# Veritas NetBackup Legacy Plugin Configuration Guide

Legacy methods to support EOL NetBackup or Bocada versions

## Contents

# Introduction

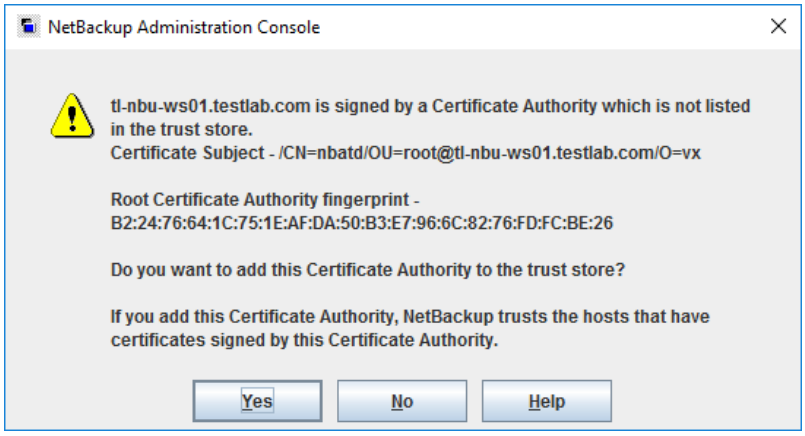
As of Bocada version 19.6.8, this collection method is obsolete and we highly recommend using the REST API or PuTTY/WinRM methods described in the primary plugin guide. Please contact Bocada Support for assistance in setting up NetBackup data collection using Java methods

# Data Collection: Java

The following properties and steps describe the process for connecting to NetBackup Master Servers with the NetBackup (Java) Admin Console. These steps should only be performed if instructed by Bocada Support

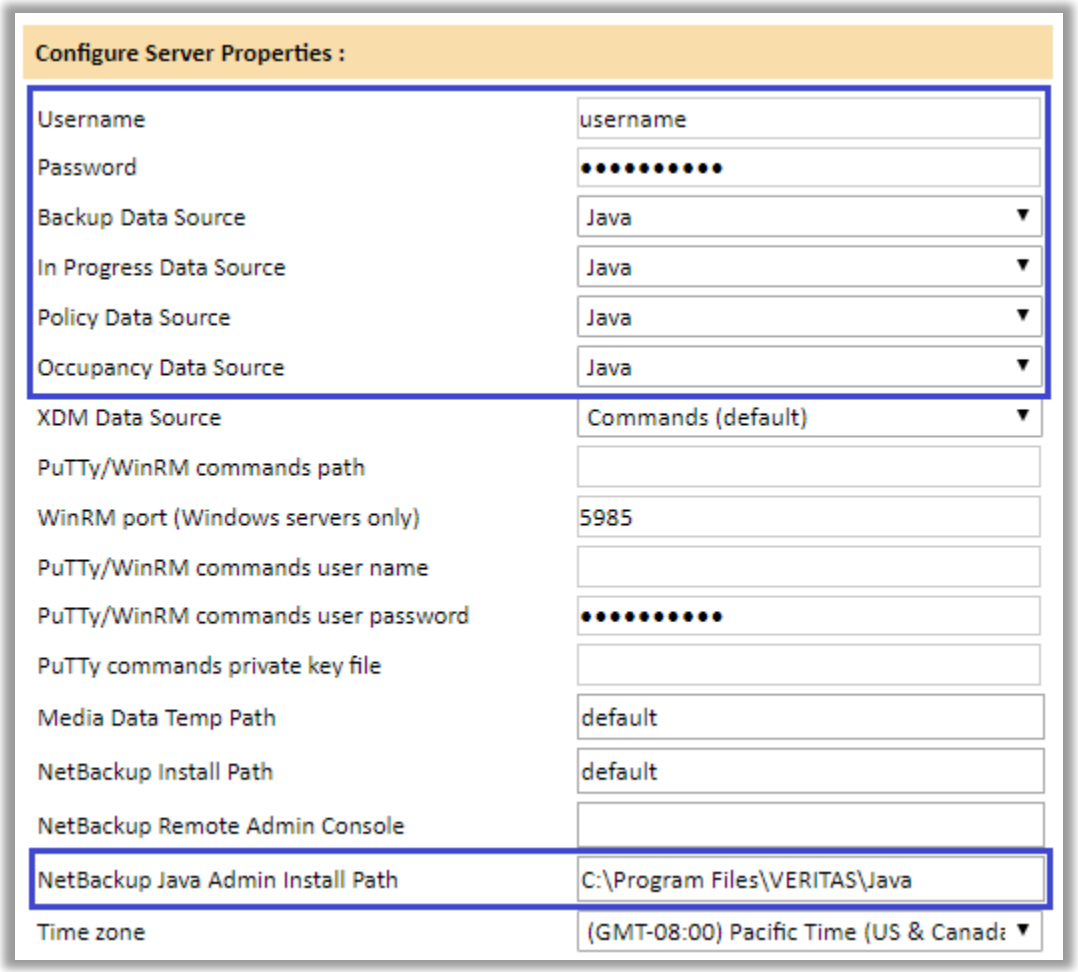
## Add NetBackup Admin Console Certificates to Bocada

