

Using multiple SPD Server Libname Domains with a ODBC Connection (SPDS 3.0 M1)

(1.0) Configuration of SPDS SNet Server Port in NT Services File

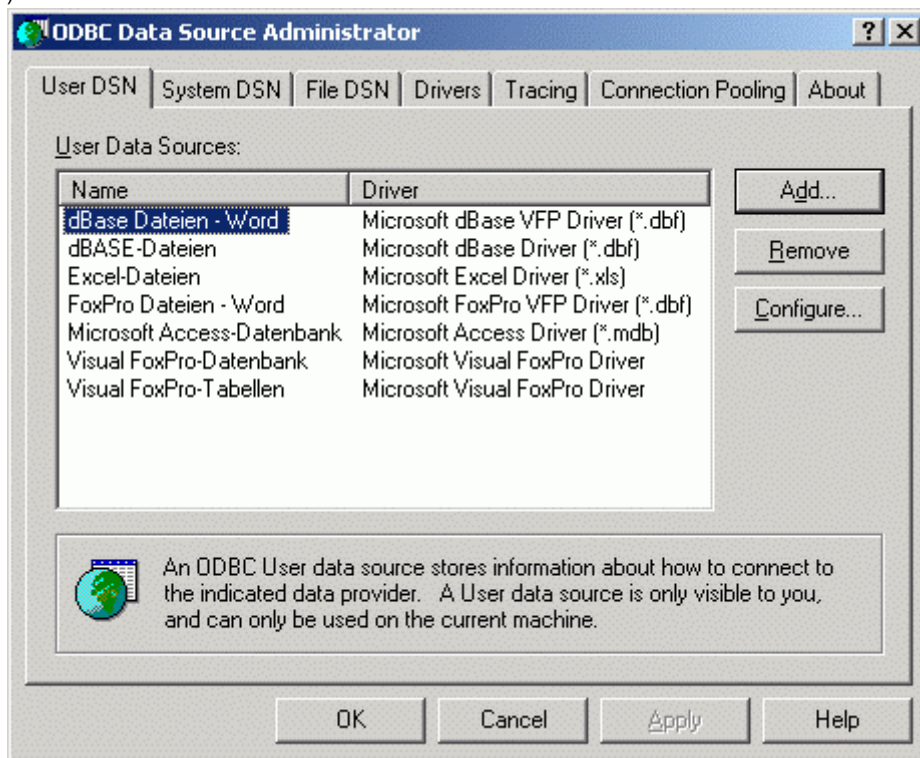
The default listener Port for SPDS SNet Server is 5151. The Port Number cannot be used for the ODBC Driver configuration. According to this the Win NT Services file has to be edited. Add the following line to the services file (located in c:\winnt\system32\drivers\etc\services) :

```
spdssnet          5151/tcp          #SPDS Snet Server
```

(1.1) Create a new DSN (data source name) using ODBC Manager

In the Control Panel, select *Administrative Tools* and then *Data Sources (ODBC)*. The following Window should look like the following Screen Shot (depending on the Release Level of the ODBC Kernel)

