# Compatibility of SQL Server 2005 and 2000 coexisting

So, you've decided to upgrade your databases from SQL Server 2000 to SQL 2005. A lot has been said as to why upgrade: gaining scalability, reliability, up to 30% performance improvements and much more.

You have your desktop or your testing environment with an already installed instance of SQL Server 2000 and you want to try the in-place upgrade or maybe you just want to install a new instance of SQL Server 2005. This article highlights issues that may arise when installing the new instance and also analyzes options for interaction between the two versions, such as: linked servers, multi-server administration and log shipping.

# Installing SQL Server 2005 on a SQL 2000 machine

It's recommended that the SQL Server 2000 machine where SQL Server 2005 will be installed has at least Service Pack 3a, or better yet SP4.

When installing SQL Server 2005 on the same machine as SQL 2000, you might have the following issues:

- 1. A default SQL Server 2000 instance was not recognized by the installation wizard. The installation could not identify the default SQL Server 2000 instance and therefore it may be asked to install a default 2005 instance. The installation completes successfully, but the new 2005 instance is not really installed. When this happens, you have to uninstall and reinstall the 2005 instance. In the new installation, enter a named instance.
- 2. **The SQL Server 2000 Agent could not restart.** After completing the installation, there's a chance the SQL Server 2000 Agent may not restart. Generally re-entering the password in the Agent's Service solves the problem.
- 3. Enterprise Manager )2000) is not working after the 2005 installation (database servers are running). If the Enterprise Manager is not working after you install 2005, take a look at these steps copied from Microsoft's <a href="#">Co-exist of SQL Server 2000 and SQL 2005</a>:
  - Click Start, click Run, type regedit, and then click OK.
     Locate the following registry subkey:
     HKEY\_LOCAL\_MACHINE\SOFTWARE\Microsoft\Microsoft SQL Server\80\Tools\ClientSetup
     Right-click the ClientSetup registry subkey, point to New, and then click String Value.
     Rename the registry subkey that you just created SqlPath, and then press ENTER.
     Double-click the SqlPath registry subkey, and then type C:\Program Files\Microsoft SQL Server\80\Tools in the Value data box.

- 6. Click **OK**, and then close Registry Editor.
- 7. Click **Start**, click **Run**, type regsvr32 "C:\Program Files\Microsoft SQL Server\80\Tools\Binn\sqlmmc.dll", and then click **OK.**
- 4. **SQL Server Management Studio is not installed.** You need to install .NET 2.0 framework prior to the installation.

SQL 2000 and 2005 can co-exist on the same machine. But here are some issues I've been asked about in the past concerning the interaction between the two versions:

#	Issue	Error message when using 2005 tools	Error message when using 2000 tools	Possible?
1.	New SQL Server Registration	(Success)	A connection could not be established to Server 2005.  Reason: [SQL-DMO]You must use SQL Server 2005 management tools to connect to this server	Only from 2005 to 2000
2.	Multi Server Administration	2005 – master, 2000 - target:  The master server <2005 Server> version 9.00.2047.00 is not compatible with the target server '<2000 Server> version	2000 – master, 2005 - target:  SQL Server registration failed because of the connection failure displayed below  [SQL-DMO]You must use SQL Server 2005 management tools to connect to this server	NO
3.	Replication	(Success)	No error message, the SQL Server 2005 instance does not appear in the list of possible subscribers	Only from 2005 to 2000
4.	Linked Server	(Success)	(Success)	YES
5.	Database restore	Backup – 2005, Restore – 2000:  The backed-up database has on-disk structure version 611. The server suppors version 539	Backup – 2000, Restore – 2005: (Success)	Only from 2000 to 2005

		and cannot restore or upgrade this database. RESTORE DATABASE is terminating abnormally.		
6.	Log Shipping	instance because it is not the correct version. Secondary	SQL Server 2005 instances do not appear in the list of the possible Secondary instances	NO

# SQL Server 2000 and 2005: Six compatibility concerns

By Michelle Gutzait 07.02.2007

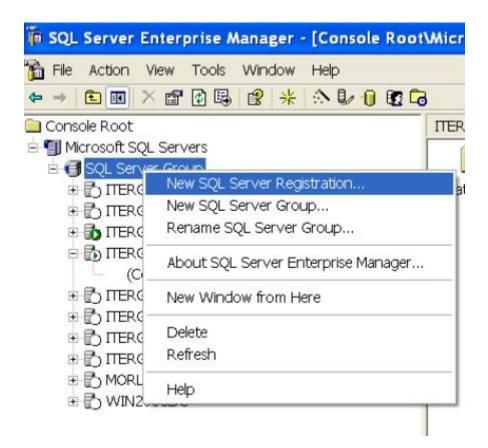
Rating: -3.50- (out of 5)

