Bell Services West PSAP Benchmark Service Description

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Overview

Bell Services West (BSW) will retrieve Call and Call Detail Part Records from PSAP server using a USB Flash RAM storage device and data retrieval application. This application will access the PSAP server database via a ODBC connection to the server's SQL Server database. In order to be able to connect to the PSAP server database, your PSAP equipment vendor must first provision the database for a new User with "Select Only" access to the Call Record and Call Detail Part tables. This user name, Login and Password is to be determined PSAP equipment vendor. PSAP equipment vendor should also provision the server with a new User login and Password or use one already available to your PSAP's personnel.

Once the server and database has been provisioned, the PSAP personnel can create a new ODBC connection (See Appendix B) and then run the BSW data retrieval application. When the all the tables have been copied into the USB Flash RAM, it should be removed, placed in the prepaid mailer and mailed back to BSW. If the results file is small enough (10M or less) when zipped, then the PSAP personnel can email the files to BSW as an attachment.

BSW will then analyze the data and produce reports with in 7 working days. Preliminary reports will be emailed back to your center for review

Method

The following method will be used at each PSAP location.

1. BSW will mail a preprogrammed USB Flash RAM module to a location specified by PSAP group.
2. The PSAP personnel will have PSAP equipment vendor provision the PSAP Server and CDR Database with a “Read Only” User, Login and Password that can be used by the PSAP personnelonly.
3. PSAP personnel will place the USB Flash RAM in a spare USB slot in the PSAP Server or one of the PSAP position PCs (See Fig. 1).
4. The PSAP will install (if needed) and run the data acquisition program that resides on the USB module
5. When the application has completed retrieving all the data, the PSAP personnel will remove the USB module and mail it back to BSW in the prepaid preaddressed mailer provided or Zip the results folder and email the zip file to BSW.
6. Within 5 to 7 days after receiving the USB module, BSW will analyze the data and generate the customer identified reports.
7. BSW will then email the reports to the PSAP for their review. If additional reports are required, BSW will generate and email them within one to two days.

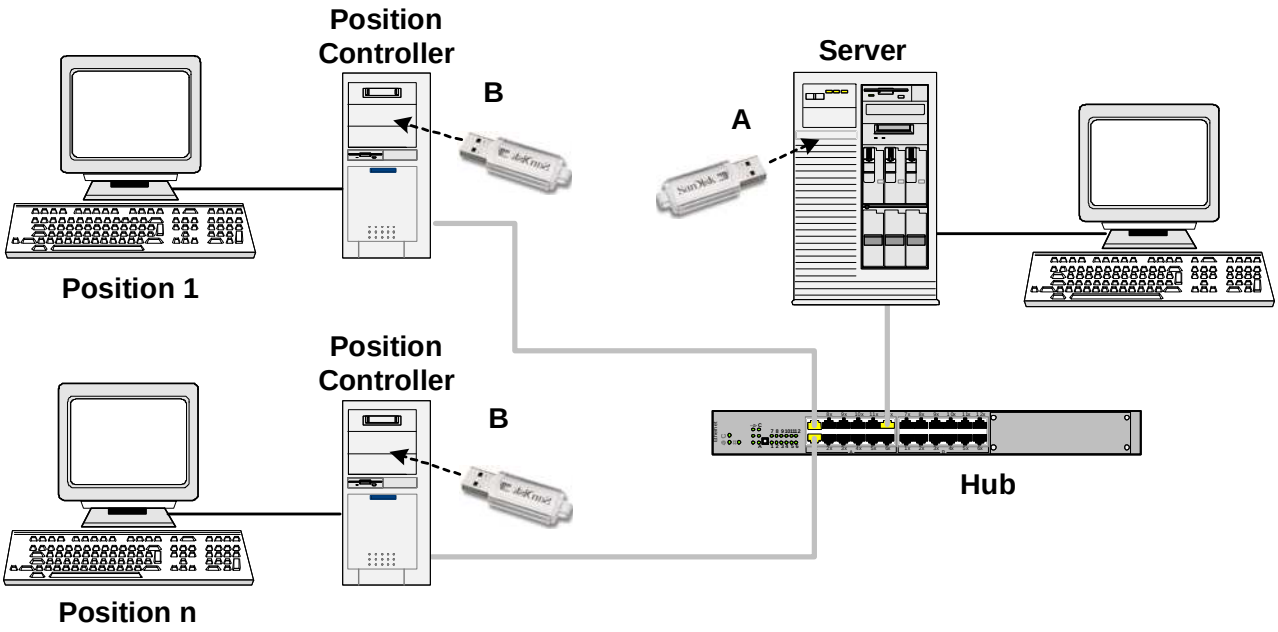


Figure 1 - USB Installation

Requirements and Required Actions

The following hardware requirements and software activities will need to be provided.

PSAP Server

The PSAP Server should have at least one spare USB 1 or 2 port, If a spare port is not available, BSW will provide the PSAP a USB Hub.

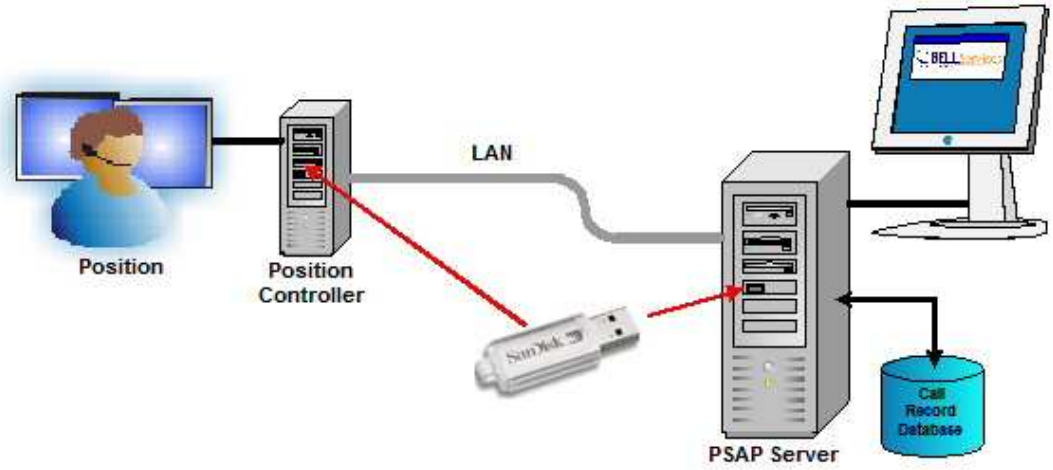


Figure 2 – USB Flash RAM Placement

PSAP equipment vendor

The following procedure needs to be completed before an ODBC connection can be established. It only needs to be done once at each PSAP. Once completed, the PSAP will be able to access the Call Record data at any time for any reason.

1. A new user must be added to the PSAP Server (See Apeendix C). This user's permissions should allow the user to access the SQL Server database.
2. A new user must be added to the SQL Server database. This user should only be allowed to read the ADAP database and only view ("Select") the Call_Records and Call_Detail_Part tables.
3. If access from a Position PC is required, the directory for the SQL Database should be shared over the network so that the Position PC can see the ADAP database.

