Installation guide and configuration of settings for Pervasive.SQL 7 in a Novell Netware environment

This guide explains the different steps during the installation and configuration of Pervasive SQL settings in a Novell Netware environment; it is not an installation guide of Coba management software.

1. Technical requirements
2. Pre-installation preparation
3. Installing the software (Pervasive)
4. Configuring the server settings
5. Table of all Pervasive SQL v7 settings
6. Installation of client components on a workstation

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1. **Technical requirements**

To install and configure Pervasive SQL, you must logon onto the server with an account that has “Administrative” or “Supervisor” privileges.

Verify before proceeding that you have the disk space requirements for the installation on both the server and workstations.

<table>
<thead>
<tr>
<th>Disk space required</th>
</tr>
</thead>
<tbody>
<tr>
<td>Novell NetWare server</td>
</tr>
<tr>
<td>Workstations - Windows 95/98 or Windows NT/2000/XP</td>
</tr>
</tbody>
</table>

**Technical requirements for the Server**

For a minimum installation (3 user license), we recommend:

- Pentium II 500 or greater
- Minimum of 128 Mb RAM dedicated to the Pervasive database engine

The installation of all Service Packs and updates for Novell Netware should be completed prior to the installation of Pervasive SQL 7; you can find the latest updates for Novell Netware on their website.

For an installation larger than 3 users or on a server with other services installed, please contact Coba’s technical service department.

**Technical requirements for the workstations**

- Windows 95 rev. B/98 or Windows NT/2000/XP
- Pentium II or better processor
- 64 Mb RAM dedicated to the software
2. **PRE-INSTALLATION PREPARATIONS**

- The BTRIEVE or Pervasive.SQL or Scalable SQL services need to be stopped prior to the installation.

- The installation of Pervasive SQL 7 must be done from a workstation connected to the server with the permissions necessary to create files and directories on the SYS volume and SYSTEM directory. Ideally, you should map the letter *F* to the SYS volume.

- We recommend that you exit all other software before proceeding with the installation.

- To avoid any technical issues during the installation, we suggest you use the default directory offered by the installation wizard, *F:\SYSTEM\*.

- During the installation the progress windows may show 100% for a few minutes. This is normal, the installation is progressing.
3. **INSTALLING THE SOFTWARE (PERVASIVE)**

BTRIEVE and SSQL services must be stopped prior to proceeding with the installation. On the server console, execute SQLSTOP and BSTOP commands to unload these services. Unload any other services or application dependant on these services as well. i.e.(« ArcServe » or « IP/IPX Gateway »).

1. **Insert the CD into the CD-Rom reader of the workstation**

   If the PC is configured with «AutoPlay CDs », the installation will start automatically. If the PC is not configured with «AutoPlay CDs » then simply browse to the CD-Rom and execute SETUP.EXE:
   - Click on START
   - Click on RUN
   - Type: <drive letter of cdrom >:\SETUP.EXE (i.e. d:\setup.exe)

   You should see the following window appear:
2. **Click on Next**
   You should see the following window:

   ![Image of Next button](image1.png)

3. **Select « Typical »**
   This window then appears.

   ![Image of Typical selection](image2.png)

4. **Specify the destination directory the installation will use to install the software**
   We suggest using the default suggestion of the installation wizard.
5. **Click Next**

Another destination selection window appears.

![Installation Wizard Window](image1.png)

Once again, we suggest using the default suggestion of the installation wizard.

6. **Click Next**

This window will appear:

![License Diskette Window](image2.png)

7. **Insert the License diskette into the floppy drive**

8. **Click Install Licence**

   **Note:** use a working copy of this diskette to preserve the original one intact.

If this is your second attempt or a re-installation of the software you might receive the following message indicating that certain directories already exist. You should reuse the same directories. If the Pervasive SQL 7 directory (PVSW) already exists click « OK » and then « NO » to the following prompt to install into a different directory. Also Select Pervasive SQL 7 for the Start Menu shortcut.
Click Next and the installation will now proceed.

Once the installation is finished, this window will appear:

9. Click Finish to end the installation

10. Copy the file SSQL.NLM from the Patches directory on the CD into the SYSTEM directory on the SYS volume. Answer YES to overwrite the existing file.
11. **Start the Btrieve and Scalable SQL services**
On the server console, type SQLSTART « Enter », this will start (« SSQL » and « BTRIEVE »). If you stopped other services before the installation you may start them now (« ArcServe » or « IP/IPX Gateway »).