1. On the Bocada DCS: Launch the NetBackup Java Admin Console that matches the version of the NBU Master backup server that you are adding.
2. Enter the credentials of the user that has been given access to the NetBackup Master server in the auth.conf. (This is the same user that will be used in the Bocada server properties).
3. Accept the signed certificate by clicking Yes:




4. Locate the Java Admin Console certificates:
   - Location: (varies based on Java Admin Console version)
     c:\Users\%username%\AppData\Roaming\Veritas\VSS\certstore\trusted
     or
     c:\Users\%username%\AppData\Roaming\Veritas\VSS\%username%\certstore\trusted
   - Certificate names should be named similarly to: **629a09e2.0**
5. Copy the certificate file(s) to the install location of the NetBackup Java Admin Console:
   - Default Location:
     C:\Program Files\Veritas\Java\var\VxSS\at\systemprofile\certstore\trusted

To add the NetBackup server to Bocada for data collections using the Java connection method, the following fields must be set:




### *Username/Password*

Enter credentials which have access to the NetBackup Master server through the Remote Admin Console. These credentials will be the same used when adding the NetBackup Java Certificates.

### *Data Source(s)*

Set the data source for all update types to Java for Unix Master serves, this dictates the method of connection to collect data.

### *NetBackup Java Admin Install Path*

Enter the path on the Bocada DCS where the NetBackup (Java) Admin console was installed.

For a detailed description of each Server Properties field, please see Appendix D

# Data Collection: Legacy

As of Bocada 19.6.8, this collection method should be obsolete and should be configured only when directed by Bocada Support.

Veritas made several changes to their product that affect legacy collection using the Bocada NetBackup plugin. The primary change was that Veritas removed the NetBackup (Windows) Remote Admin Console in version 7.7 in favor of the previously named NetBackup Java Admin Console and changed some underlying commands.

## *Checklist*

- ☐ Install the NetBackup 7.7 (Windows) Remote Admin Console on the Bocada DCS.
- ☐ Copy the Remote Admin Console files from the Master server (same major version) to the Bocada Data Collection server.
- ☐ Install the SQL Anywhere ODBC Driver on the Data Collection Server. (Not needed for NBU versions before 7.7)

## *SQL Anywhere ODBC Driver*

The SAP SQL Anywhere ODBC Driver must be installed on the Bocada DCS to collect Media and Storage data from the NetBackup database. The SAP SQL Anywhere driver can be found in the Bocada installation directory: …\Bocada\DataCollection\bin\SQL_Anywhere_17_Installer.ZIP

More information related to the SQL Anywhere ODBC Driver is available in the troubleshooting section.

## *NetBackup Database: NBDB*

This is ONLY required for NetBackup version 7.7 and affects only storage data collection, the Bocada NetBackup plug-in relies on access to the NetBackup NBDB database as a fallback data source when other data collection methods are unsuccessful.

**Server.conf**

To allow a new remote connection, the server.conf needs to be updated following the steps below. More information regarding the server.conf file can be found on the Veritas Support website.