This process should not take more then 15 minutes to complete.

The PSAP

The following procedure will need to be done at every PSAP location. It only needs to be done once at each PSAP.

1. A ODBC connection needs to be created to access the SQL Server ADAP database. (See Appendix C)
2. Once the ODBC connection has been created and tested, the BSW PASP Benchmark program should be run from the USB module.

   Note: it may be necessary to install the BSW application first before running it if the Server does not have the appropriate data access Active X components. **This will not require the server to be rebooted and can be installed without stopping any programs**.
3. Once the BSW application has completed downloading the Call Detail Record data as indicated by the application, the USB Module should be removed and placed in the prepaid mailer provided.
4. The prepaid mailer should then be placed in the mail.

This procedure should not take more then 30 minutes to complete, even if the BSW application has to be installed.

BSW

1. Upon receipt of the USB module, BSW will convert, process and analyze the CDR data. BSW will then generate and will email reports to identified PSAP personnel within 5 to 7 days.

2. BSW analysts will be available to explain the reports and the results analysis.

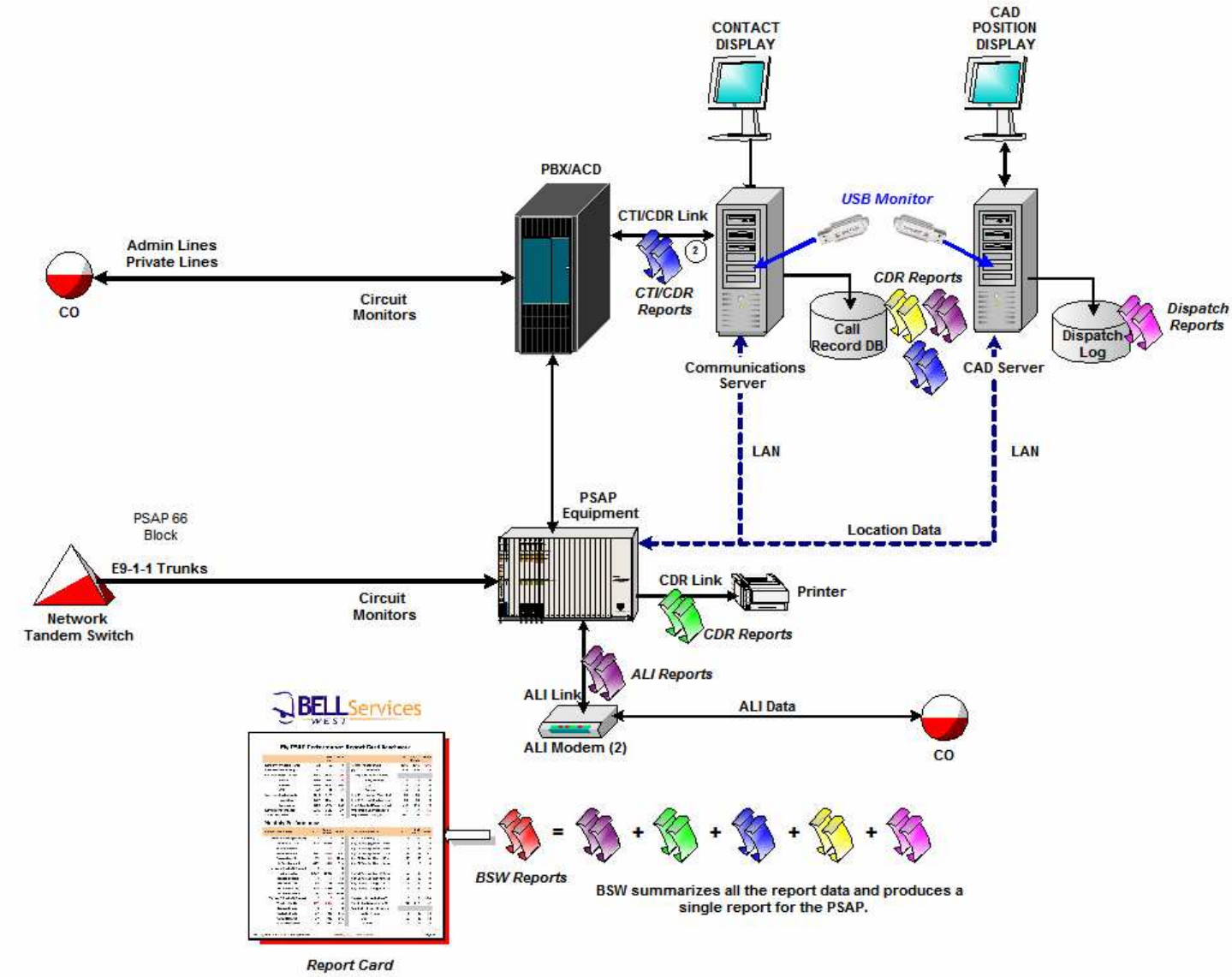
Tentative Schedule

This schedule is to be used for planning purposes only.

#	Task		BY	Start	Finish	Notes
	Configure Database					
	Troup 'A"		PEV			
	Create ODBC Connection					
	Troup 'A"		PSAP			
	Retrieve Database Table Records					
	Troup 'A"		PSAP			

PSAP = PSAP personnel PEV = PSAP Equipment Vendor

My PSAP



Required Information:

PSAP server Log In:		**ODBC Data Source Name**		**SQL Server Password:**	
PSAP Server Password:		**SQL Server Log In:**		**SQL Server IP:**	

My PSAP Performance Report Card

Benchmark

	YTD	Latest Month	Trend		YTD	Latest Month	Trend
Number Of Available Trunks	12	12	0	% Ntwk Abandon Calls	11%	13%	+2%
Number Of Trunk Groups	2.5	3	+1	# of E9-1-1 Call Backs	128	119	+7
Avg. Monthly E9-1-1 Calls	3047	3552	+14	Avg. Call Takers Per Shift			
Wireline	1900	2002	+5	Early Morning	4	4	0
Wireless	1000	1400	+29	Day	15	15	0
VOIP	147	152	+3	Evening	10	10	0
Avg. Monthly Admin Calls	4216	4174	-1	Avg. E9-1-1 Answer Time (Sec)	6.3	6.3	0
Originating	1222	1053	-16	Avg. E9-1-1 Call Duration (Sec)	53	53	0
Terminating	2994	3002	+.01	Avg. Admin Call Duration (Sec)	243	164	-48
Busy Hour Performance	93%	91%	-2%	Avg. Time in Call Queue (Sec)	6	7	+1
% Call Completion	87%	84%	-3%	Avg. On Hold Times (Sec)	196	229	+15

