
          RETURN
```

END

where *dbo. sp_selecttesttable* is the procedure name and it takes in a parameter name of type varchar. The return type is the resultset.



2) Test the SQL Store procedure. Once it is return back the right resultset you can create your data source.

3) At the JDBC SQL entry wizard page, enters the store procedure as

where call procedure-name[([parameter]],[parameter]]...)] to indicate the parameters as ? example

{call dbo.sp_selecttesttable(?)}

4) Enable this as callable statement

🗶 Datasource Wizard	×
Define JDBC Datasource Enter SQL or use the Query Builder	
SQL Callable	
[call dbo.sp_selecttesttable(?)}	
Callable Statement Convert Nulls to Empty Strings	Edit SQL
Previous Next Finis	h Cancel

5) At callable tab enter the parameters

X Datasource Wizard		×
Define JDBC Datasource Enter SQL or use the Query H	Builder	E-
SQL Callable {call dbo.sp_selecttesttable(?)}		
Out Type: DataType String	Value \${name##%}	Add Insert Delete
	Previous Next	Finish Cancel

The in parameter is only one in our case a string of the name. ${name##\%}$ is a special syntax used to indicate this field is a dynamic parameters.

5) Now you can test the data source.

Data	
[Result]	🔽 🗐 🧄 🔚 🚝 🐚 Showing 4 records 🗌 Count All Records
sno Name (String) (String) 1 Janice 2 Peter 3 Jon 4 Jone	Dynamic Parameters Dynamic Parameters Enter dynamic parameter values
	name: %
	Previous Next Finish Cancel