1. Locate the server.conf file:
   Windows Master Server: *Install_path*\VERITAS\NetBackupDB\conf\server.conf
   Unix/Linux Master Server: /usr/openv/var/global/server.conf
2. Copy and rename the server.conf file, so that any changes can be rolled back if necessary.
3. Edit the server.conf file:
   - Take note of the case-sensitive NetBackup database name after the "-n" flag. This will be entered in the Bocada Server Properties.
   - Change LocalOnly=YES to LocalOnly=NO
4. Restart the *SQL Anywhere* service or daemon on the NetBackup server (as described on the Veritas Support website).
   - Note that you must restart the entire SQL Anywhere service or daemon, not just the NetBackup NBDB database, for this change to take effect.
5. Verify the new settings in server.conf have taken effect:
   - Set up an ODBC connection to the SQL Anywhere service / daemon and test the connection. See the Troubleshooting section for details.

**NetBackup Database Password**
During installation of the NetBackup Master server, the database password is set to a default value of "nbusql". If Bocada collections fail with an error related to the database password, it can be reset; please see the Veritas Support website for how to reset the password.

Note: During installation of or upgrade to NetBackup Version 7.7.x or higher the database password is set or changed to a randomly generated password and must be reset with the above process.

**Default NBDB Properties**
The following properties are the defaults normally created during the installation of a NetBackup Master server:

| | |
|---|---|
| Sybase ODBC Driver: | SQL Anywhere 17 |
| Database host name: | *<master_server_name>* |
| Database server (instance): | NB_*<master_server_name>* |
| Database name: | nbdb |
| Database User: | dba |
| Database user password: | See above |

Note: If the NBU server has been added to Bocada by its fully-qualified name or by IP address, then the DB Host Name and DB Server need to be specified as *<master_server_short_name>* and NB_*<master_server_short_name>* respectively, instead of using default values.

## *Remote Admin Console and Command Directories*
The NetBackup (Windows) Remote Admin Console must be present on data collection servers to collect Storage and Policy data using the ***Commands (default)*** protocol.

In version 7.7 of NetBackup, the Windows Remote Admin Console was removed from remote installation packages. Even with this omission, a Remote Admin Console must be installed on the Bocada Data Collection server. In addition, the executable files must also be copied manually to the Bocada Data Collection server from a Windows installation of NetBackup Master Server. The following are the steps on this process:

**Install NetBackup (Windows) Remote Admin Console**
Multiple versions of the Remote Admin Console files can be present on the same Data Collection Server if these are kept in separate directories, but at least one version must be *installed* on the Data Collection Server for the registry entries required to run Remote Admin Console commands.

The version of the Remote Admin Console will depend on the version of the NetBackup Master server. The compatibility matrix for installed NetBackup Remote Admin Console, copied files, and Master servers of different versions are as follows:

| NetBackup Remote Admin Console<br>Version Dependencies for Bocada Data Collection | | |
|---|---|---|
| **Installed** Remote Admin Console (Bocada DCS) | **Copied** Remote Admin Console Files (Bocada DCS) | NetBackup Master Server |
| 7.6 | 8 | 8.x |
| | 7.7 | 7.7.x, 8.x |
| | 7.6 | 7.6.x |
| | 7.5 | Not Supported |
| 7.5<br>(Windows Server 2008 R2 DCS) | 8 | 8.x |
| | 7.7, 8.0 | 7.7.x, 8.x |
| | 7.6 | 7.6.x |
| | 7.5 | 7.5.x |

**Required Admin Console Files**

The required files can be found in the following directories on a Windows NetBackup Master server, and when copied over to the Bocada Data Collection server, must be placed in a location relative to each other:

- …\VERITAS\Volmgr\bin
- …\VERITAS\NetBackup\bin\admincmd

Bocada recommends that you use the Bocada install folder for these directories. If multiple versions of NetBackup are to be collected, the files must be in different directories. For example:

- …\Bocada\DataCollection\NetBackup7.7\VERITAS\Volmgr\bin
- …\Bocada\DataCollection\NetBackup7.7\VERITAS\NetBackup\bin\admincmd
- …\Bocada\DataCollection\NetBackup7.6\VERITAS\Volmgr\bin
- …\Bocada\DataCollection\NetBackup7.6\VERITAS\NetBackup\bin\admincmd

In the Properties section of the Add/Edit Server wizard in Bocada, the Remote Admin console property should be set to the admincmd directory on the Bocada DCS where the directories have been copied to.