Monthly Performance

Network Performance	YTD	Latest Month	Trend	Call Taker Performance	YTD	Latest Month	Trend
Tandem 1 Trunks (# Trunks)	4	4	0	Total Call Takers (CT)	29	29	0
Trunk Utilization	100%	100%	0	# of CT Avg. Ans Time < 4 sec	22	20	+2
Required Trunks	3	4	+1	# of CT Avg. Ans Time < 6 sec	26	28	+2
%Blocked Calls	.02%	.04%	50%	# of CT Avg. Ans Time < 15 sec	28	29	+1
% Overflows In	8%	9%	12%	# of CT Avg. Ans Time < 40 sec	29	29	0
% Overflows Out	.01%	.3%	3%	# of CT Avg. Ans Time >40 sec	0	0	0
Tandem 2 Trunks (# Trunks)	5	5	0				
Trunk Utilization	100%	100%	0	# of CT Avg. Call Dur < 60 sec	27	27	0
Required Trunks	6	7	+2	# of CT Avg. Call Dur < 90 sec	28	28	0
%Blocked Calls	.15%	.21%	29%	# of CT Avg. Call Dur < 120 sec	29	29	0
% Overflows In	.02%	.02%	0	# of CT Avg. Call Dur > 120 sec	29	29	0
% Overflows Out	4%	5%	20%				
Tandem 3 Trunks (# Trunks)	3	3	0	Min # of calls handled by CT	5	25	+20
Trunk Utilization	66%	66%	0	Max # of calls handled by CT	210	212	+2
Required Trunks	2	2	0	Avg. # of Calls per CT Per Shift			
%Blocked Calls	0%	0%	0%	Early Morning	8	12	+4
% Overflows In	0%	0%	0%	Day	37	39	+2
% Overflows Out	0%	0%	0%	Evening	29	27	-2

Appendix A – SQL Server Enterprise Manager

How to add a Windows user or group access (NT)

1. Open Computer Management (Local).
2. Right Click on Local Users and Groups and select **<New User>**
3. In Name, type your user name, click Add, and then click OK.
4. If your computer is part of a network, type your complete user name as follows: domainname\username.

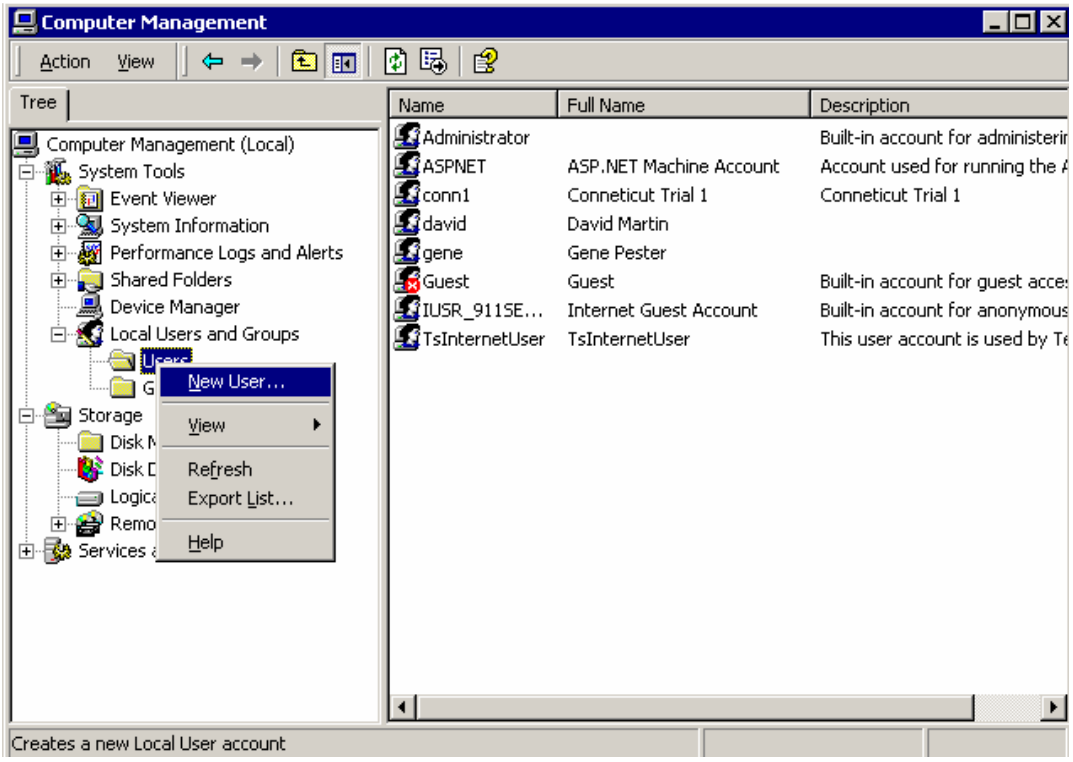
Notes

Only a member of the Administrators group can add a user to the Administrators, Backup Operators, or Replicators group.

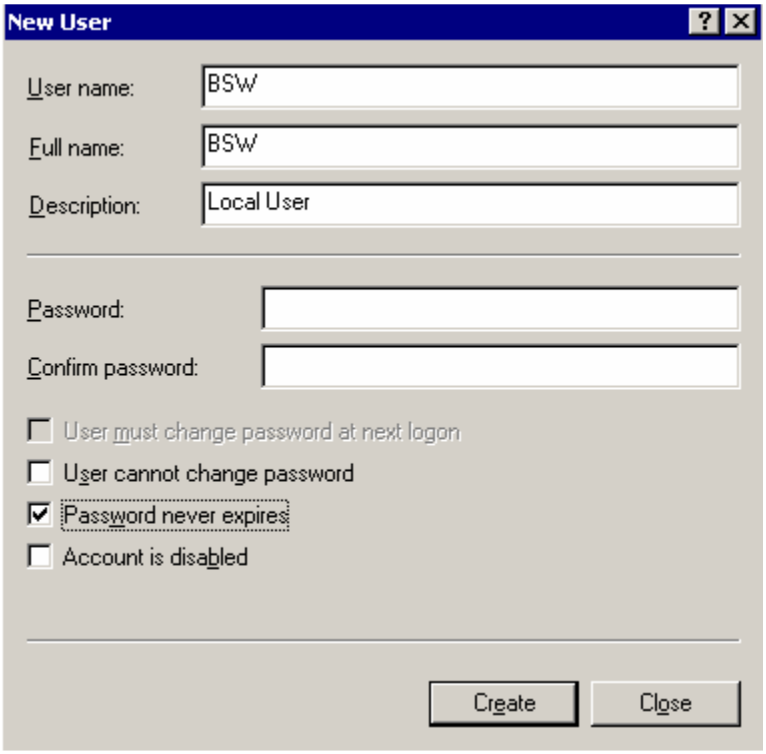
To open Computer Management, click Start, point to Settings, and then click Control Panel. Double-click Administrative Tools, and then double-click ***Computer Management****.*

Example:

Open the **User** item in the **Local Users and Groups** tree



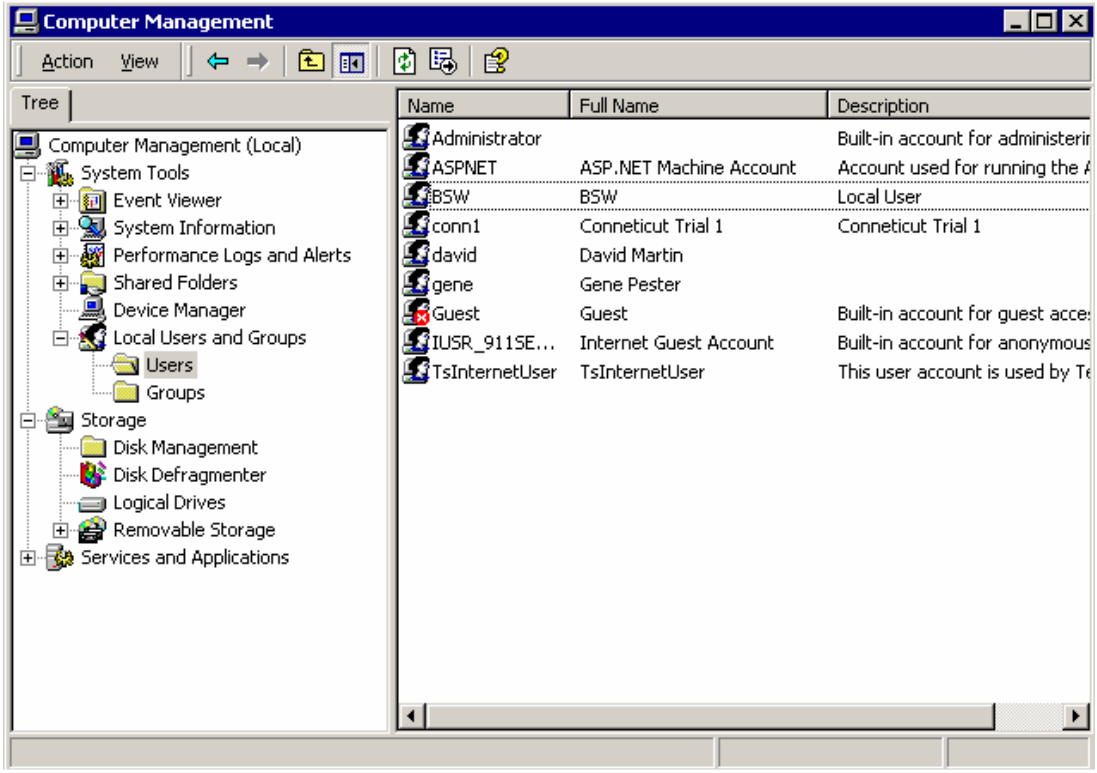
Enter the new login **User name** and **Password** if required.



Make sure the **Password never expires** option is checked.

Click the <**Create**> button.

New User (BSW) appears in the **Computer Management** window.



How to Add a New User to the SQL Database (Enterprise Manager)

To add a Windows NT 4.0 or Windows 2000 user or group to a database

1. Open the Enterprise Manager by clicking on the <**Start**> Expand a server group, and then expand a server.
2. Expand **Databases**, and then expand the database to which the user or group will be granted access.
3. Right-click **Users**, and then click **New Database User**.
4. In the **Login name** box, type or select the Microsoft® Windows NT® 4.0 or Windows® 2000 user or group name to which database access will be granted.

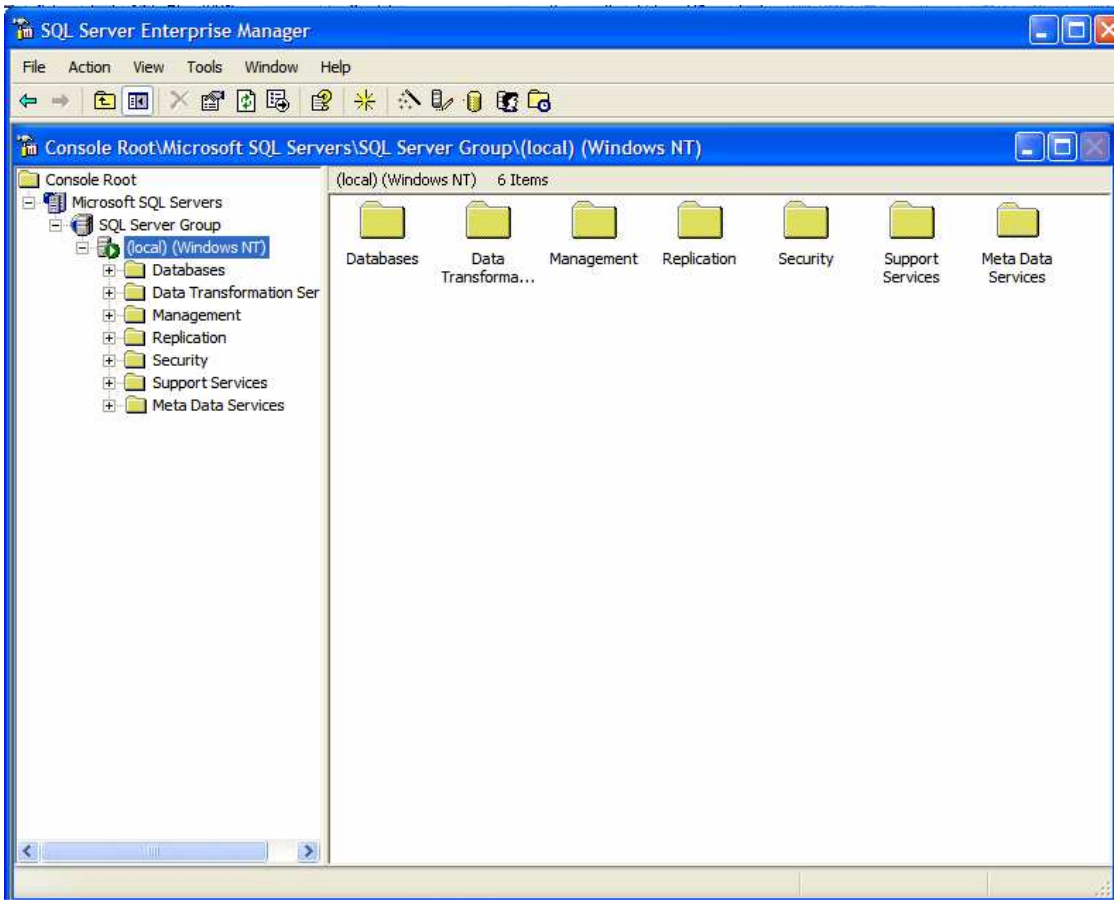
   If this user has not been grated access to the SQL Server, then select **<new>** from the drop down box and proceed to adding a new SQL Server User.

5. Optionally, in **User name**, enter the user name that the login is known by in the database. By default, it is set to the login name.