12. **Configuring the services to start automatically on the server**
From the « INSTALL » utility on the server console, add the line SQLSTART to the « AUTOEXEC.NCF » file. Insure that this line is executed prior to other services listed in Autoexec.ncf.  

   Ex:  
   
   SQLSTART (Pervasive SQL 7)  
   ASTART6 (Arcserve)
4. CONFIGURATION OF THE SERVER SETTINGS

The configuration of the server is necessary only once, at the time of installation. No other maintenance need be done other than adding licenses as needed.

1. If the services are not started on the server
   On the server console, type SQLSTART « Enter », this will start (« SSQL » and « BTRIEVE »).
   If you stopped other services before the installation you may start them now (« ArcServe » or « IP/IPX Gateway »).

2. Consult the configuration guide on pages 11 to 13

3. From the workstation launch the Setup utility by:
   Start
   Programs
   Pervasive SQL 7
   Setup (Win32)

   The following window will appear:
4. **To start the configuration of the server, click on CONNECT**

   The following window should appear:

![Connect to Remote Server](image)

5. **Enter the Server Name and click OK**

   The configuration utility will connect to the server and display its settings.

   To configure the various settings, simply choose the appropriate parameter: «Component», «Category» and «Settings» and then select the setting you wish to modify and enter the new value.

   **Example**:

   To set the amount of Open Files permitted by the engine, simply choose: Component -> Microkernel Database Engine

   Category -> File Settings

   Settings -> Open Files

   In the Current field enter the appropriate value (500 per Coba application)

6. **Once all the settings have been modified, click on Save and then Exit**

7. **Restart the server to insure that all settings will be applied**

   Exit all users from the server and type «DOWN» at the server console

8. **The installation is now complete**
## 5. TABLE OF PERVERSIVE SQL SETTINGS

<table>
<thead>
<tr>
<th>Component</th>
<th>Categories</th>
<th>Settings</th>
<th>Current</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scalable SQL Engine</td>
<td>System Configuration</td>
<td>Enable External Procedures</td>
<td>Off</td>
</tr>
<tr>
<td></td>
<td></td>
<td>External Sort File Directory</td>
<td>Default</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Isolation Level</td>
<td>Cursor Stability</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Communications Buffer Size</td>
<td>SERVEUR NT SEULEMENT</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Worker Threads</td>
<td>SERVEUR NT SEULEMENT</td>
</tr>
<tr>
<td>Trace File Control</td>
<td></td>
<td>Check Table Definitions</td>
<td>Off</td>
</tr>
<tr>
<td>Scalable SQL</td>
<td>Server Communication</td>
<td>Scalable SQL Logins/Logouts</td>
<td>Off</td>
</tr>
<tr>
<td>Communications Manager</td>
<td>Configuration</td>
<td>Failed Scalable SQL Logins</td>
<td>Off</td>
</tr>
<tr>
<td></td>
<td></td>
<td>All Other Scalable SQL Calls</td>
<td>Off</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Trace File</td>
<td>Default</td>
</tr>
<tr>
<td>Microkernel Database Engine</td>
<td>File Settings</td>
<td>Open Files</td>
<td>500 per COBA application.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Handles</td>
<td>240 X the licensed users.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Index Balancing</td>
<td>Off</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Archival Logging of Selected Files</td>
<td>Off</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Create File Version</td>
<td>6.X</td>
</tr>
<tr>
<td></td>
<td></td>
<td>System Data</td>
<td>If needed</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Maximum Databases</td>
<td>10</td>
</tr>
</tbody>
</table>