**NBU Client**

The NBU Client is not required for Bocada data collection. Unless it is needed for backing up the Bocada Data Collection server do not install it. If the NBU Client is installed on the Bocada DCS, then the same version NBU Remote Admin Console must be installed to support all Bocada data collection. The following dependencies or requirements apply in this case:

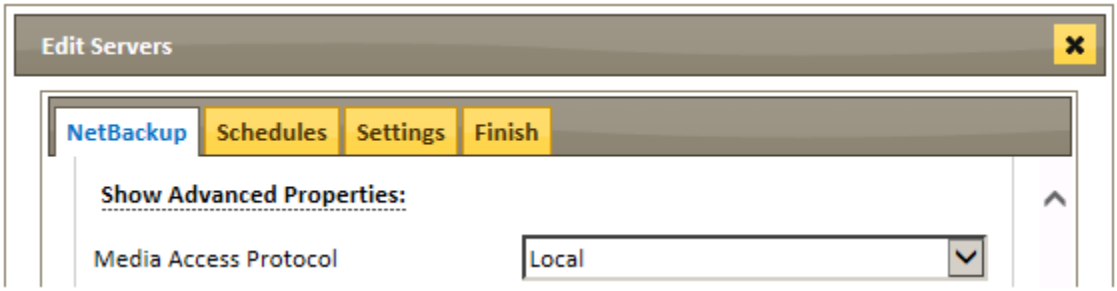
- NBU Client must be installed before the Remote Admin Console.
- NBU Client and NBU Remote Admin Console must be the same versions.
- See the matrix below for the version dependencies between the NetBackup Remote Admin Console and Master Server.

## *Settings for each Data Collection Type*

**Storage Collection**

In the Media Access Protocol advanced property, three methods can be used to establish a connection tunnel between the Bocada Collection Server and the NetBackup Master Server:

1. Local (Unix or Windows)
2. BpRsh or SSH (Unix)
3. MsTelnet or CopSSH (Windows)




The Local setting utilizes the NetBackup Remote Administration Console installed on or copied to the Bocada Data Collection server as described above. This is the default setting.

Use of msTelnet or copSSH protocols can be used to access NetBackup servers installed on Windows machines. For more information regarding installation of copSSH, please contact Bocada Support.

SSH is an alternative protocol that can be utilized to collect from NetBackup servers installed on UNIX platforms.

**Policy Collection**

Policy data is collected using the NetBackup Remote Administration Console executable files installed on or copied to the Bocada Data Collection server (legacy method) or using the Java Admin Console (preferred method). This is controlled by the Primary Data Source selection but is not dependent on the Media Access Protocol setting.

When NetBackup is used to backup VMware VMs, the NetBackup Java Admin Console (version 7.5 or higher) must be present on Data Collection Servers in order to properly map data for NetBackup VMware policy clients to virtual machines. Without the Java Admin Console, data will not be displayed in Bocada properly. Note that installing the current version of the Java Admin Console will automatically install all earlier supported versions.