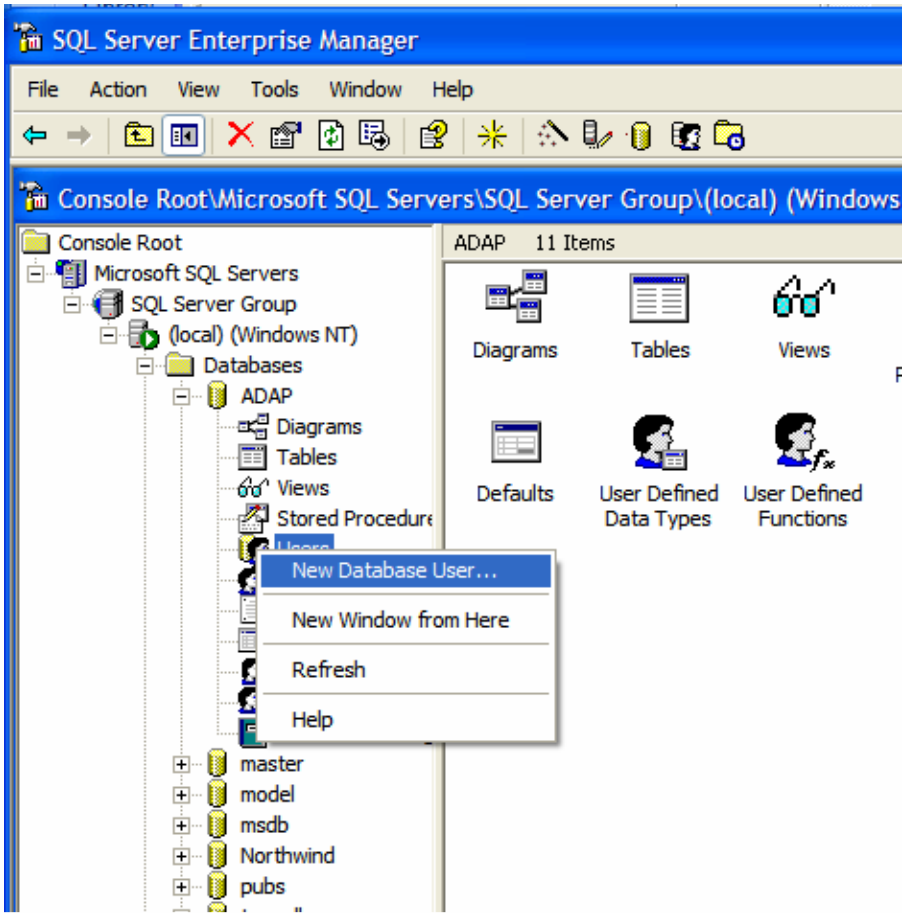
6. Optionally, select database role memberships to be granted to the user or group in addition to **public**, the default.

Example:

Open the Database tree.



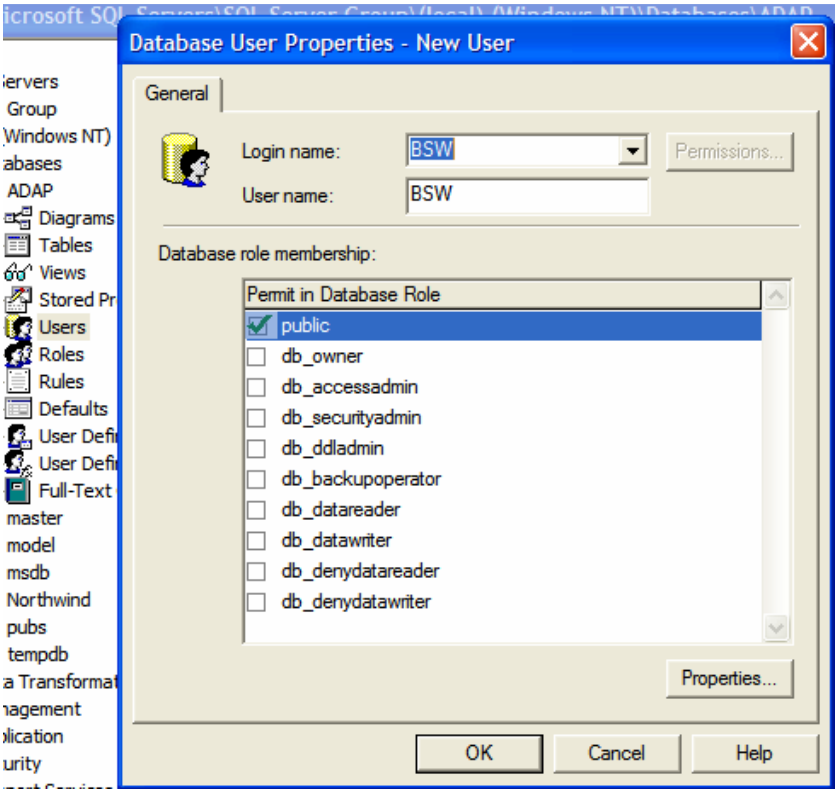
Open the ADAP database and right click on the **Users** item.



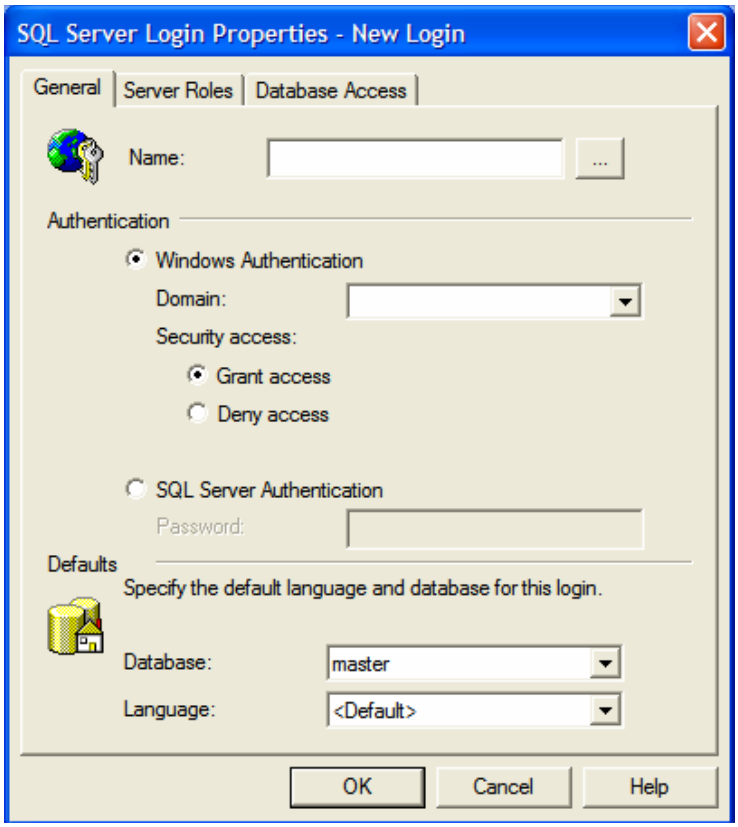
The **Database User Properties – New User** window appears.

Enter the user **Login name** and **User name** if different.

Click the <**OK**> button.



The SQL Server Login Properties – New Login window appears.

