

Preparing for DB2 UDB LUW Performance Diagnosis Lab

Presented by:
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The primary objectives of this seminar are to help you analyze the performance of a database in your organization and to help you understand changes that you can make to improve performance based on this analysis.

To achieve these objectives, you will need to bring certain DB2 performance data with you to the seminar. Ideally, if you have access to a laptop computer that has DB2 installed, it would be greatly beneficial to you and your organization if you can bring the requisite performance data with you electronically. If you cannot arrange access to a DB2 laptop for this class, you should bring printed data, a calculator, and optionally a CDROM with electronic files with you.

All class participants should complete the detailed plain text instructions below to adequately prepare for this performance diagnosis lab. Complete the instructions shown in **green bold text** if you will have access to a laptop computer running DB2 during the class, or if you can bring the files with you on a CDROM. Again, it is worth emphasizing that you and your organization will benefit more from the class if you are able to bring the requisite data on a laptop running DB2.

If you have any questions regarding these class preparation instructions, please contact Scott Hayes at <mailto:scott.hayes@dbisoftware.com>.

Thank you, in advance, for your interest in this class.

Best regards,
Scott

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Please complete the following tasks prior to attending the IBM DB2 UDB LUW Performance Design Lab:

- mkdir classlab
- cd classlab
- db2 “update monitor switches using bufferpool on sort on uow on table on timestamp on”
- db2 “connect to YOURDB”
- **db2 “create event monitor CLASSLAB for tables, transactions, statements write to table manualstart”**
- **db2 “set event monitor CLASSLAB state = 1”**
- db2 “get db cfg for YOURDB” > dbcfg.txt
- db2 “get dbm cfg” > dbmcfg.txt
- db2 “get snapshot for database on YOURDB” > dbsnap1.txt
- db2 “get snapshot for tables on YOURDB” > tbsnap1.txt
- db2 “get snapshot for tablespaces on YOURDB” > tssnap1.txt
- db2 “get snapshot for bufferpools on YOURDB” > bpsnap1.txt
- **STOP! PATIENTLY WAIT 15 MINUTES, THEN CONTINUE.**
- **db2 “flush event monitor CLASSLAB buffer”**
- **db2 “set event monitor CLASSLAB state = 0”**
- db2 “get snapshot for database on YOURDB” > dbsnap2.txt
- db2 “get snapshot for tables on YOURDB” > tbsnap2.txt
- db2 “get snapshot for tablespaces on YOURDB” > tssnap2.txt
- db2 “get snapshot for bufferpools on YOURDB” > bpsnap2.txt
- At your discretion, you may now turn off the monitor switches that were turned on earlier
- **Verify that YOURDB now contains the following 5 tables by using the db2 “list tables” command:**
CONNHEADER_CLASSLAB, CONTROL_CLASSLAB, STMT_CLASSLAB, TABLE_CLASSLAB, XACT_CLASSLAB
- **Export each of these 5 tables to IXF files using command syntax:**
db2 “export to tablename.ixf of IXF select * from instance.tablename”
- **Use your favorite FTP program to transfer the IXF files created above to your DB2 laptop (binary FTP may be required)**
- **Use your favorite FTP program to transfer the TXT files created above to your DB2 laptop (ascii mode)**
- **Create a database on your laptop named “CLASSDB”, then use DB2 import to create and load the 5 tables via IXF files**
 - **db2 create database CLASSDB**
 - **db2 -v “import from tablename.ixf of IXF commitcount 500 replace_create into CLASSLAB.tablename”**
- Please print the previously created text files: dbmcfg.txt, dbcfg.txt, dbsnap1.txt, dbsnap2.txt, bpsnap1.txt, bpsnap2.txt, tssnap1.txt, tssnap2.txt, tbsnap1.txt, tbsnap2.txt
- Please remember to bring a calculator to class – especially if you won’t have a laptop. And please bring eight or more **crayons** or colored **markers**.