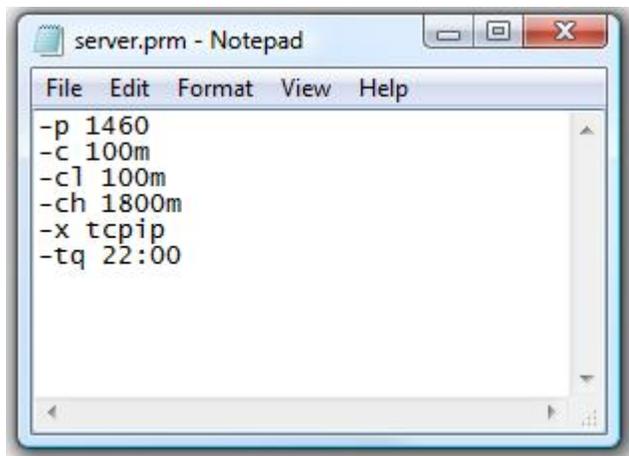




Topic: Running the SOS Database on an Alternate TCP Port
Document ID: #429
Product: ALL
Date: 3/4/2009
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Sybase Adaptive Server Anywhere (SQL Anywhere) is used as the database “back-end” by by SOS and many other applications, such as Intuit’s Quickbooks. When two or more instances of the database, possibly even different versions, are running on the same host computer, there can be conflicts.

Luckily, it is relatively easy to get the databases to play well together. The SQL Anywhere server engine normally communicates with workstations using the TCP port number 2638. To resolve potential conflicts, all we have to do is to configure each instance to use a unique port. SOS stores the database startup settings in a file named SERVER.PRM, located in the SOS folder on the computer designated as the database server. This is a plain text file that can be opened and modified using any text editor, including Windows Notepad. Here is a typical SERVER.PRM:

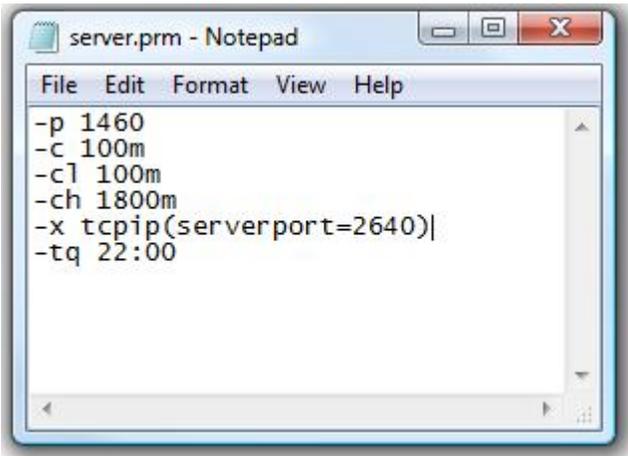


```
server.prm - Notepad
File Edit Format View Help
-p 1460
-c 100m
-cl 100m
-ch 1800m
-x tcpip
-tq 22:00
```

In this file, starting at the top, these parameters configure the network packet size to be 1,460 bytes, the starting db cache size to be 100 MB, the minimum cache size to be 100 MB, the maximum cache size to be 1,800 MB, the communication protocol to be TCP/IP, and the automatic database shutdown time to be 10 PM. (Note that the parameters could just as effectively be written one after the other on the same line. Putting each on a separate line makes them easier to read, but has no functional significance.)

By adding the option “serverport” to the protocol, we can change the port from the default to some other available port.

Below we have the exact same configuration, with the exception that when the database engine is started, it will use port 2640 instead of the default 2638. Note that there is nothing magical about 2640; you can use any port that you do not currently use or expect to use in the future:



Now that we have changed the parameter file, we must restart the database to make the change effective. Double check that the database is running before going on to the next step.

Now try to launch SOSLOGIN from one of your workstations. In many cases it will automatically find the database on the new port and no additional changes will be necessary.

If the workstation cannot connect to the server, you will see the ODBC configuration window. Cancel out of that (it will pop up three or four times) then clear the additional error windows. The first possibility is that there are firewall restrictions on the server and/or workstation side that are preventing communication through the TCP 2640 port. Check the firewalls and if necessary manually add permission so that local network traffic is permitted to use that port. The procedure to "open a port" varies from one firewall product to another, so we cannot provide those details.

If you are still having trouble, try temporarily disabling the firewalls on both sides. If that solves the problem, re-enable the firewalls and get some help to open the 2640 port.

If you cannot connect *even with the firewalls disabled*, then try specifically configuring the SOSDATA data source in ODBC.

1. Go to Windows **Administrative Tools > Data Sources (ODBC)**.
2. Select the **System DSN** tab and double-click *SOSDATA*.
3. Select the **Network** tab.
4. You will see a checkmark to the left of TCP/IP. In the entry field just the right, enter the host's (database server's) IP address and the port number as shown in the figure below (but use your own server's IP address, of course). After the *HOST=<ip address>* insert a semi-colon, then type the *PORT=2640* option.
5. Save the settings and try to connect again.
6. Once you have figured out what needs to be done, do the same on all the other workstations.