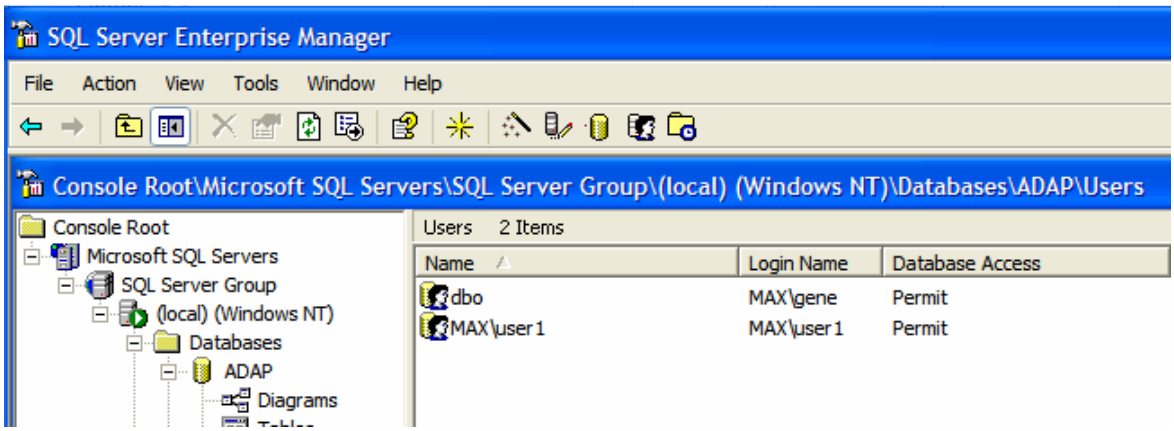


Here is where you set whether the user will use the **Windows Authenticity (default)** or **SQL Server Authenticity** to log into the SQL Server.

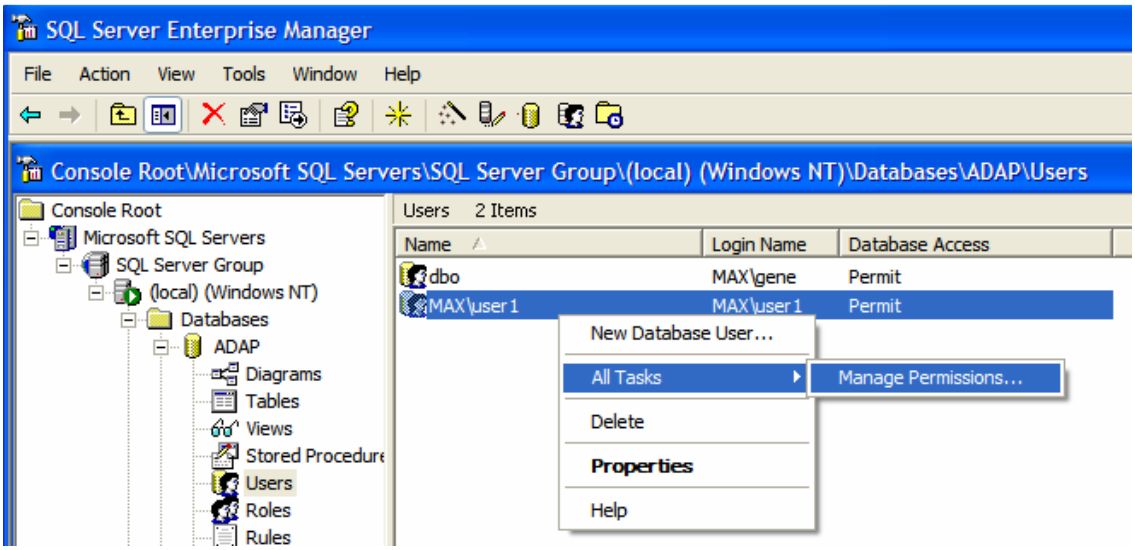
If **Windows Authenticity** is desired, select the ADAP database as the default database form **the Database** Dropdown list.

If **SQL Server Authentication** is desired, click on the **SQL Server Authentication** option. Enter a **Password** (optional).

Click on the <**OK**> button.



The new user now appears on in the ADAP Database Users tree.

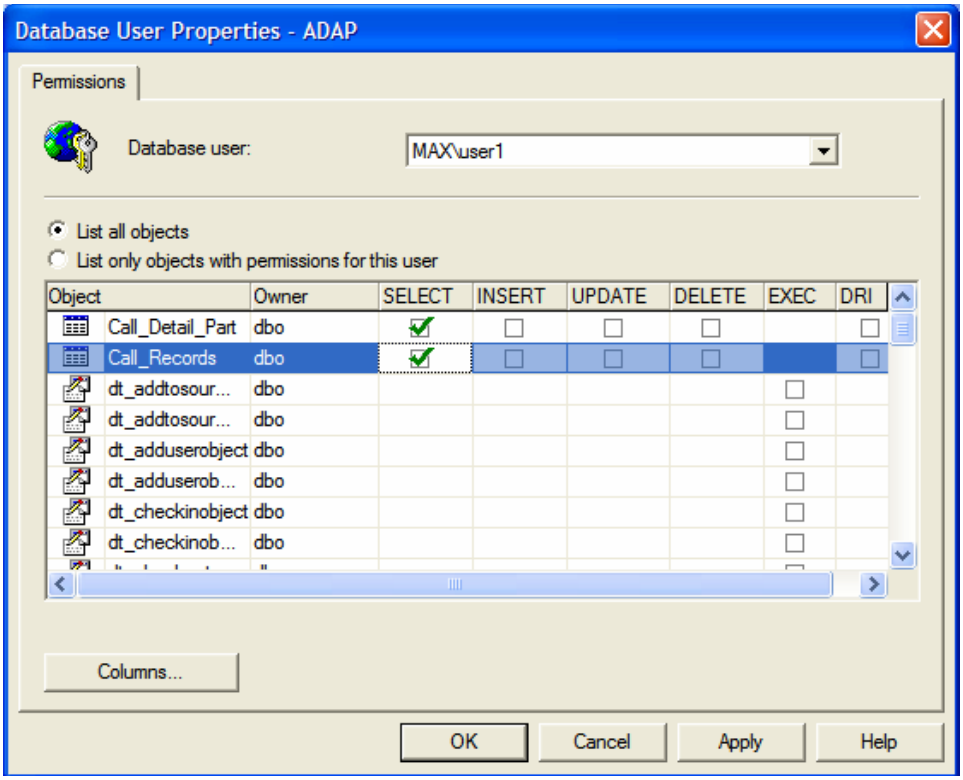


Right click on the new user and select the **All Tasks – Manage Permissions** item.

Find the **Call_Detail_Part** and **Call_Record** Tables in the **Database User Permissions – ADAP** window.

Check the [**SELECT**] option for each table.

Click on the <**OK**> button.



