

Define DB2 library in the SAS Management Console

The purpose of this document is to explain how to define DB2 library in the SAS Management Console, when SAS server is running on the **UNIX and PC Hosts**. This library can be used with Business Intelligence (BI) clients.

Pre-requisites

SAS/Access Interface to DB2 software provides an interface between the SAS System and the DB2 database. SAS/Access Interface to DB2 requires Base SAS, SAS/Access Interface to DB2 and **DB2 Client**. For more information on DB2 Client Version, requirements refer to **System Requirement**. You must have DB2 Client configured before you can exchange data from SAS. Your DB2 DBA can help with DB2 client configuration. Before configuring the library in the Management Console, make sure you have a libname working from a SAS session as following.

Make sure you have libname working from a SAS session.

```
LIBNAME X DB2 DATASRC=DB2V7r1 USER=DBITEST PASSWORD=DBIGRP1  
SCHEMA=DBITEST;
```

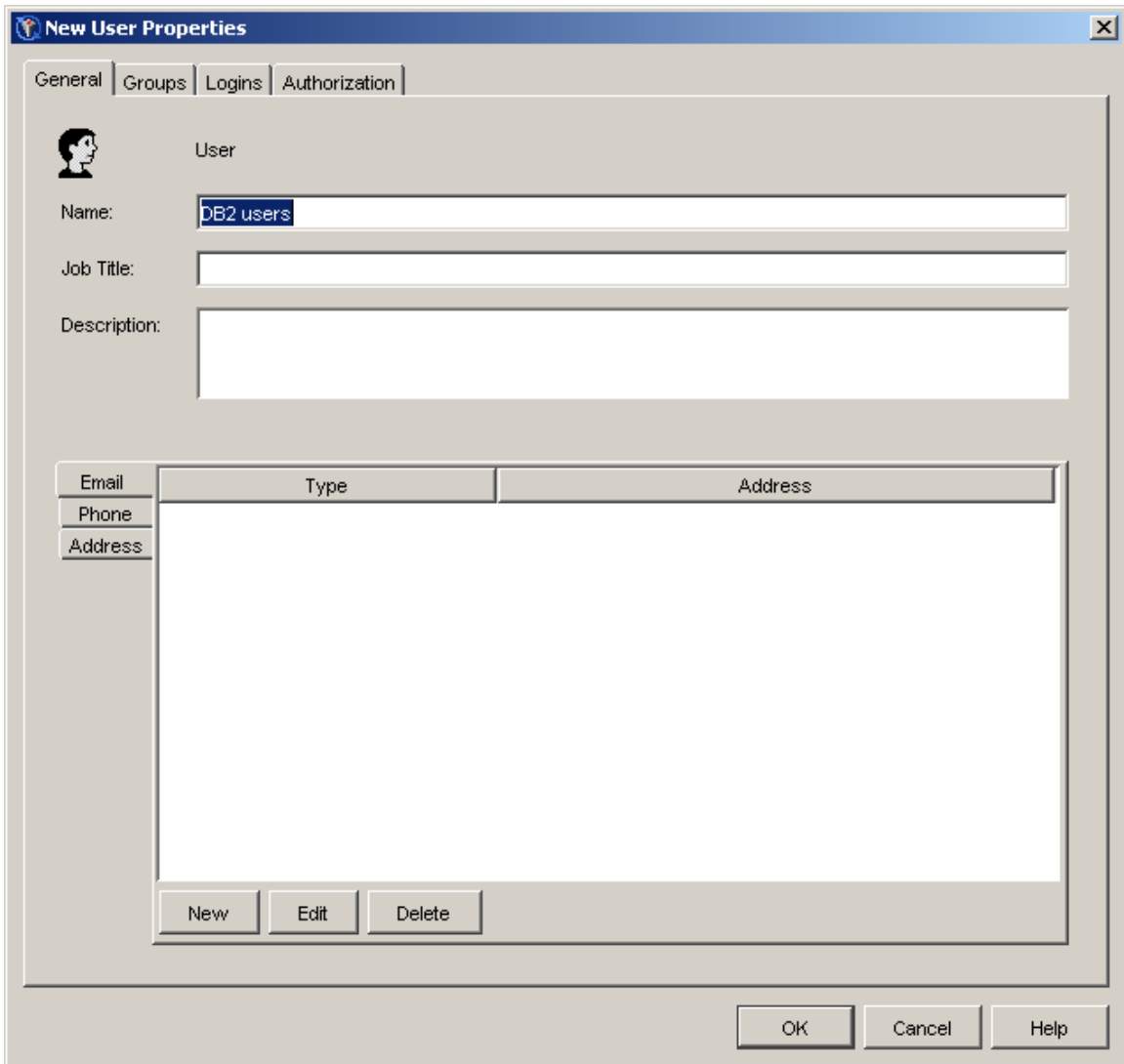
There are three main steps when defining DB2 library in the SAS Management Console.

1. Define the DB2 users
2. Define the DB2 server
3. Define the DB2 library with DB2 Schema

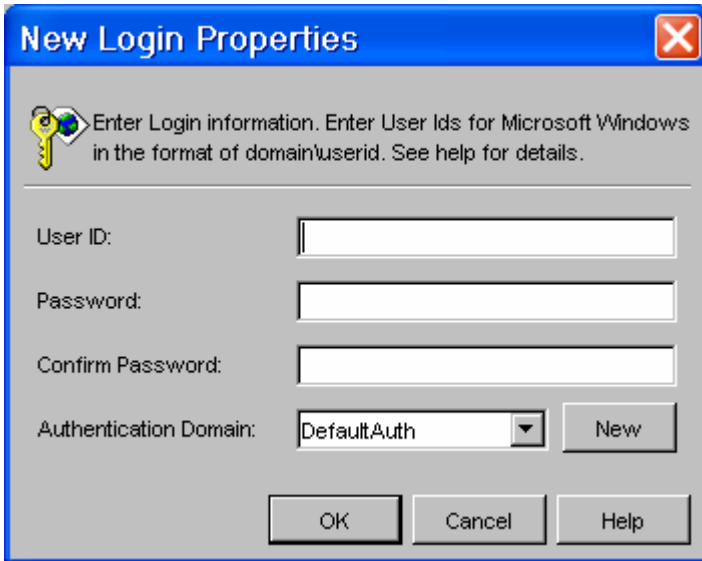
1. Define the DB2 users

Defining a user involves identifying information about the users, defining DB2 users' login IDs, and authenticating domains.