**Notes**

1. In this context it is the licensed users of Pervasive SQL 7 not the Novell server.
<table>
<thead>
<tr>
<th>Component</th>
<th>Categories</th>
<th>Settings</th>
<th>Current</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Memory Resources</td>
<td>Cache Allocation</td>
<td>32768 ²</td>
<td></td>
<td>2. The cache allocation setting will depend on the total available memory (RAM) installed on the server. The minimum value needed is 32768. A higher value will improve the performance of the Coba applications.</td>
</tr>
<tr>
<td></td>
<td>Communication Buffer Size</td>
<td>35</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Largest Compressed Record Size</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Extended Operation Buffer Size</td>
<td>35</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sort Buffer Size</td>
<td>(0) ³</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Client/System Transactions</td>
<td>Transaction Durability</td>
<td>Off</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Operation Bundle Limit</td>
<td>1000</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Initiation Time Limit</td>
<td>10 000</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Transaction Log Buffer Size</td>
<td>64</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Transaction Log Size</td>
<td>512</td>
<td></td>
<td></td>
</tr>
<tr>
<td>System Resources/Directories</td>
<td>Active Clients</td>
<td>6 X the licensed users</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>I/O Threads</td>
<td>15</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Wait Lock Timeout</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Transaction Log Directory</td>
<td>Default</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Working Directory</td>
<td>Default</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trace Btrieve Operations</td>
<td>Trace Operations</td>
<td>Off</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Trace File</td>
<td>Default</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Select Operations</td>
<td>ALL</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Number of Bytes From Data Buffer</td>
<td>32</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Number of Bytes From Key Buffer</td>
<td>32</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes

2. The cache allocation setting will depend on the total available memory (RAM) installed on the server. The minimum value needed is 32768. A higher value will improve the performance of the Coba applications.

3. This value should be set to zero (0), the Microkernel will use the amount of resources necessary
<table>
<thead>
<tr>
<th>Component</th>
<th>Categories</th>
<th>Settings</th>
<th>Current</th>
</tr>
</thead>
<tbody>
<tr>
<td>Btrieve Message Router</td>
<td>Btrieve Message Router</td>
<td>Load BROUTER</td>
<td>See note 4</td>
</tr>
<tr>
<td>Btrieve Communications</td>
<td>Router Communications Buffer Size</td>
<td>35</td>
<td></td>
</tr>
<tr>
<td>Brouter Communications</td>
<td>Number of sessions</td>
<td>6 X the licensed users</td>
<td></td>
</tr>
<tr>
<td>Manager</td>
<td>Communications Buffer Size</td>
<td>32768</td>
<td></td>
</tr>
<tr>
<td>Server Communication</td>
<td>Number of Communications Threads</td>
<td>30</td>
<td></td>
</tr>
<tr>
<td>Configuration</td>
<td>Receive Packet Size</td>
<td>1500</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Use SAP</td>
<td>AutoDetect</td>
<td></td>
</tr>
</tbody>
</table>

**Notes**

4. If you have Coba applications on more than one server, set this to ON. This will permit the database to communicate properly.
6. INSTALLATION OF CLIENT COMPONENTS ON A WORKSTATION (OPTIONAL)

1. Installing the client via the server

To install the client utilities on a workstation that was not used to install Pervasive SQL 7 on the server:

- Click on START
- Click on RUN
- Type the following and click OK:

![Installation window]

The following window will appear:

![Client installation window]

2. Click Next

The following window will appear:
3. **Select Typical**
   The following window will appear:

   ![Image](image1.png)

4. **We recommend installing into the default directory, click NEXT**
   If this is your second attempt at installing this software on the workstation or a reinstallation you may receive the following Information Window indicating the destination directory already exists. You should use this path for the reinstallation.

   ![Image](image2.png)

   ![Image](image3.png)
If the Pervasive SQL 7 folder already exists click OK and select the Program Folder Pervasive SQL 7 so that the installation may proceed, then click Next.

At this point the installation will verify network connectivity with the server.

5. **Make sure that the services are loaded and running on the server**
6. **Click Next**  
Once the Btrieve communication tests are completed, the following window will appear explaining the results.

7. **Verify that all the tests completed successfully.**

8. **Click Next**  
Once the Btrieve communications tests are completed the Scalable SQL tests will begin; once they are completed they will display the results in the following window.

9. **Verify that all the tests completed successfully.**
10. **Click Next.**
    The following window will appear:

11. **Verify that the SAMPLES directory is in the Server Path. (i.e. f:\pvsw\samples\)**

12. **Click Next.**
    Once the transactional tests are completed the following window will appear.

13. **Verify that all the tests completed successfully.**
14. **Click Next**

   The following window will appear:

   ![Image of the window](image)

15. **Verify that the DEMODATA directory is in the Server Path. (i.e. f:\pvsw\demodata)***

16. **Click Next**

   Once the relational tests are completed the following window will appear.

   ![Image of the window](image)

   Verify that all the tests completed successfully.
17. Click Finish

The following message will appear:

Select YES, I want to restart my computer now and click FINISH.