**Bocada Data Collection Service Login**

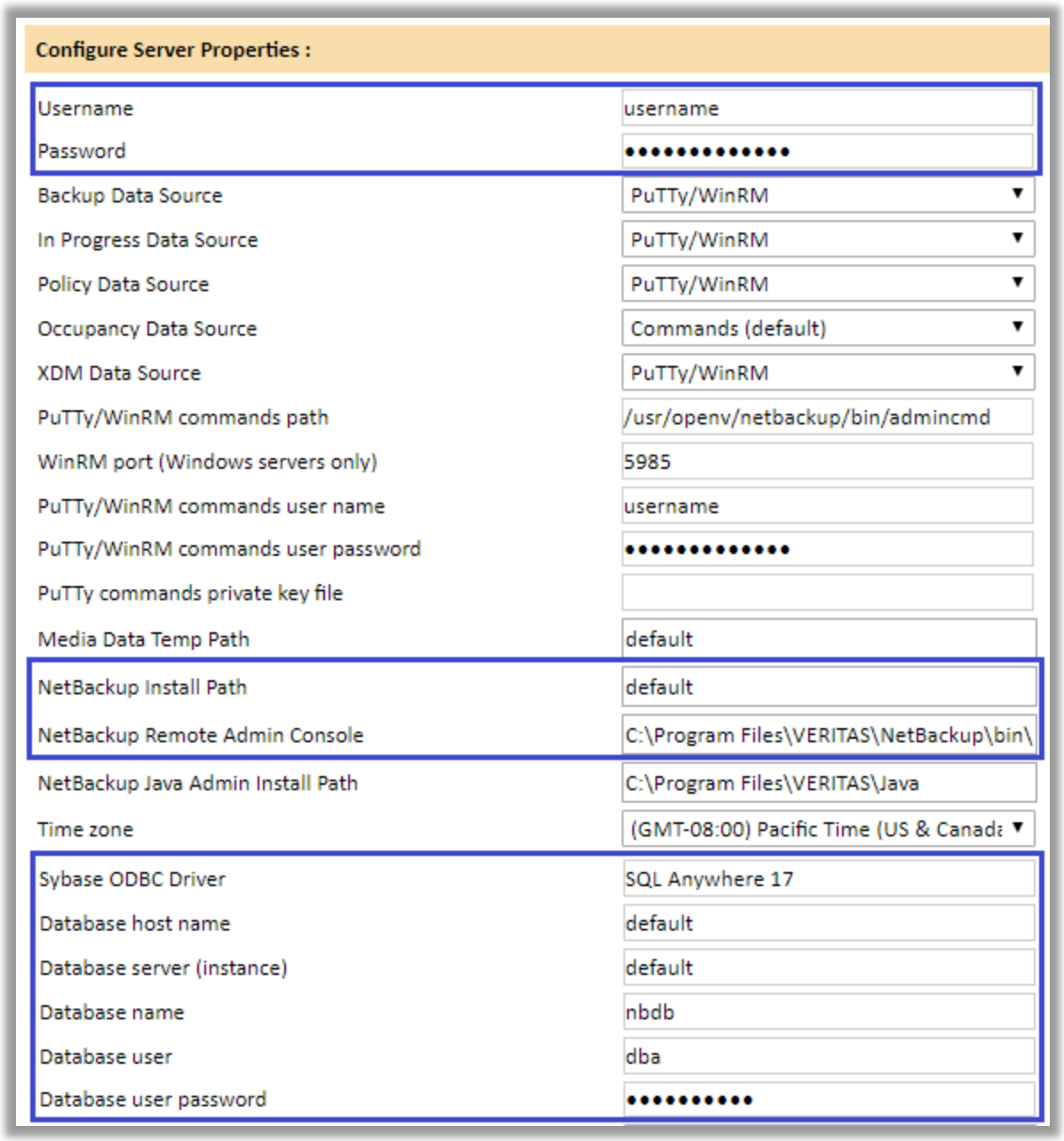
The Bocada collection engine relies on the Bocada Data Collection Service. In some environments running the service under the Local System account may not grant the plugin sufficient permissions to collect data from NetBackup servers. In this case, change the “Log On” for the Data Collection Service to use a named account.

## Configuring the NetBackup Master Server in Bocada

Backup Server Properties determine how the plugin will interact with the NetBackup server. Backup Servers may be added to Bocada via the Operations > Servers view, or edited from this view once added; Backup Server Properties may also be edited from the Operations > Data Collection view once a collection has been run against that server.

To add a NetBackup server to Bocada for data collections, select the Add Server action from the right Action panel, and update the following fields:

1. Server names to add: NetBackup Master server to be collected
2. Application Type for these servers: Select NetBackup
3. Username: Username with the required permissions
4. Password: Password for the username above
5. NetBackup Install Path: The defaults are:
   *Windows = C:\Program Files\VERITAS*
   *UNIX = /usr/openv*
6. NetBackup Java Admin Install Path: **MUST BE BLANK**
7. Time zone: Time zone of the NetBackup server
8. Sybase ODBC Driver: Registry information for the ODBC Driver installed with the NBU Client
9. Database host name: Default is the name of the NetBackup Master server
10. Database server (instance): Default is the NetBackup Master server prefaced by "NB_"
11. Database Name: default value is "nbdb"
12. Database User: Default value is "dba". Should be the same user as described in the NetBackup Database: NBDB section of this document.
13. Database User Password: Default value for pre-7.7 is "nbusql". For newer versions, see the NetBackup Datebase: NBDB section of this document.