Start SAS Management Console as a SAS Administrator (SASADM). Select the **User Manager** plug-in in the navigation tree, **Right Click -> New Group**



Define a new group and give it a name. Click the **Logins** tab. "New Login Properties" window is displayed as below.



New Login Properties [X]

Enter Login information. Enter User Ids for Microsoft Windows in the format of domain\userid. See help for details.


User ID:

Password:

Confirm Password:

Authentication Domain:

Supply the login information for the DB2.



New Login Properties [X]

Enter Login information. Enter User Ids for Microsoft Windows in the format of domain\userid. See help for details.

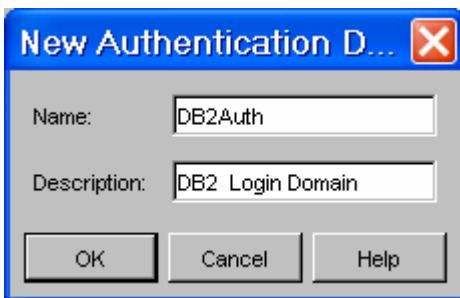
User ID:

Password:

Confirm Password:

Authentication Domain:

Click "New" to create a new authentication domain
Provide a domain name "DB2 Login Domain" and a description "when connection with DB2".
Select **OK**. Description is optional.

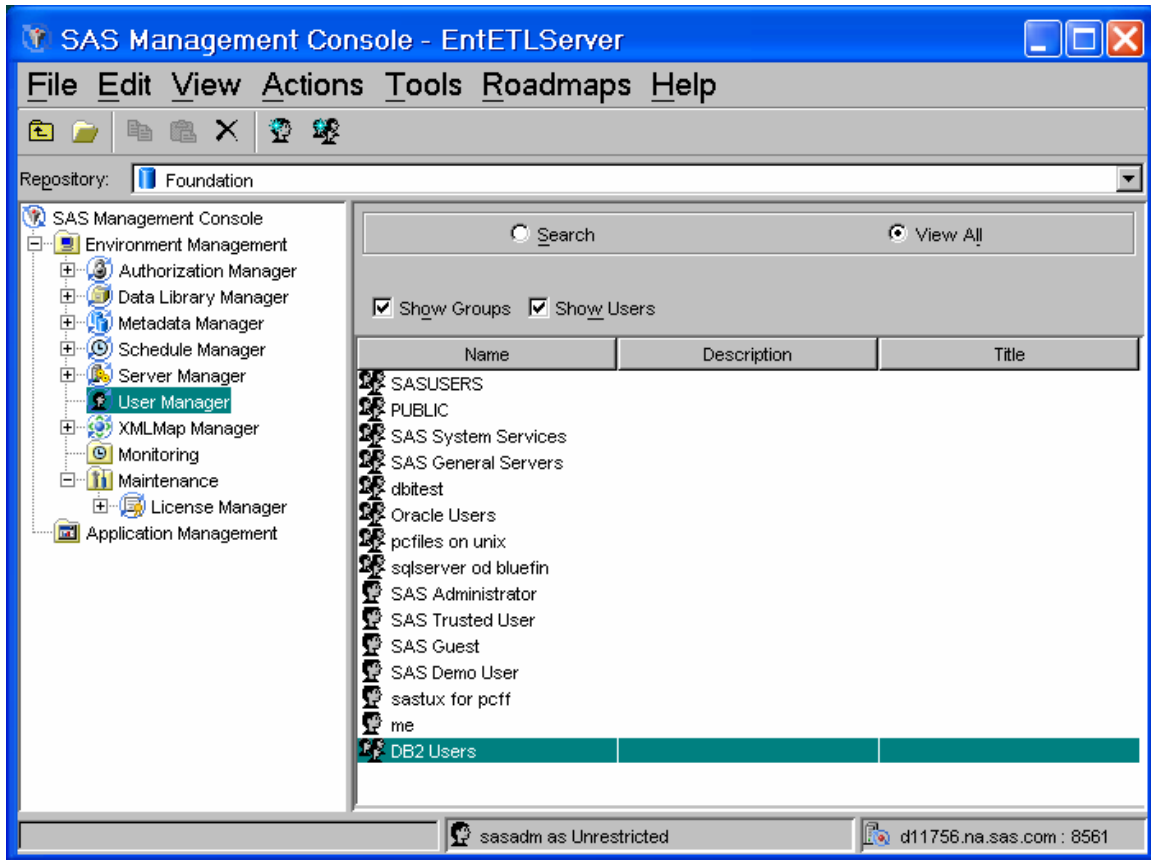


New Authentication D... [X]

Name:

Description:

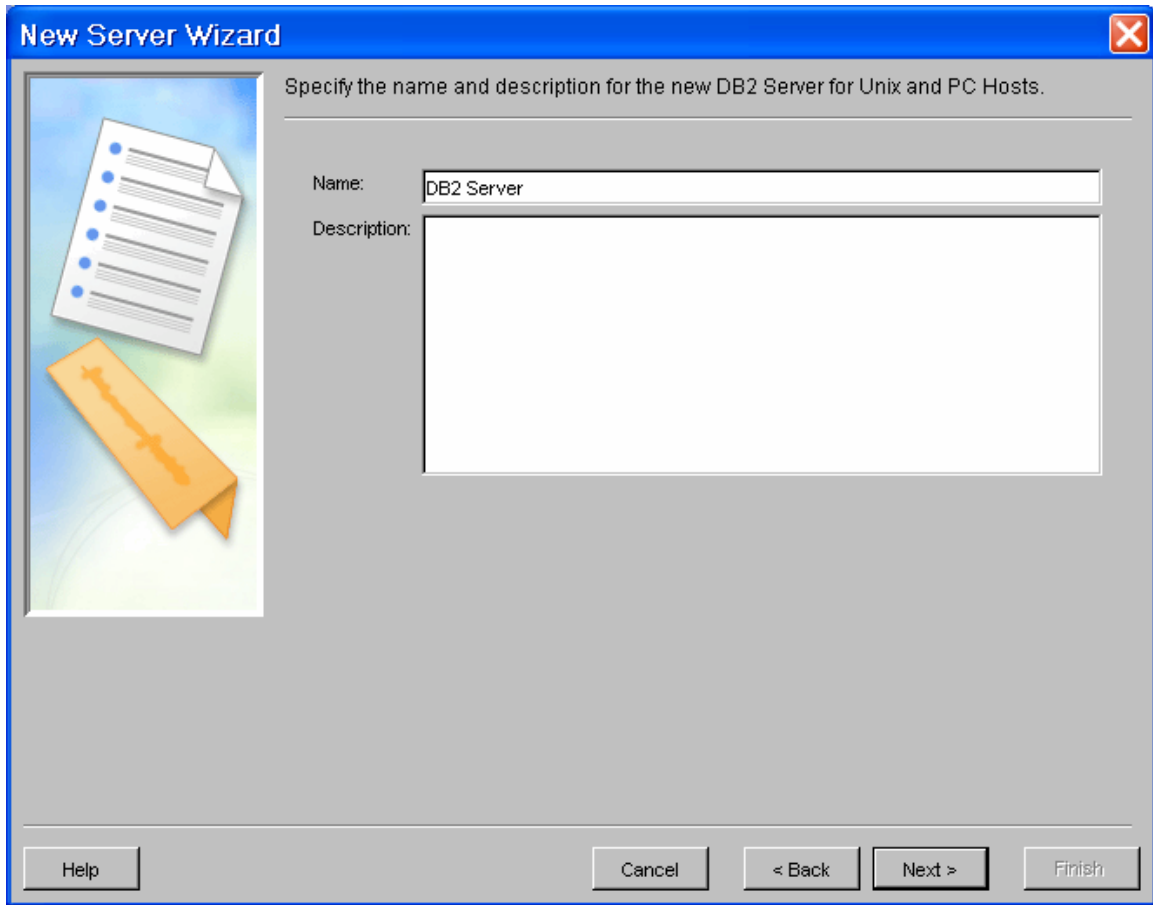
Choose the new Domain that was just created. Select **OK**. A new group is defined and now **DB2 Users** will be listed in the User Manager as below.



2. Define the DB2 Server

To define the DB2 database server use the following steps in the SMC

- From the navigation tree, Right Click on the **Server Manager** plug-in and select **New Server**.
- The New Server Wizard starts. Select **DB2 Server for UNIX and PC Hosts** from the **Database Servers** folder and click **Next** to continue. (Your DB2 database can be on mainframe but your SAS is on the UNIX or PC, so you will select **DB2 Server for Unix and PC Hosts**).



In the **Name and Description** window, specify a name – **DB2_Server** description is the optional. Click **Next** to continue.

New Server Wizard ✖

Enter the following server properties.

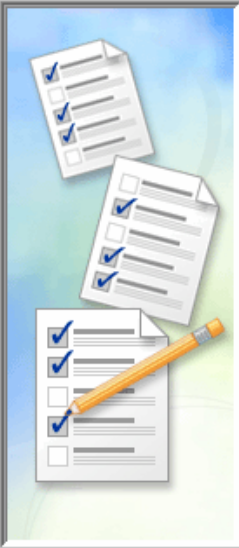
Major Version Number:

Minor Version Number:

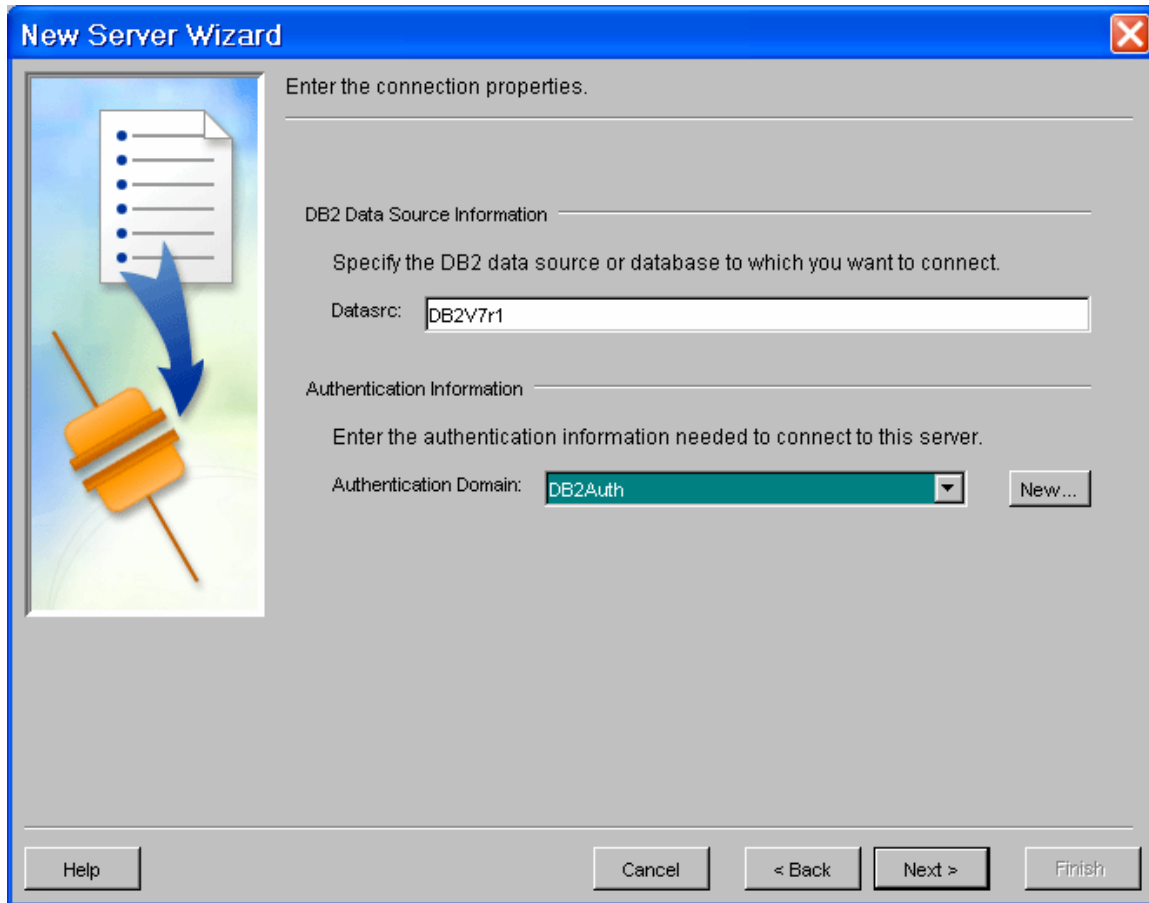
Software Version:

Vendor:

Associated Machine:



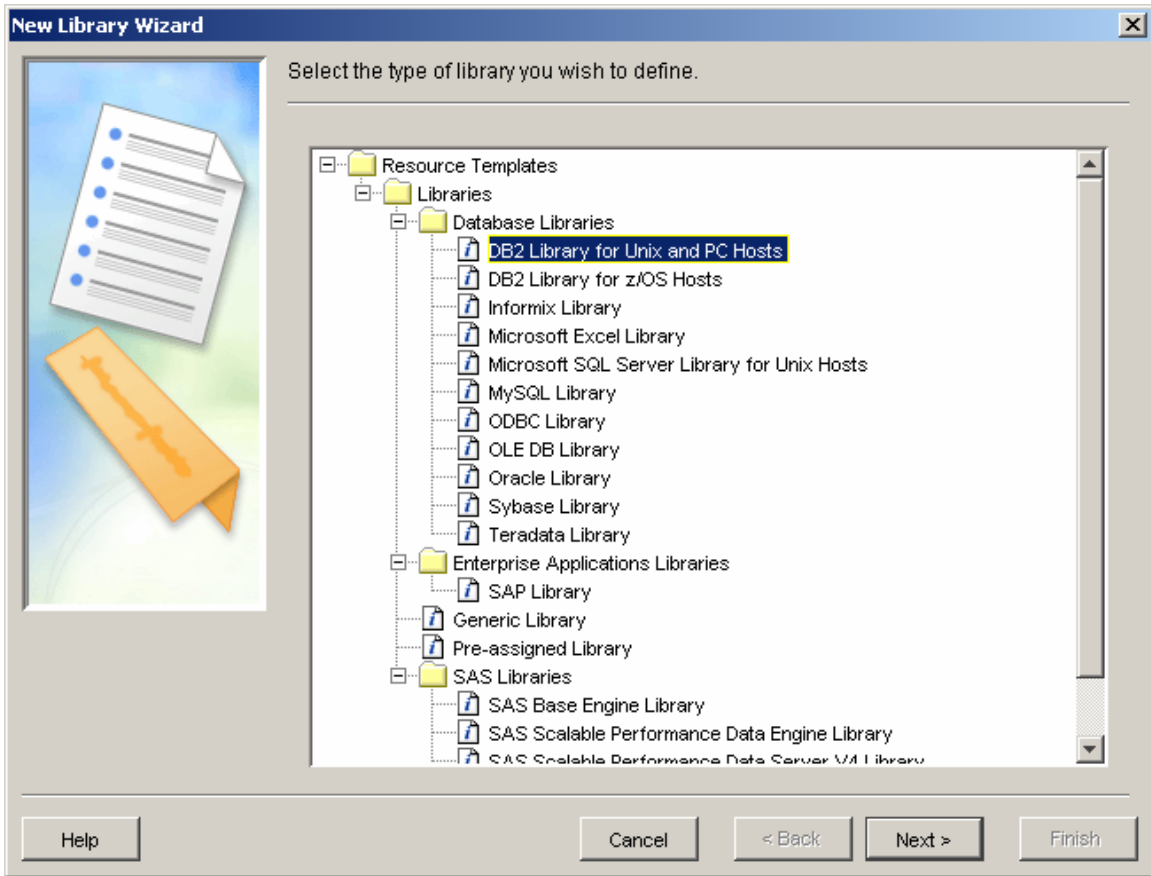
You do not have to change anything on this screen. Select **Next**.