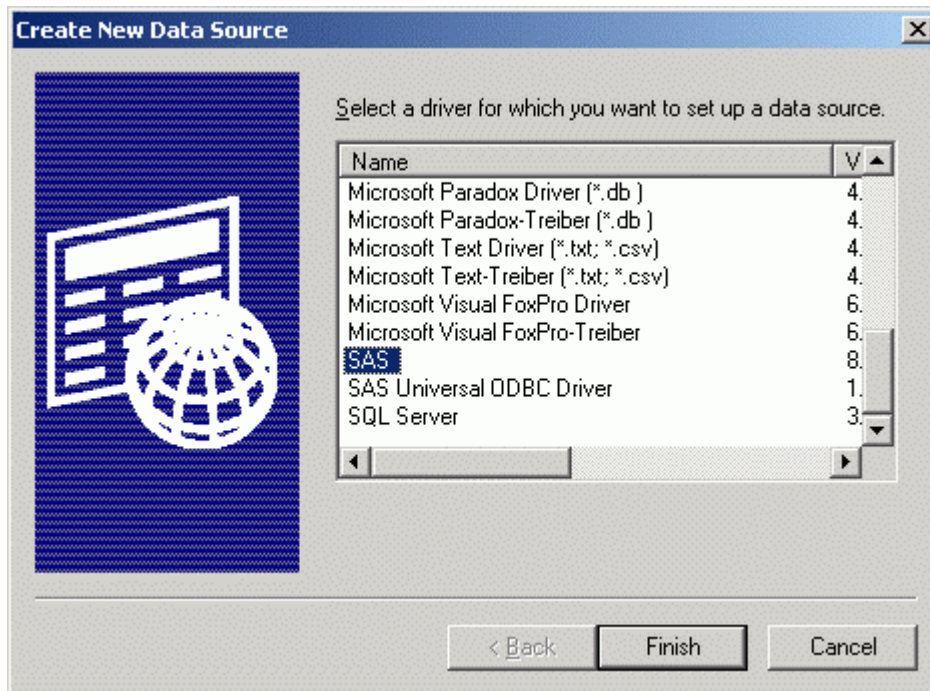
(Pic. 01)



Press the **Add...** Button to add a new DSN.

Select the SAS ODBC Driver.

(Pic. 02)



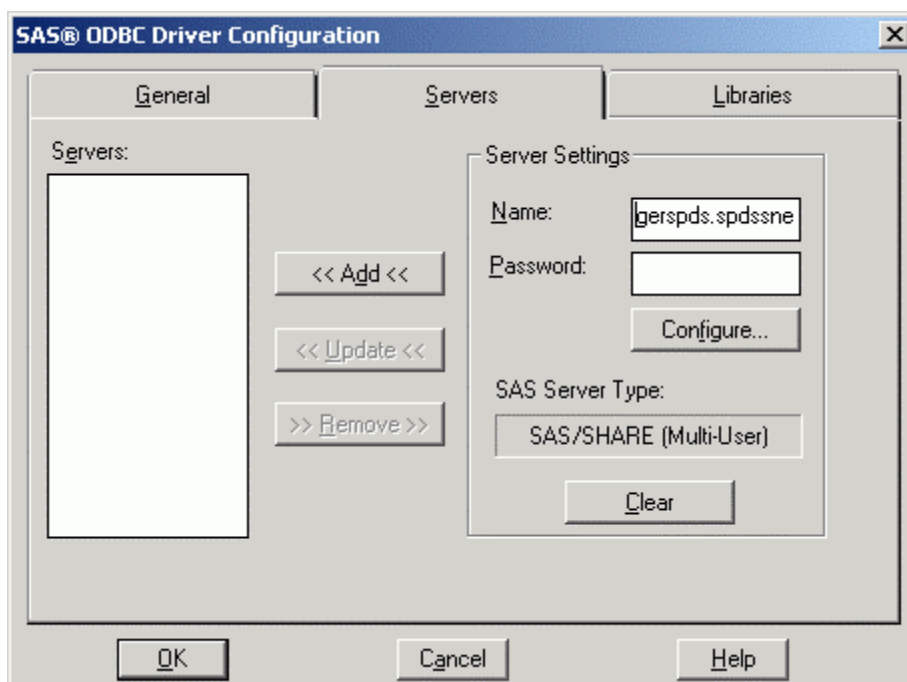
and Press **Finish** to proceed.

In the next Window select the **Servers** Tab and enter a Server Name. This Server Name must contain a two level name like :

<Server_IP_Alias>.<SPDS_Snet_Server_Port>

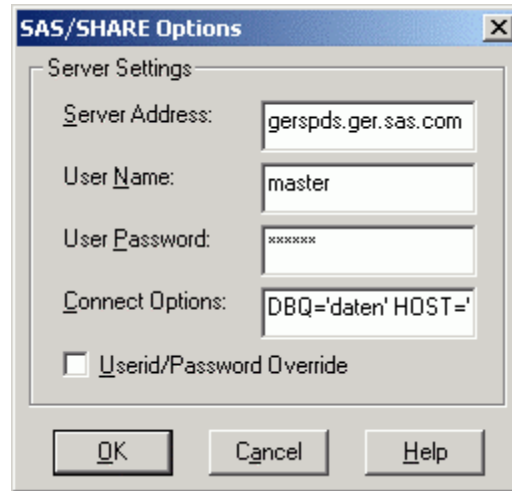
In this example `gerspds.spdssnet`.