Configure Server Properties :
Username
username
Password
Backup Data Source
PuTTy/WinRM
In Progress Data Source
PuTTy/WinRM
Policy Data Source
PuTTy/WinRM
Occupancy Data Source
Commands (default)
XDM Data Source
PuTTy/WinRM
PuTTy/WinRM commands path
/usr/openv/netbackup/bin/admincmd
WinRM port (Windows servers only)
5985
PuTTy/WinRM commands user name
username
PuTTy/WinRM commands user password
PuTTy commands private key file
Media Data Temp Path
default
NetBackup Install Path
default
NetBackup Remote Admin Console
C:\Program Files\VERITAS\NetBackup\bin\
NetBackup Java Admin Install Path
C:\Program Files\VERITAS\Java
Time zone
(GMT-08:00) Pacific Time (US & Canada
Sybase ODBC Driver
SQL Anywhere 17
Database host name
default
Database server (instance)
default
Database name
nbdb
Database user
dba
Database user password

# SQL Anywhere Connectivity

This section will walk you through checking connectivity and access from your Bocada Data Collection Server (DCS) to the SQL Anywhere database on your NetBackup master servers.

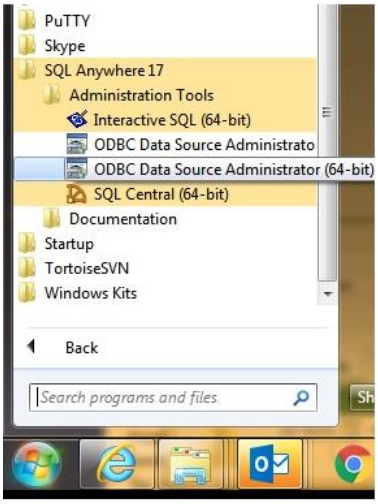
References below to “ODBC Driver” below are related to the SQL Anywhere ODBC Driver that enables communications between the Bocada DCS and NetBackup NBDB database.

## *Verify ODBC Driver Installation*

Verify that the SQL Anywhere ODBC Driver has been installed on the Bocada DCS:

1. Navigate to: All Programs > SQL Anywhere 17 > Administration Tools
2. Verify that you see the ODBC Data Source Administrator (64-bit)

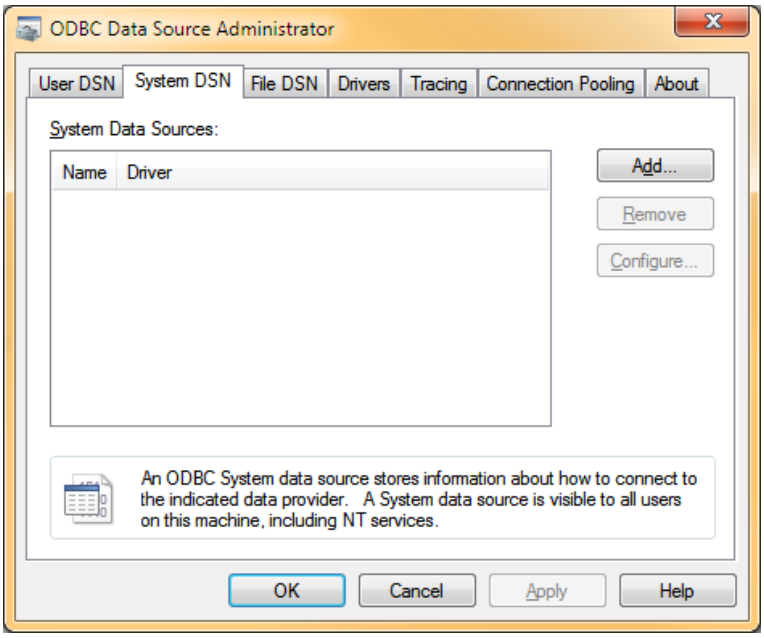
Note: Your version of SQL Anywhere ODBC may be different from the 17 that will be used in these examples.