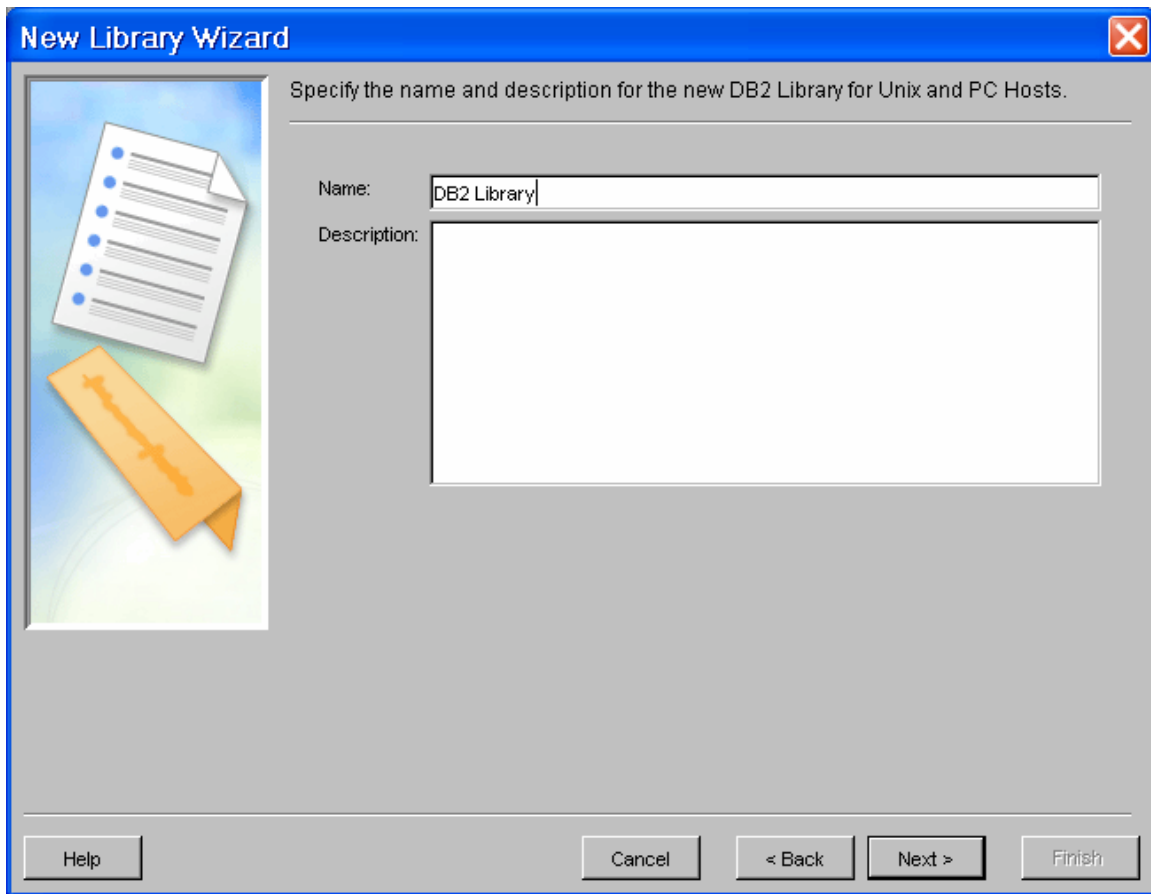
Enter the Datasrc name that you have it working in the libname statement. Select DB2Auth that was define in the Step 1 for the authentication Domain. Select **Next**, Verify the information and Select **Finish**

Define the DB2 Libraries

- Expand the **Data Library** Manager plug-in and then Right click on the **SAS Libraries** folder.
- Select **New Library**
- Select **DB2 Library for Unix and PC Hosts** from the **New Library Wizard** and Select **Next**



Give the name, **DB2 Library**. Select **Next**.



The image shows a Windows-style dialog box titled "New Library Wizard". The title bar is blue with a red close button in the top right corner. The main area has a grey background. On the left, there is a vertical panel with a light blue and green background, containing an icon of a document with blue dots and an orange ribbon with a yellow cross. To the right of this panel, the text "Specify the name and description for the new DB2 Library for Unix and PC Hosts." is displayed. Below this text are two input fields: "Name:" with a text box containing "DB2 Library" and "Description:" with a larger empty text box. At the bottom of the dialog, there are five buttons: "Help", "Cancel", "< Back", "Next >", and "Finish".