(Pic. 03)



Press the Configure Button and enter the following information in the fields

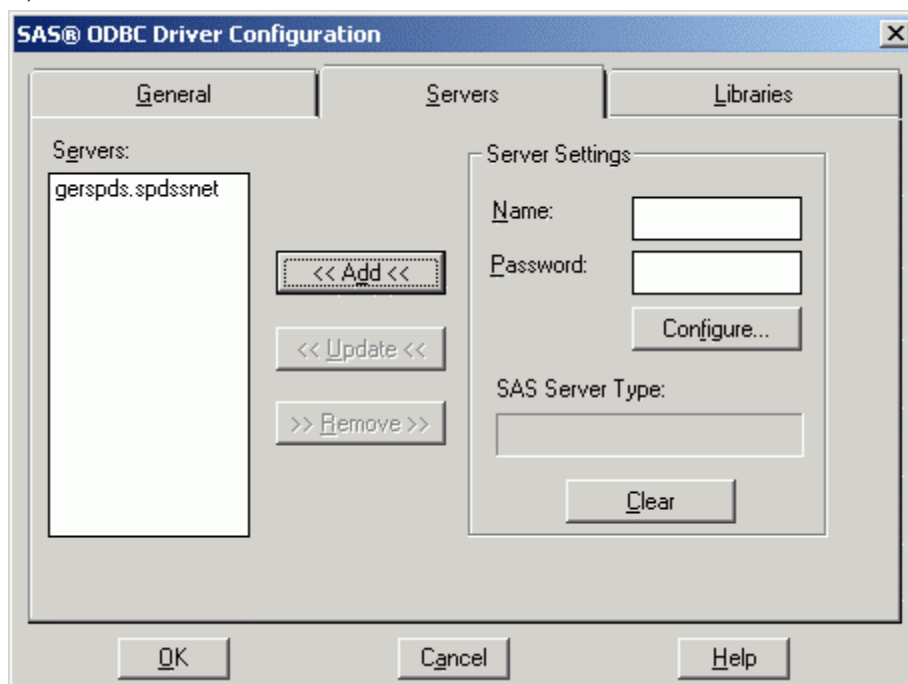
(Pic. 04)



Server Address : *full qualified IP Alias Name*
User Name : *SPDS User ID*
User Password : *Password for SPDS User*
Connect Options : DBQ='<SPDS_Libname_Domain>'
HOST='<IP_Alias_Name>'
SERV='<SPDS_Name_Server_Port>'

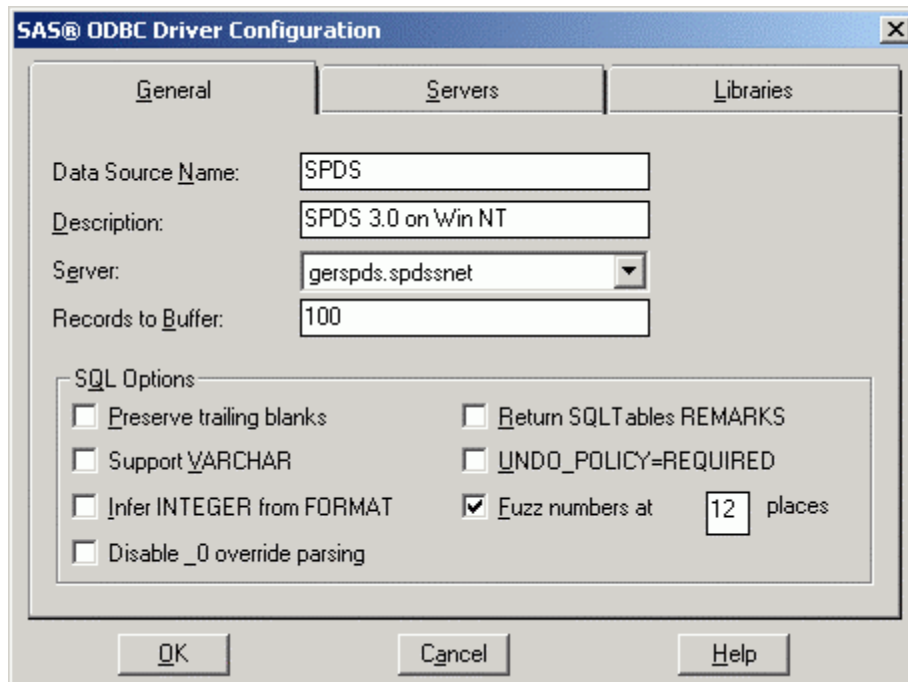
Press **OK** and then the **<< Add <<** Button to add the new server to the Servers list.