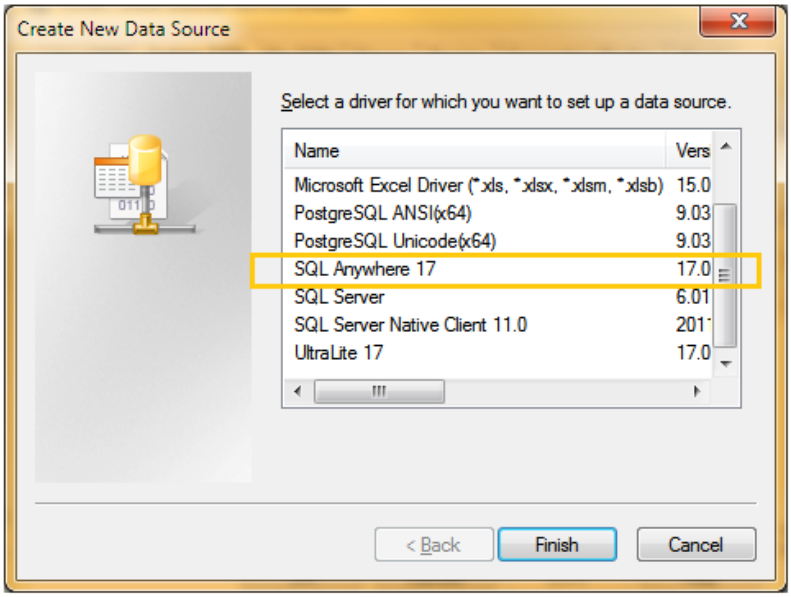
## *Verify ODBC Driver Connection to NBU*

First, verify that the NetBackup relational database service is running. This service is the NB_dbsrv daemon on UNIX, or the "Adaptive Server Anywhere - Veritas_NB" service on Windows.

1. Open the ODBC Data Source Administrator (64-bit) on your Bocada DCS.
2. Go to the ***System DSN*** tab:



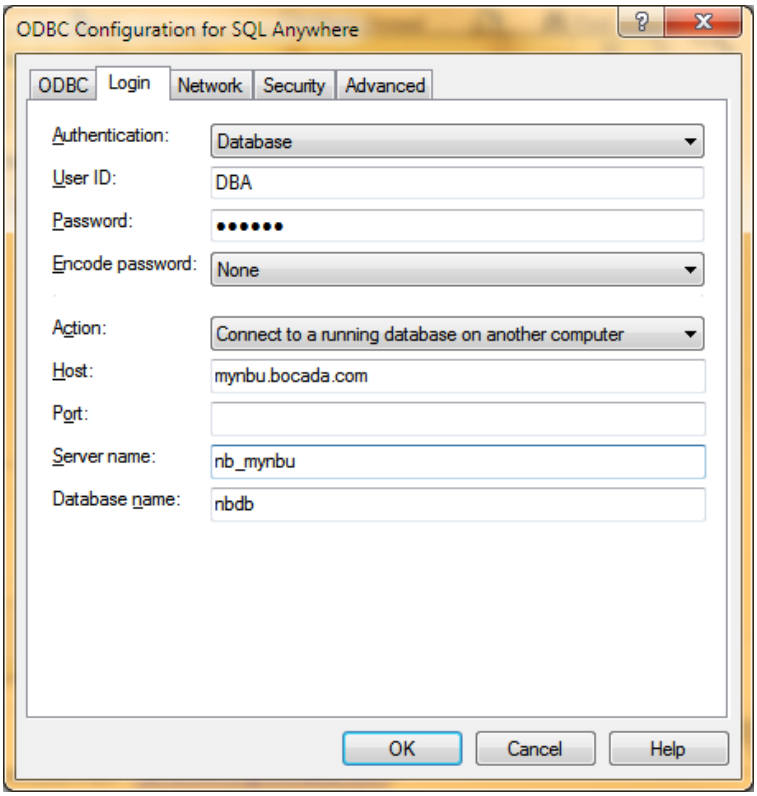

3. Click the "*Add…*" button. In the dialog that opens, select the *SQL Anywhere 17* Driver. Note: Your driver number may be different from the 17 in this example screen.