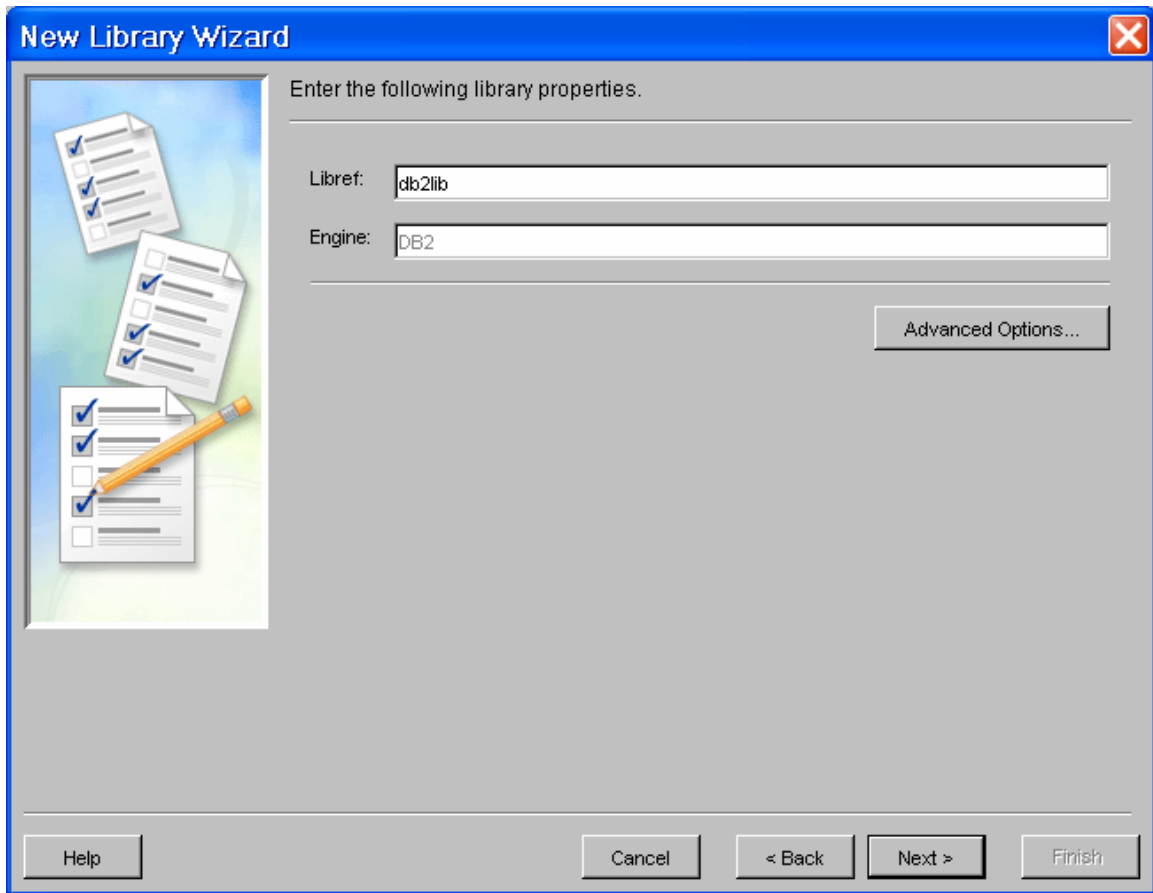
New Library Wizard

Specify the name and description for the new DB2 Library for Unix and PC Hosts.

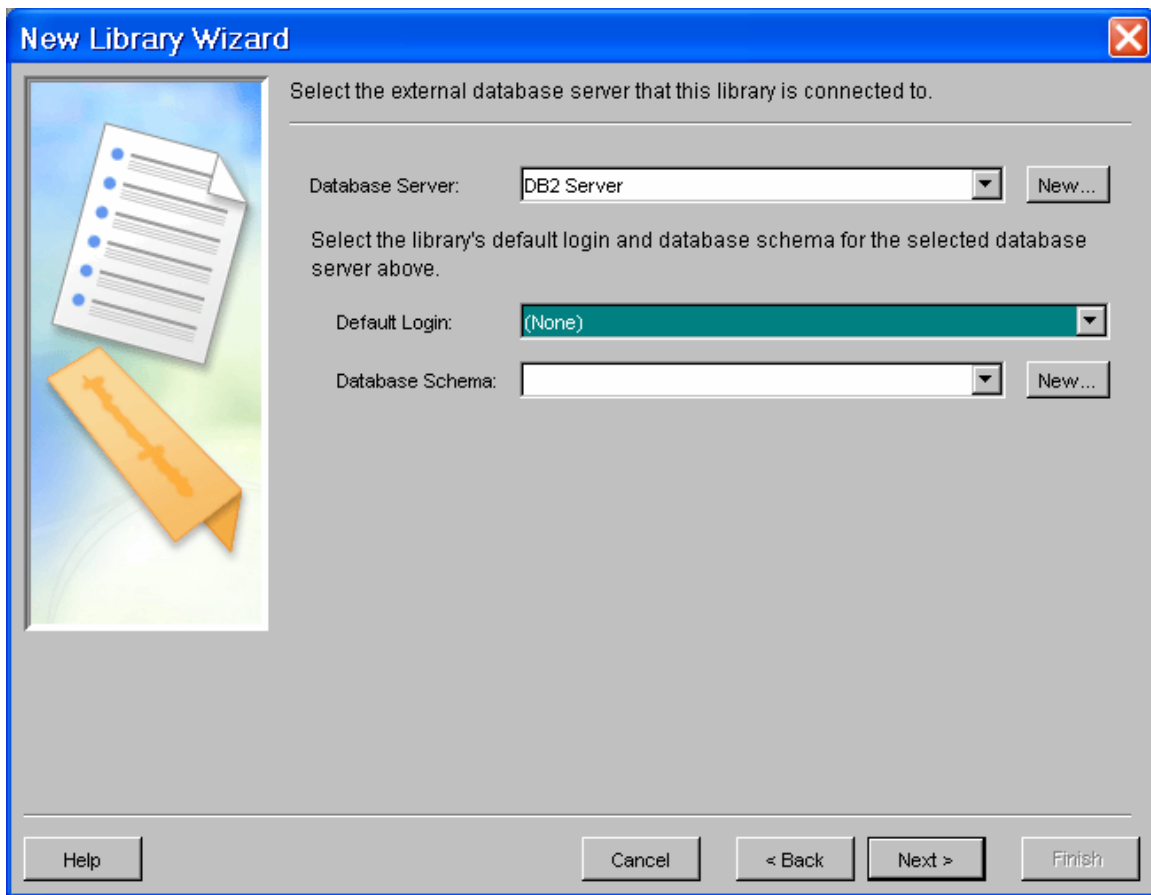
Name: DB2 Library

Description:

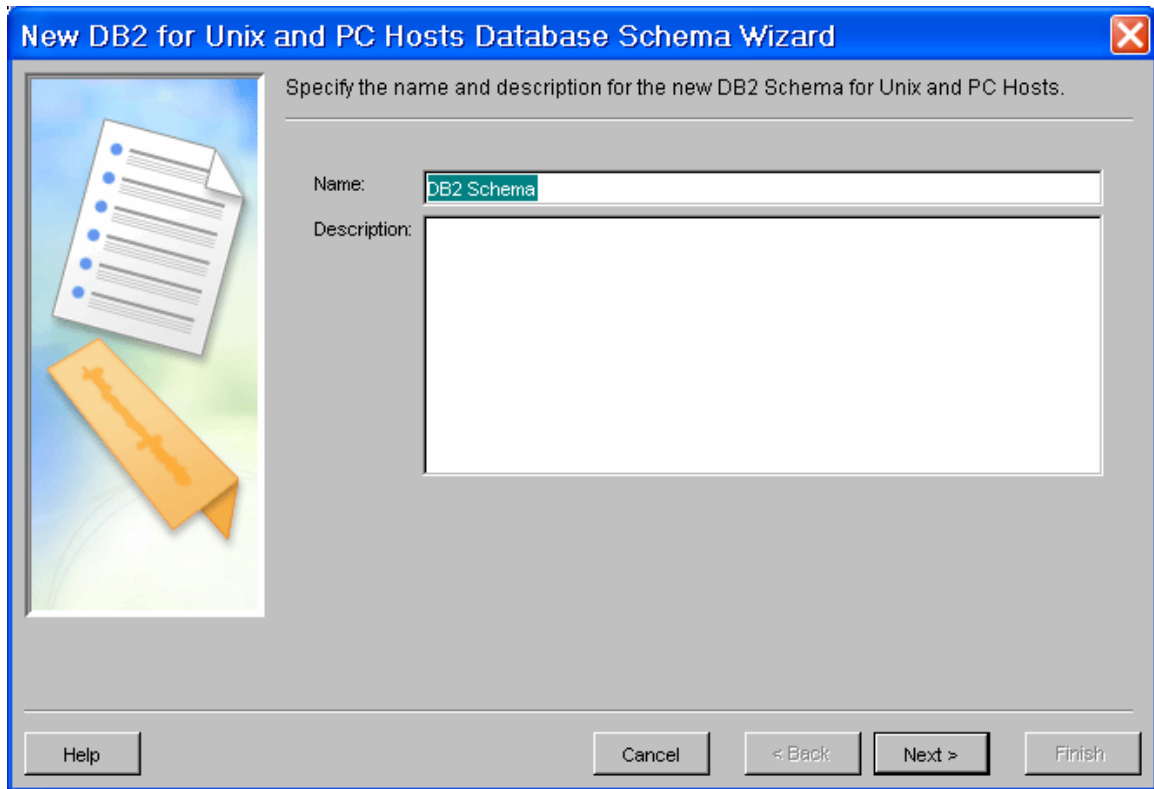
Help Cancel < Back Next > Finish



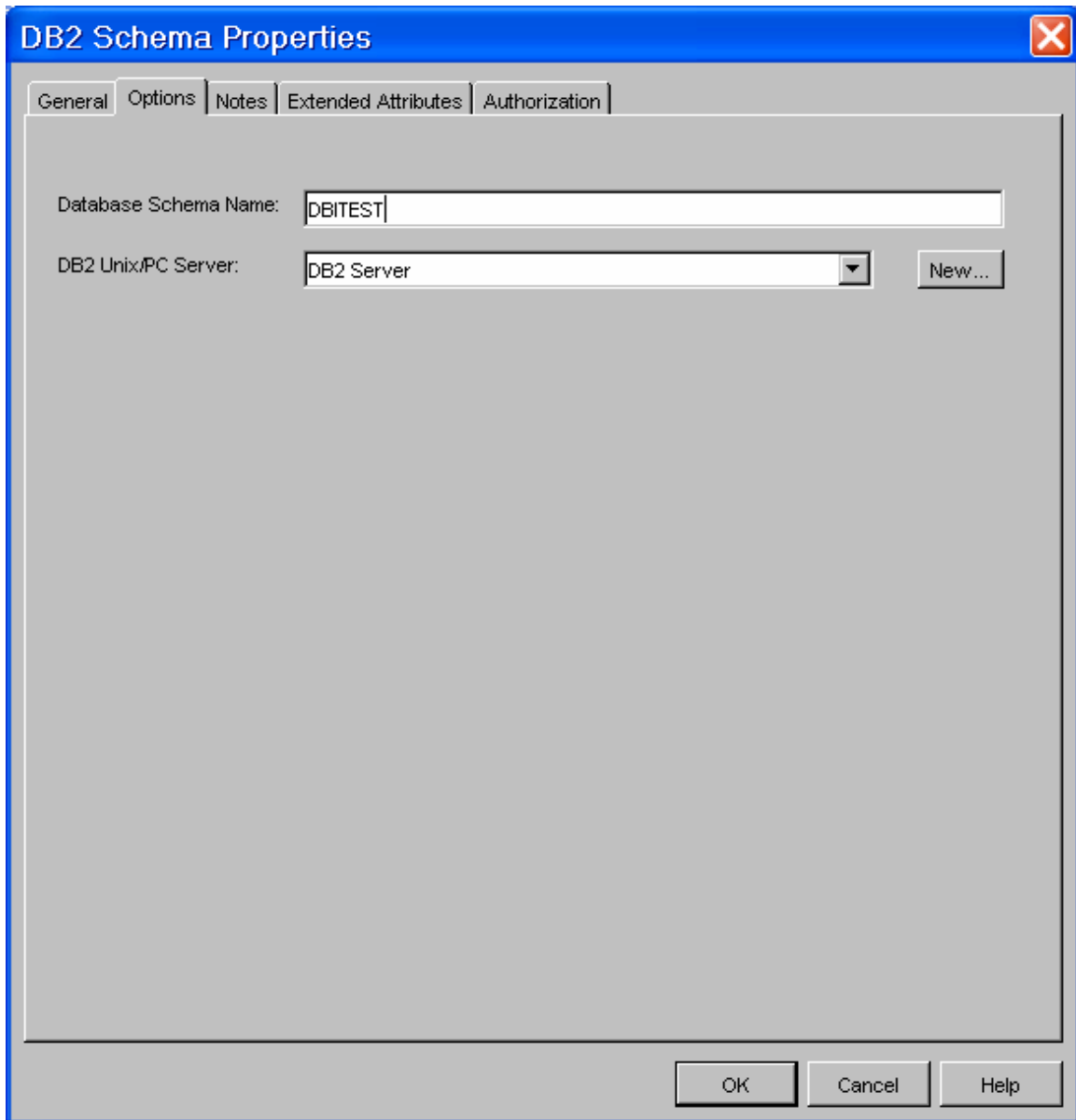
Enter the libref, db2lib in the New Library Wizard and Select **Next**.