(Pic. 05)



Select the **General** Tab and enter a name and description for this DSN.

(Pic. 06)



In the Server pull down menu select the new configured Server and press **OK**.

(2.0) Configure additional Libname Domains to the ODBC connection

Due to the configuration shown in (Pic. 04) only one SPDS Libname domain can be accessed within one DSN. Theoretically the SAS ODBC Drivers allows the configuration of additional Libraries, see the **Libraries** Tab in the SAS ODBC Driver Configuration Window. These Libraries will be set using standard SAS Libname Statement e.g. `libname test 'c:\temp';`

The ODBC connection to SPDS is a SQL PassThrough connection and needs an SQL PassThrough Syntax.

(3.0) Solution

Except from the SPDS Online documentation Chapter 4 :

When a connection to the SPD server is established a primary libname domain is assigned. The primary libname domain is specified by the "DBQ" connection options parameter. Immediately after the connection is made the SPD SNET server looks for a file named `odbc.parm`. The `odbc.parm` file contains LIBREF statements. LIBREF statements assign additional libname domains to the connection. If the connecting user can access these additional libname domains dependant on their level of access.

This **ODBC.PARM** file must contain one line of code for every additional libname domain and must be written in the following Syntax :

```
libref test engname=spdseng engopt='dbq="test" user="master" passwd="spds30"';
```

On Unix the **ODBC.PARM file** must reside in the \$INSTDIR/bin directory.
On Windows the **ODBC.PARM** file must be located where the spdsnet executable resides.

Some things to avoid trapdoors writing this **ODBC.PARM** file :

- if you enter multiple *libref* statements in the **ODBC.PARM** file don't enter a blank line between these *libref* statements

```
libref test engname=spdseng engopt='dbq="test" user="master" passwd="spds30"';  
libref back engname=spdseng engopt='dbq="back" user="master" passwd="spds30"';
```

with this **ODBC.PARM** file you'll only get the first libref

```
SPDS_NOTE: User master(ACL Group ADMIN) connected to SPDS(NT) 3.00 server at  
130.96.201.172.  
SPDS_NOTE: Physical Name: :1280c:\spds\SPDS_Meta\daten\  
SPDS_NOTE: User master(ACL Group ADMIN) connected to SPDS(NT) 3.00 server at  
130.96.201.172.  
SPDS_NOTE: Libref X0000001 was successfully assigned as follows:  
Engine:          SPDSENG  
Physical Name:  :1360c:\spds\SPDS_Meta\daten\  
  
SPDS_NOTE: Libref TEST was successfully assigned as follows:  
Engine:          SPDSENG  
Physical Name:  :1360c:\spds\SPDS_Meta\test\  
  
05/22/01 09:35:24:(1664) SPDSSNET- client master has connected from node  
130.96.200.181  
client thread is 180
```

just delete the blank line between these two *libref* statements

```
libref test engname=spdseng engopt='dbq="test" user="master" passwd="spds30"';  
libref back engname=spdseng engopt='dbq="back" user="master" passwd="spds30"';
```