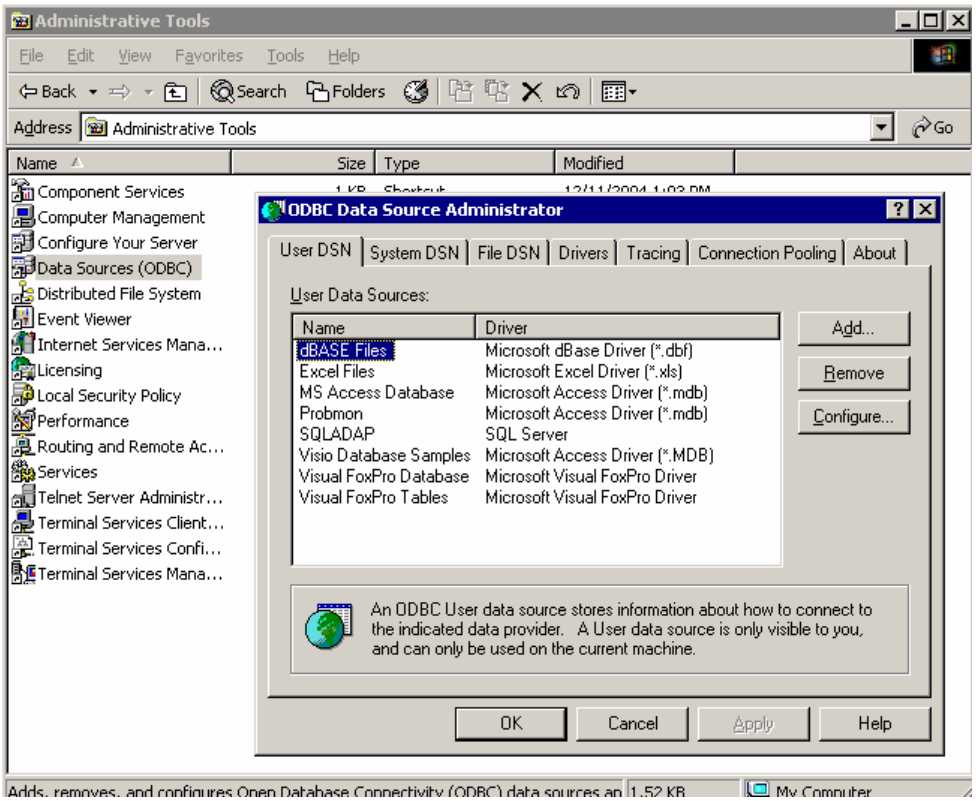
Appendix B - Creating an ODBC Connection

To access the ODBC Data Source Administrator:

Click on <**Start**> <**Settings**> <**Control Panel**> and double click on <**Administrative Tools**>

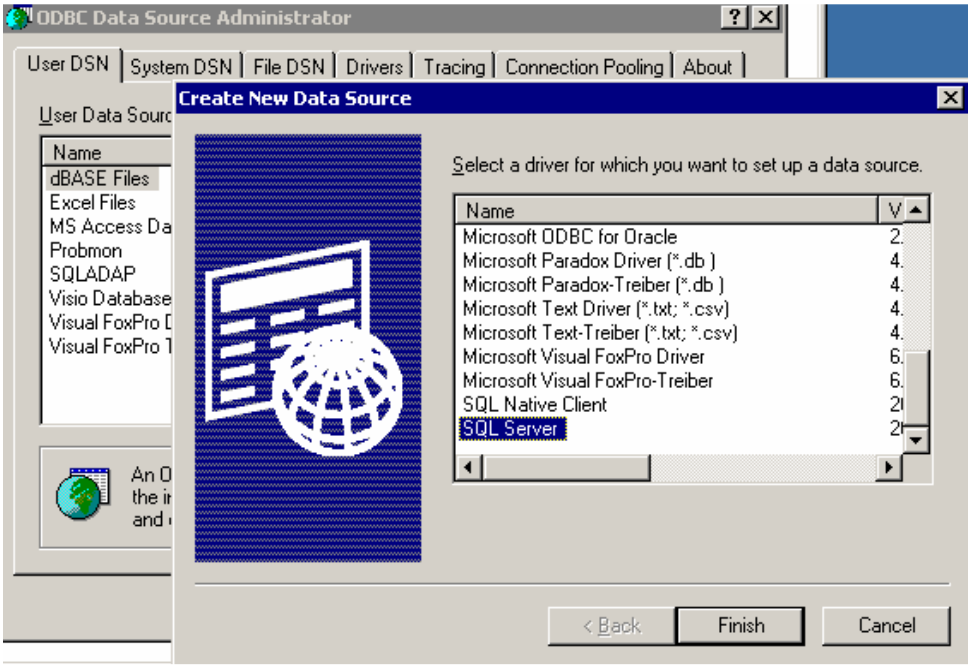
An Administrative Tools window will open. In that window, double click on the <**Data Source (ODBC)**> item.

In the ODBC Data Source window, click on the <**Add**> button.



A **Create New Data Source** window will appear.

Click on the **SQL Server** item and then click on the <**Finish**> button. This will cause the **Create to New Data Source for SQL Server** window to appear.

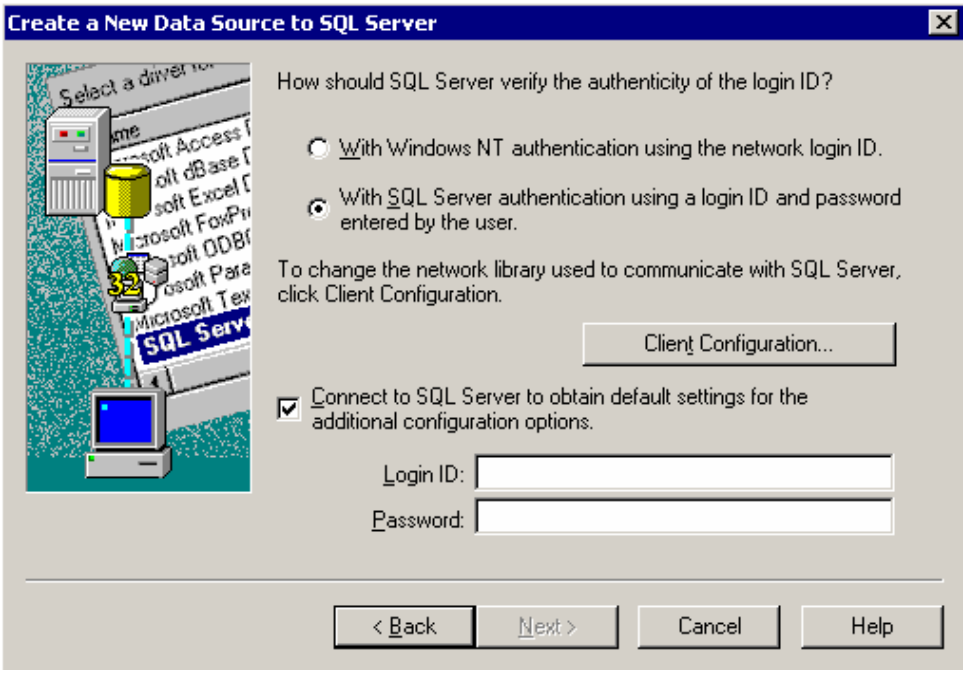


At this point you have two options.

Authenticate using network login ID (Default) or Authenticate using SQL Server Login ID and Password.