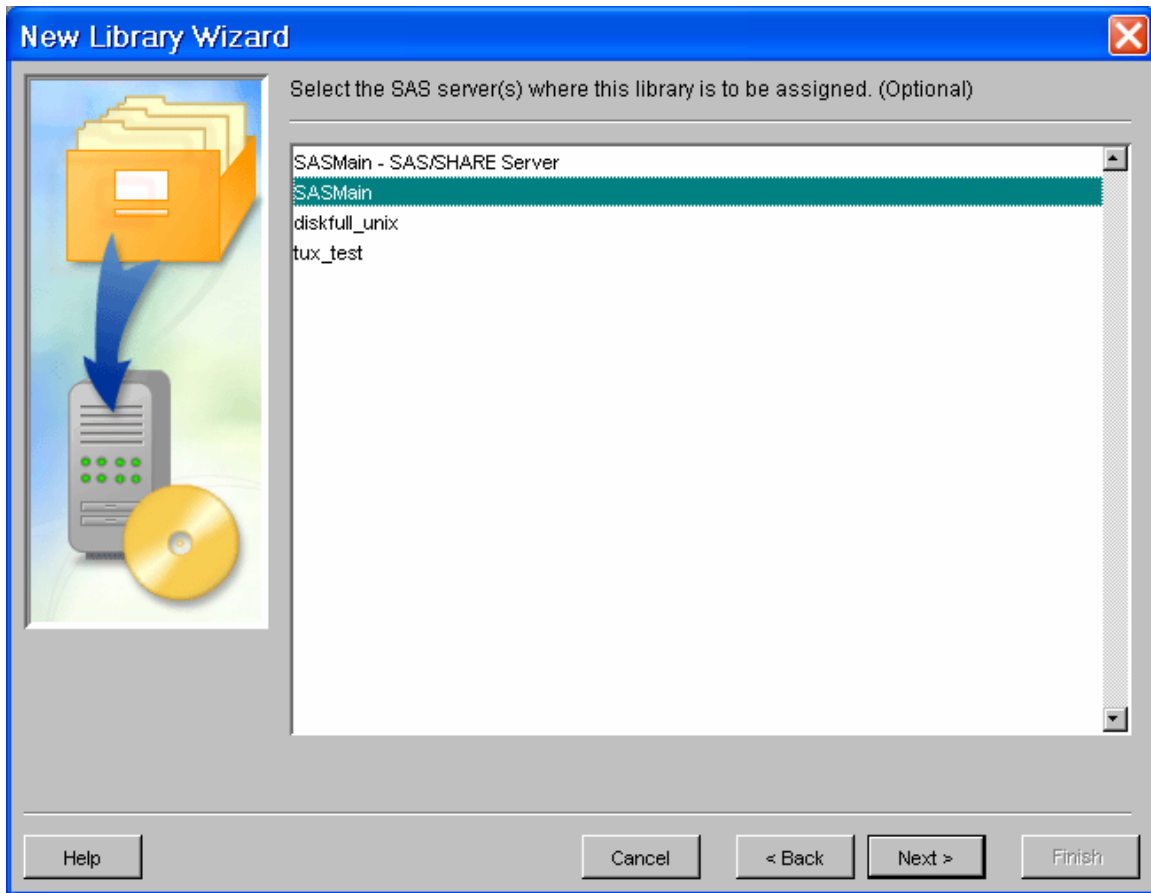
Select **DB2Auth** that was created for the Default Login. Select **New** for the Database Schema.



Give a Name in the Database Schema Wizard. This name can be anything you want. A description is optional. Select **Next**.



Enter the Database Schema name (DBITEST). This is the actual DB2 database name that you are using the libname statement. Select **Next**, verify information and then **Finish**. You will be back to the New Library wizard with this new created schema name. Select **Next**.



Make sure to Select (highlight) the Server (SASMain) in the SAS Server window. Select Next, Verify the information and Select **Finish**

Verify Libname

You can use the Management Console to verify the library before using from other client.

- 1) Select **Data Library Manager**
- 2) Select db2 library Right Click and Select **Display Libname**
- 3) Libname name should display similar to the following.

```
LIBNAME db2lib db2 DATASRC=db2v7r1
USER=dbitest PASSWORD="{sas001}ZQJqZ3JwMQ==" ;
```

- 4) Above libname can be submitted from the SAS Editor Window.

Note: Entering metadata for a library does not provide access to tables in the library. You must also specify metadata for all tables that you want to access in the library. With 9.1.3, you can use Management console to import the tables: right click on the library in the Data library and select Import Tables, select next (SASMAIN), verify the SAS library connection information, select next, list of DB2 tables will be display. Once Metadata is added for the table, right click on the table, select properties, Select Authorization tab and appropriate permission can be added for the table.

Documentations

For further information, the following documentation is also available:

* SAS 9.1.3 Intelligence Platform Planning and Administration Guide at <http://support.sas.com/documentation/configuration/iaplanning913.pdf>

* SAS Enterprise Guide at <http://support.sas.com/documentation/onlinedoc/guide/>

* SAS Open Metadata Architecture at <http://support.sas.com/rnd/eai/openmeta/index.html>