and both *librefs* will be activated for ODBC connections

```
SPDS_NOTE: User master(ACL Group ADMIN) connected to SPDS(NT) 3.00 server at
130.96.201.172.
SPDS_NOTE: Physical Name: :1364c:\spds\SPDS_Meta\daten\
SPDS_NOTE: User master(ACL Group ADMIN) connected to SPDS(NT) 3.00 server at
130.96.201.172.
SPDS_NOTE: Libref X0000001 was successfully assigned as follows:
    Engine:          SPDSENG
    Physical Name:   :1832c:\spds\SPDS_Meta\daten\

SPDS_NOTE: Libref BACK was successfully assigned as follows:
    Engine:          SPDSENG
    Physical Name:   :1832c:\spds\SPDS_Meta\back\

SPDS_NOTE: Libref TEST was successfully assigned as follows:
    Engine:          SPDSENG
    Physical Name:   :1832c:\spds\SPDS_Meta\test\

05/22/01 09:38:31:(1664) SPDSSNET- client master has connected from node
130.96.200.181
client thread is 188
```

- after the last line you must enter a *return*
If the **ODBC.PARM** file only ends with the semicolon of the last *libref* entry, this last *libref* will not be enabled and the following error message is printed in the SPDS SNet Server Log

```
SPDS_NOTE: User master(ACL Group ADMIN) connected to SPDS(NT) 3.00 server at
130.96.201.172.
SPDS_NOTE: Physical Name: :1204c:\spds\SPDS_Meta\daten\
SPDS_NOTE: User master(ACL Group ADMIN) connected to SPDS(NT) 3.00 server at
130.96.201.172.
SPDS_NOTE: Libref X0000001 was successfully assigned as follows:
    Engine:          SPDSENG
    Physical Name:   :1956c:\spds\SPDS_Meta\daten\

SPDS_NOTE: Libref BACK was successfully assigned as follows:
    Engine:          SPDSENG
    Physical Name:   :1956c:\spds\SPDS_Meta\back\

SPDS_NOTE: Correct Syntax for libref statement is:
SPDS_NOTE: LIBREF librefname [ ENGNAME '=' identifier ] [ ENGOPT '=' string ]
SPDS_ERROR: Parse Failure: query must be terminated with a SEMICOLON
SPDS_ERROR: Parse Failure: libref test engname=spdseng engopt='dbq="test"
user="master" passwd="spds30"'

SPDS_ERROR: SQL passthru expression contained errors.
05/22/01 09:37:19:(1664) SPDSSNET- client master has connected from node
130.96.200.181
client thread is 168
```

The Parser for the **ODBC.PARM** file seems to cut off the last Byte in this file and if this is the semicolon this character is missed.

(4.0) SPDS Snet Server Log (Example)

```
c:\spds\spds30m1>set MSGPATH=c:\spds\spds30m1\msg\  
  
c:\spds\spds30m1>c:\spds\spds30m1\spdssnet -listenport 5151  
SAS Scalable Performance Data Server 3.00(TS M1) SPDS SNET Server  
  
Copyright (c) 1996 by SAS Institute Inc, Cary NC 27513 USA  
  
System information: NT-5.0(Build 2195) running on gerspds()  
Hardware information: Vendor: NT Serial#: N/A  
05/22/01 11:53:14:(2064) SPDS SNET - listen PORT IS 5151  
SPDS_NOTE: User master(ACL Group ADMIN) connected to SPDS(NT) 3.00 server at  
130.96.201.172.  
SPDS_NOTE: Physical Name: :2008c:\spds\SPDS_Meta\daten\  
SPDS_NOTE: User master(ACL Group ADMIN) connected to SPDS(NT) 3.00 server at  
130.96.201.172.  
SPDS_NOTE: Libref X0000001 was successfully assigned as follows:  
Engine: SPDSENG  
Physical Name: :1724c:\spds\SPDS_Meta\daten\  
  
SPDS_NOTE: Libref BACK was successfully assigned as follows:  
Engine: SPDSENG  
Physical Name: :1724c:\spds\SPDS_Meta\back\  
  
SPDS_NOTE: Libref TEST was successfully assigned as follows:  
Engine: SPDSENG  
Physical Name: :1724c:\spds\SPDS_Meta\test\  
  
05/22/01 11:53:24:(2064) SPDSSNET- client master has connected from node  
130.96.200.181  
client thread is 176  
  
SPDS_NOTE: Parallel group-select method chosen to execute this query.
```