

## MS SQL Server DBA Troubleshooting Tips

S1 No	Problem Reported / General point	Environment / Comments	Fix / Solution.
1	sa could not get connection	Any	<i>Change SQL server instance properties and allow both the types of authentications.</i>
2	How to check database version	Any	<i>Select SERVERPROPERTY('ProductLevel')</i>
3	Query to check which version/ service pack	Any	<pre> SELECT SERVERPROPERTY('productversion') AS SQLServerVersion,  SERVERPROPERTY ('productlevel') AS ServicePackLevel, SERVERPROPERTY ('edition') AS SQLServerEdition  -----  SELECT 'SQL Server '  + CAST(SERVERPROPERTY('productversion') AS VARCHAR) + ' - '  + CAST(SERVERPROPERTY('productlevel') AS VARCHAR) + ' ('  + CAST(SERVERPROPERTY('edition') AS VARCHAR) + ' )' </pre>
4	Query to get the SQL instance name	Any	<i>SELECT @@SERVERNAME AS 'Server Name'</i>
5	Command to get running traces	Any	<i>SELECT * FROM ::fn_trace_getinfo(NULL)</i>

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6	Command to stop trace by getting the trace id from the above query.	Any	<p>1. <b>EXEC sp_trace_setstatus</b></p> <p style="padding-left: 40px;"><i>@traceid = &lt;traceid&gt; , @status = 0</i></p>
7	Close the trace and delete the trace information	Any	<p>1. <b>EXEC sp_trace_setstatus</b> <i>@traceid</i></p> <p style="padding-left: 40px;"><i>= &lt;traceid&gt; , @status = 2</i></p>
8	Query to check if any traces are running.	Any	<p><b>SELECT *</b></p> <p><b>FROM</b> <i>fn_trace_getinfo(default);</i></p> <p><b>GO</b></p>
9	To get fragmentation related information on an SQL instance.	Any	<p><b>By using the system function,</b></p> <p><i>sys.dm_db_index_physical_stats</i>, you can detect fragmentation in a specific index, all indexes on a table or indexed view, all indexes in a database, or all indexes in all databases. For partitioned indexes, <i>sys.dm_db_index_physical_stats</i> also provides fragmentation information for each partition</p>
10	To remove the auto shrink property of the database and to manually shrink file or the database and then as a best practice to defragment the indexes.	Any	<p><b>NOT ADVISED WITHOUT CONSULTATION AND APPROVAL</b></p> <p><i>Ensure that AUTO_SHRINK is turned off by default. If free space must be generated, do that by using the <b>DBCC SHRINKFILE</b> or <b>DBCC SHRINKDATABASE</b> commands.</i></p> <p><i>In addition, always rebuild or reorganize the indexes after a shrink operation in order to fix any fragmentation that might have occurred in the data files.</i></p>

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11	<p>To change the recovery model to Full.</p> <p>Transactions logs are not backed up in the simple model. Data can be recovered only upto the complete restore but cannot be rolled forward from there. Hence data loss.</p>	Any	<p><i>On a production server, the Recovery Model should be set to Full or Bulk-Logged except in special circumstances. Because the Simple Recovery Model does not make use of transaction log backups, all activity since the last database backup will be lost in the event that the database needs to be restored.</i></p> <p><i>The Recovery <b><u>databasepropertyex</u></b> property exposes the current setting of the</i></p> <p><i>Recovery Model for the database in question. To determine the Recovery Model for a database, query the ?Recovery? <b><u>databasepropertyex</u></b> for the database by viewing the Options panel of the Properties for the database using Management Studio, or</i></p> <p><i>by running the following command:</i></p> <p><b>Select databasepropertyex(? database_name ?, ?Recovery?);</b></p> <p><i>The possible output values for this are:</i></p> <p><i>FULL = Full recovery model</i></p> <p><i>BULK_LOGGED = Bulk logged model</i></p> <p><i>SIMPLE = Simple recovery model</i></p> <p><b>Recommended</b></p> <p><b>Resolution</b></p> <p><i>Review the database recovery model for the</i></p>

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12	Shrink the log file to free up unused pages.	Any	<b>BACKUP LOG</b> <DBName> <b>WITH No_log</b>  <b>DBCC SHRINKFILE</b> (DBName_logfilename,sizeinMB);  GO
13	DBCC commands to  Check for any open transaction and also store the results in a table.	Any	<b>CREATE table dbccOpenTran</b>  ( <dbname> sysname , OpenTran varchar(30) , ntime datetime DEFAULT getdate() )  insert into dbccopentran (<dbname>, opentran)  <b>exec ('dbcc opentran with tablereults')</b>
14	Database Consistency Check (DBCC)	Any	<b>DBCC CHECKDB</b> (<DBNAME>) <b>WITH ALL_ERRORMSGS;</b>  GO
15	Query to list all the user tables.	Any	<b>use [DBNAME]</b>  GO  <b>select * from sysobjects where xtype='U' order by name;</b>  GO