SQL Server 2000 and 2005 can co-exist on the same machine. In Part 1: <u>Installing SQL Server 2005 on a SQL 2000 machine</u>, I listed some compatibility issues in a quick reference table. Below, I've mapped out the specifics from that table as to interaction concerns between SQL Server 2000 and SQL Server 2005 upon upgrading.

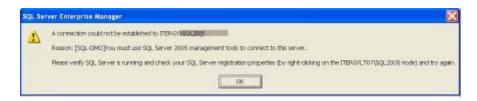
- 1. New SQL Server registration
- 2. Multi Server Administration
- 3. Replication
- 4. Linked Server
- 5. Backup and restore
- 6. Log Shipping

## 1. New SQL Server registration

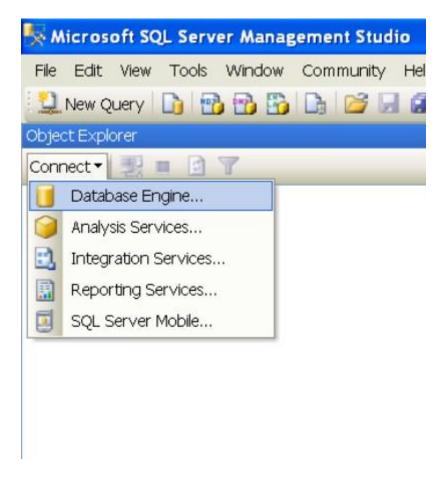
In Enterprise Manager:



Here's the error message when trying to add a SQL 2005 instance:



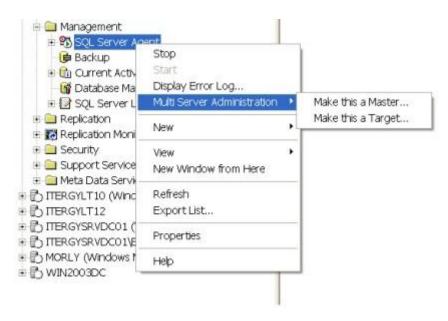
In Management Studio, however, the connection was successful.



#### 2. Multi Server Administration

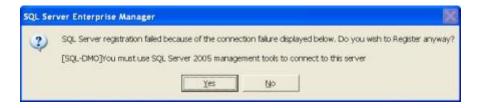
I have a new instance that I want to add to the maintenance plans. Can we do that via the Multi Server Administration option? Let's check out:

From Enterprise Manager:

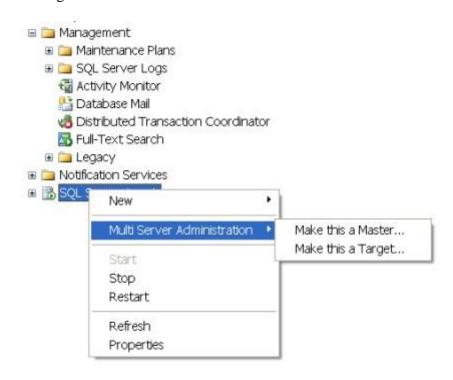


When I try to define SQL Server 2000 as the master, SQL Server 2005 as the target, I

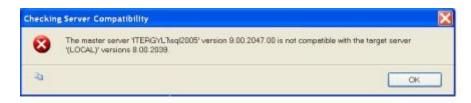
get the following error message:



# In Management Studio:

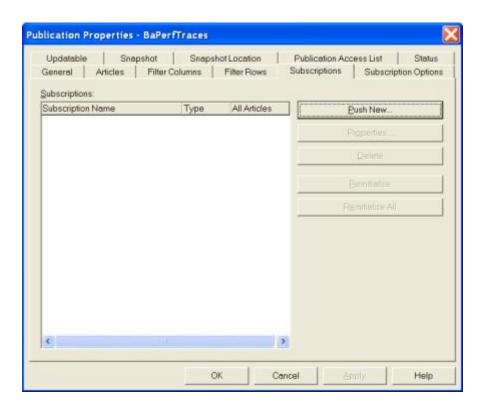


## The error message:



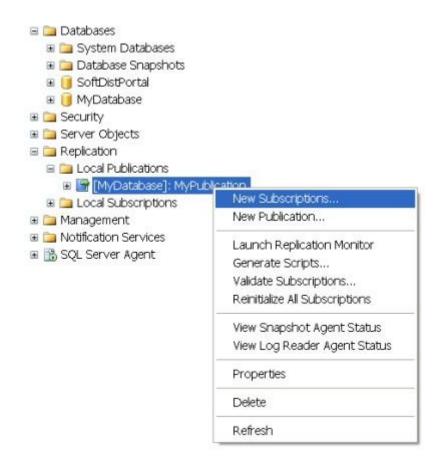
# 3. Replication

From Enterprise Manager, in the publication's properties, I tried to push new subscription:

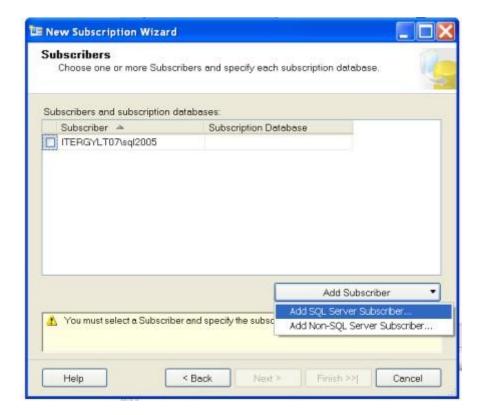


As expected, the SQL Server 2005 instance does not appear, so it cannot be used as a subscriber.

In Management Studio:



#### Add new subscriber:



Success.

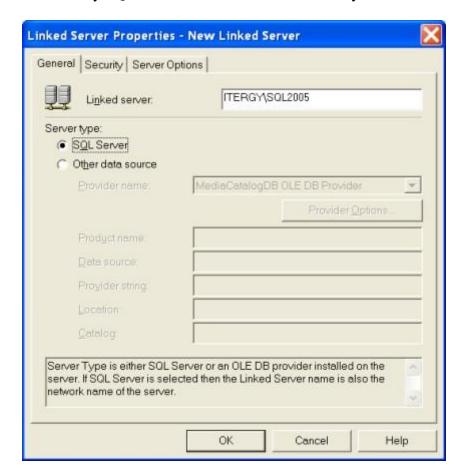
**Note:** I tested few commands where the syntax has been changed. For example: INCLUDE in indexes, NOEXPAND hint, PIVOT and UNPIVOT, and to my surprise the data was perfectly replicated.

#### 4. Linked Server

From Enterprise Manager:



I entered my SQL 2005 instance name and a security context:



The linked server was successfully configured. I also tried to run commands in the new linked server and they worked. I did the same thing from Management Studio and it works.

#### 5. Backup and restore

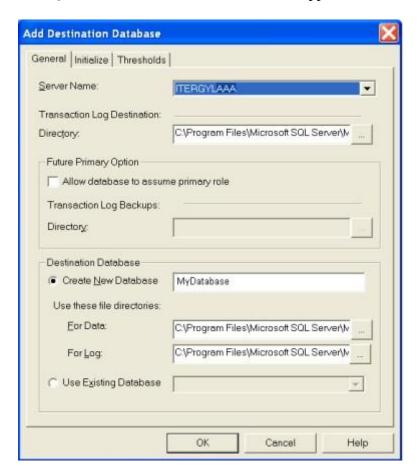
Of course when backing up a SQL Server 2000 database, it can be restored in 2005. But after being "touched" once by SQL 2005 – even if the compatibility level stays as 80 – the database cannot be restored again in SQL 2000. This is a painful subject for the upgrade process because it does not allow to "roll back" to the old version using backups and restores.

When backing up a SQL 2005 database (compatibility=80), this is the error message you get when you try to restore it on SQL 2000:

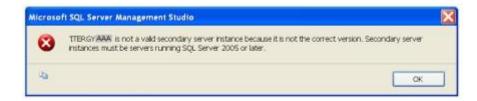


#### 6. Log Shipping

From Enterprise Manager, when trying to add destination databases for log shipping, the SQL Server 2005 instance names do not appear in the server name list:



From Management Studio, when trying to add a secondary SQL 2000 instance:



## **Conclusion**

Both SQL Server 2000 and 2005 versions can beautifully co-exist on the same machine. There might be few issues at installation time, but they can be resolved. When trying to work between the two versions via the management tools, not everything works.