

Building a SQL Linked Server (Using SQL script)

Table of Contents

- Overview
- Input Variable Table
- Example SQL Linked Server Script
- Document References

Overview

This example builds a SQL Linked Server using a script. When completed, this script can be executed using a Query Window in Microsoft SQL Server Management Studio.

The first section of the document provides details on what values are used for each input variable **Table 1**; the full body of the script can be found at the bottom of the document **Table 2**.

The .sql version of the Linked Server SQL Script **ExampleLinkedServerScript.txt** that is referenced below is available for download from this web site.

Input Variable Table

This table provides an explanation of each input variable:

Input Variable	Description
<pre>@server = N'CollegeTest_CBL8'</pre>	The value of @server is your choice, it is the name you want to use for your linked server on your client SQL Server.
@srvproduct=N'HP3KProvider'	This value is provided by Minisoft. Even though we will be using the Unix operating system and Eloquence database, the name for this data provider did not change as the function of this transformation is to emulate the HP3k / Image data.
@provider=N'HP3KProvider'	This value is provided by Minisoft. Even though we will be using Unix operating system and Eloquence database, their name for the provider did not change as the function of this transformation is to emulate the HP3k / Image data.
@datasrc=N'172.19.2.59'	This value can be either the name (if using DSN) or the IP Address of the source system you will



Input Variable	Description
	be accessing data from. The value listed here is the correct IP Address value that will access server where the data resides.
<pre>@provstr=N'Server Port=30nnn;ServerType=1;User=pnnnmsole; Password=MixedCaseUnixPswd;ImageDatabase0=SM,,0,5,0'</pre>	This is the full provider string. The components are broken down and explained below.
Server Port=30nnn	This is the port number that was opened in the firewall for the server to accept your college's connection. This value will be unique for each college. Replace the Server Port value in this example with the port number assigned for your college.
ServerType=1	Defines the server type. The value '1' indicates that the server type for this entry is Unix. Keep this value as it is shown in the example.
User=p <i>nnn</i> msole	The name of your college's dedicated UNIX User that was set up as your Minisoft OLE Service account. You will replace the " <i>nnn</i> " value with your college code. This entry is case sensitive.
Password=MixedCaseUnixPswd	The value provided for your college's password for the user <i>pnnnmsole</i> . This entry is case sensitive.
String ImageDatabase0= <mark>SM</mark> , <mark>,0,5,0</mark>	The string for the credentials for the first (database 0) database you want to provide access to.
Example using the Student database from Linked Server script: FirstDatabase=DatabaseName,Comma for user and password, Access Level(Read)	You will need one full set of credentials like this for every database that you want the Linked Server to access. Separate each sequential string of database listed by a semicolon. Every database credential string is contained within the one single quote.
	The configuration for the OLE server has been set up so that account groups (e.g., .DB) is not needed. In addition, Eloquence users are not required but the addional comma between the Database Name and access level is needed as a placholder for this input parameter.

Table 1

Please note:

- All other variables should be set to the default options as listed in the example script Table 2.
- 2. After the script is edited to include the desired values, it can be executed in a Query Window in Microsoft SQL Server Management Studio.



Example SQL Linked Server Script

```
-- Build the Linked Server
EXEC master.dbo.sp addlinkedserver @server = N'CollegeTest CBL8',
@srvproduct=N'HP3KProvider', @provider=N'HP3KProvider',
@datasrc=N'172.19.2.59', @provstr=N'Server Port=30nnn;ServerType=1;
User=pnnnmsole; Password=MixedCaseUnixPswd; ImageDatabase0=SM, ,0,5,0;
ImageDatabase1=EMP,,0,5,0'
GO
EXEC master.dbo.sp_addlinkedsrvlogin
@rmtsrvname=N'CollegeTest_CBL8',@useself=N'False',@locallogin=NULL,@rmtuser=N
ULL,@rmtpassword=NULL
GO
EXEC master.dbo.sp_serveroption @server=N'CollegeTest_CBL8',
@optname=N'collation compatible', @optvalue=N'false'
GO
EXEC master.dbo.sp serveroption @server=N'CollegeTest CBL8', @optname=N'data
access', @optvalue=N'true'
GO
EXEC master.dbo.sp_serveroption @server=N'CollegeTest_CBL8',
@optname=N'dist', @optvalue=N'false'
GO
EXEC master.dbo.sp_serveroption @server=N'CollegeTest_CBL8', @optname=N'pub',
@optvalue=N'false'
GO
EXEC master.dbo.sp_serveroption @server=N'CollegeTest_CBL8', @optname=N'rpc',
@optvalue=N'false'
GO
EXEC master.dbo.sp_serveroption @server=N'CollegeTest_CBL8', @optname=N'rpc
out', @optvalue=N'true'
GO
EXEC master.dbo.sp_serveroption @server=N'CollegeTest_CBL8', @optname=N'sub',
@optvalue=N'false'
GO
EXEC master.dbo.sp_serveroption @server=N'CollegeTest_CBL8',
@optname=N'connect timeout', @optvalue=N'0'
GO
EXEC master.dbo.sp_serveroption @server=N'CollegeTest_CBL8',
@optname=N'collation name', @optvalue=null
GO
EXEC master.dbo.sp_serveroption @server=N'CollegeTest_CBL8', @optname=N'lazy
schema validation', @optvalue=N'false'
GO
EXEC master.dbo.sp_serveroption @server=N'CollegeTest_CBL8', @optname=N'query
timeout', @optvalue=N'0'
GO
EXEC master.dbo.sp_serveroption @server=N'CollegeTest_CBL8', @optname=N'use
remote collation', @optvalue=N'true'
```







Document References

SBCTC DSA-E Linked Server SQL Script	Linked_Server_SQL.sql