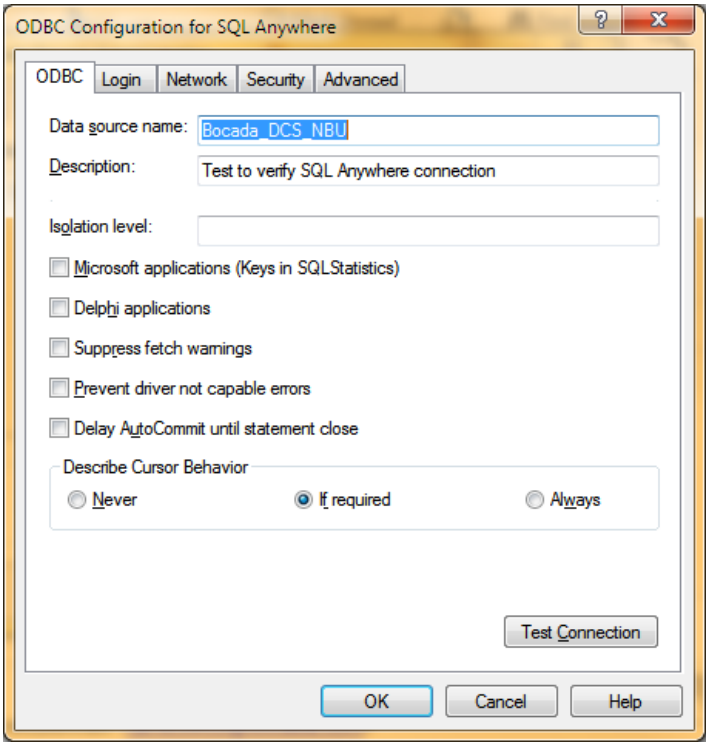

4. Click *Finish*.

5. On the next screen, you can optionally type in a Data source name and description. It may be useful to save this data source for possible future tests, in which case you will need a name for it.
6. Click the ***Login*** tab. Fill in the information in the login tab as follows:

- Authentication: Leave as **Database**
- User ID: the default NetBackup database user ID is **DBA**
- Password: Enter the password that you have configured for your NBU database on your master server
- Encode password: Leave as **None**
- Action: Select **Connect to a running database on another computer**
- Host: Enter the name of your NetBackup master server exactly as it is entered in your Bocada application
- Port: Leave blank and the connection will use the default port of 13785
- Server name: Enter your NBU master server short name preceded by the 3 characters **nb_**
- Database name: **nbdb**




7. Click on the ODBC tab again, and then the *Test Connection* button.




8. Investigate any error that you find.

# Troubleshooting

## *Issue: Spawning bpjava-msvc Processes*

When set to ***Java*** as the collection method, the NetBackup (Java) Console method is used to collect data. If the Java Console Certificates are not copied to the correct location, zombie bpjava-msvc process can spawn on the NetBackup Windows Master server. Over time these bpjava-msvc processes can cause performance issues in NetBackup and it is highly recommended to use the PuTTY/WinRM method of connection for Windows Master servers.

To verify if the Java Console Certificates are in the correct location, perform the following steps:

1. Log into the master server
2. From a command prompt, find the current number of bpjava-msvc process:
   Windows: <Install Path>\Veritas\NetBackup\bin\bpps | findstr bpjava-msvc | find /c "-"
   Unix: <Install Path>/ NetBackup/bin/bpps -a | grep java | wc –l
3. Run a Collection from Bocada
4. Upon completion, run the command from step 2.

If the count does not grow after each collection, then everything is configured properly. If this count is seen to increase, and the Java Admin Console Collection method is being used, please review the Java Console Certificate section. If this count grows while the Legacy Collection method is being used, set the Server Property “NetBackup Java Admin Install Path” to Blank.

# Technical Support

For technical support or a copy of our standard support agreement, please contact us.


**E-mail:** support@bocada.com
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