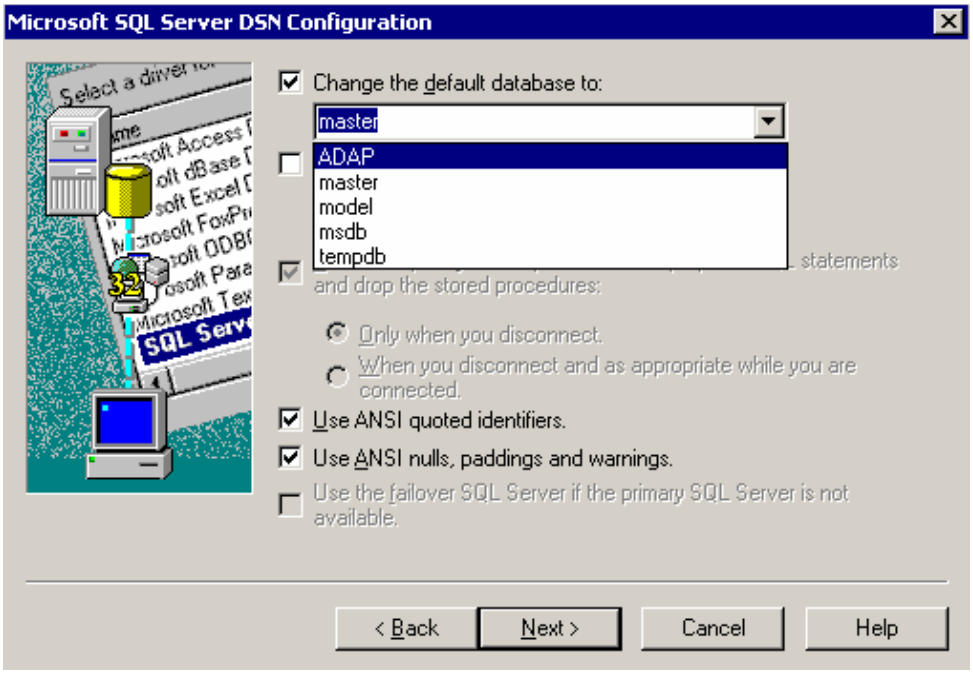
If a login and password was provided to the SQL Server Database, then click on that option, enter the login and password and click on the <**Next**> button.

If a login and password was NOT provided to the SQL Server Database, then click on the <**Next**> button.



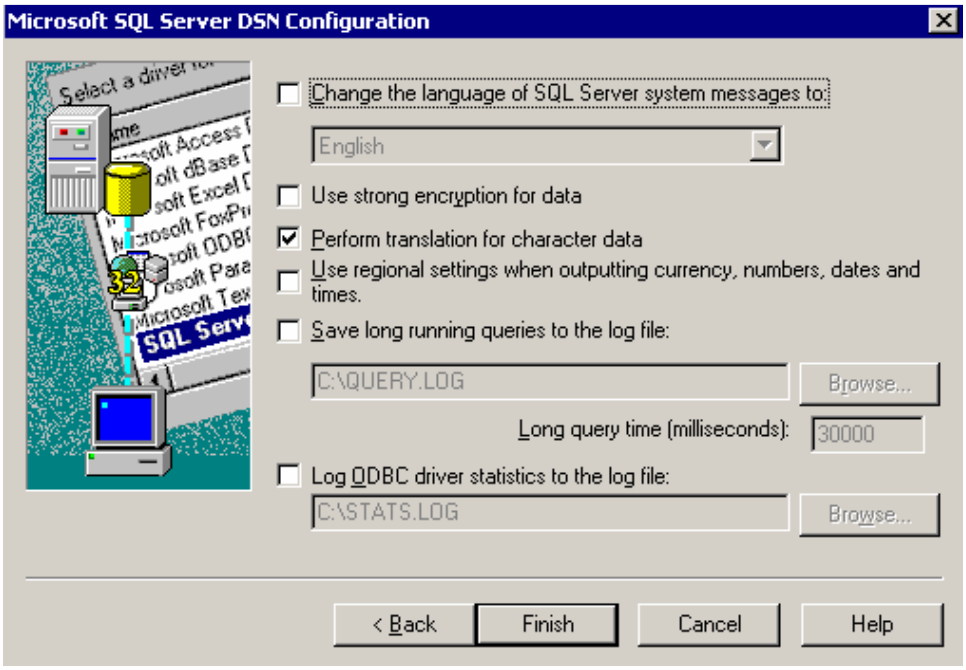
The **Microsoft SQL Server DSN Configuration** window appears.

Using the Dropdown box, select the CDR database from the list and click on the <**Next**> button.



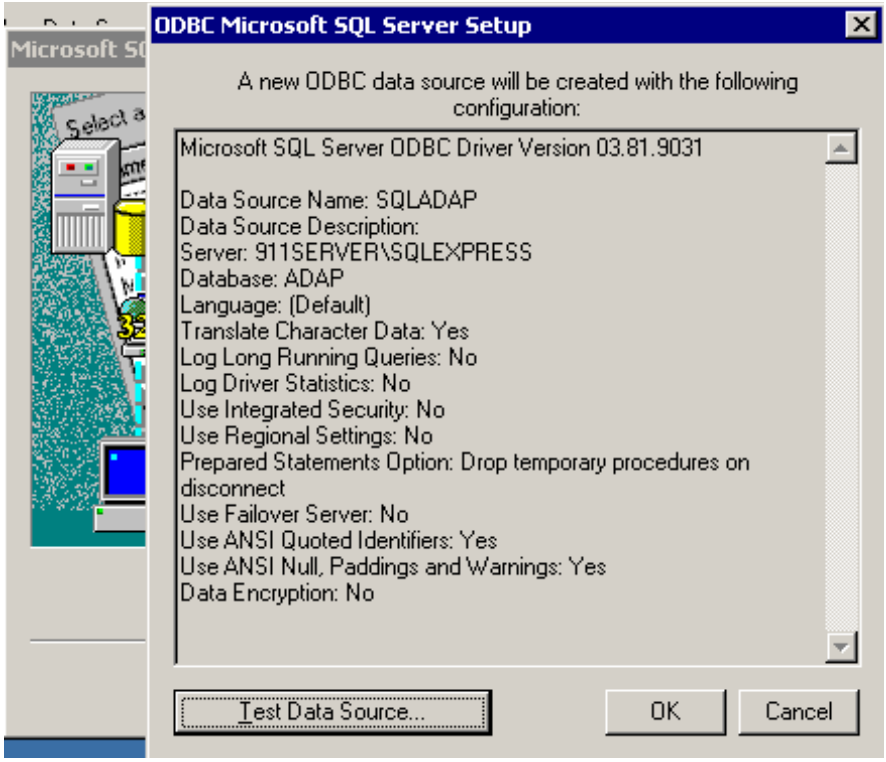
A second Microsoft **SQL Server DSN Configuration** window appears.

Accept the defaults and click on the <**Finish**> button.



The **ODBC Microsoft SQL Server Setup** window appears.

To verify that the connection works, click on the <**Test Data Source**> Button.



If a **Tests Completed Successfully**! dialog comes back, click on the <**OK**> button.

If an Error Message comes back, contact BSW Customer Support at **818-999-0980** for help.

The new ODBC connection now appears in the **ODBC Data Source Administrator** window.