

IBM 000-917

**IBM 000-917 System Administration for IBM Informix
Dynamic Server V10
Practice Test
Version 1.1**

QUESTION NO: 1

A Database Administrator needs to know the number of deadlocks and sequential scans that occurred on a particular table. From which of the following sysmaster tables can this information be retrieved?

- A. syssesprof
- B. systabnames
- C. sysptntab
- D. systabinfo

Answer: C

QUESTION NO: 2

On a busy system, index cleaning is running in a slower pace and that needs to change. Which of the following commands will provide information about the current priority of threads responsible for index cleaning?

- A. onstat -g ath
- B. onstat -g glo
- C. onstat -C
- D. onstat -P

Answer: C

QUESTION NO: 3

Which of the following onstat commands lists dbspaces and chunks on the database server as well as read/write statistics for each chunk as well?

- A. onstat -D
- B. onstat -P
- C. onstat -d
- D. onstat -p

Answer: A

QUESTION NO: 4

An instance was created by developers during the Database Administrator's absence. Tables have been created in a database and a system has gone live. The developers did not know

anything about IBM Informix Dynamic Server other than how to create a minimal instance. The instance just crashed, 15 minutes after going live. Given the statements below:

- Rootdbs is too small.
- Applications are waiting on locks.
- Deadlocks abound.
- Disk space ran out.

What are the likely problems that caused the crash?

- A. Logical Logs and physical logs and temp space found therein, along with all of the database indexes and tables. Tables have row locks.
- B. Logical Logs and physical logs and temp space found therein, along with all of the database indexes and tables. Tables have page locks.
- C. Logical Logs and physical log and temp space found therein, along with all of the database indexes and tables. Tables have page locks.
- D. Logical Logs and physical log and temp space found therein, along with all of the database indexes and tables. Tables have table locks.

Answer: C

QUESTION NO: 5

The database server configuration file contains the following parameter settings:

```
LRU_MIN_DIRTY 50
LRU_MAX_DIRTY 60
BUFFERS 10000
PHYSFILE 1500
CKPTINTVL 300
```

According to the message log, checkpoints are occurring every 10 to 15 seconds. Checkpoint duration is less than one second. Which of the following changes will most likely cause checkpoints to occur less frequently?

- A. Increase PHYSFILE
- B. Decrease LRU_MIN_DIRTY and LRU_MAX_DIRTY
- C. Increase CKPTINTVL
- D. Decrease BUFFERS

Answer: A

QUESTION NO: 6

Following are outputs of 'onstat -k' and 'onstat -u' command:

```
$ onstat -k
IBM Informix Dynamic Server Version 10.00.FC4 -- On-Line -- up 25 days 02:30:31
Locks
address  wtlist  owner      lklist  type      tblsnum  rowid      key#/bsiz
a154de0  0        afd30c8    0       HDR+S     100002   205        0
a154e58  0        afd38f0    0       HDR+S     100002   201        0
a155380  0        afd5990    0       S         100002   205        0
a1554e8  0        afd5168    0       S         100002   205        0
 4 active, 2000 total, 2048 hash buckets, 0 lock table overflows

$ onstat -u
IBM Informix Dynamic Server Version 10.00.FC4 -- On-Line -- up 25 days 02:30:45
Userthreads
address  flags  sessid  user      tty  wait      tout  locks  nreads  nwrites
afd1028  ---P--D 1      informix - 0      0      0      31      34
afd1850  ---P--F 0      informix - 0      0      0      0      756
afd2078  ---P--- 5      informix - 0      0      0      0      0
afd28a0  ---P--B 6      informix - 0      0      0      0      0
afd30c8  Y--P--- 34     informix 5  b34c2c8 0      1      1      0
afd38f0  Y--P--- 36     informix 10 b2e65a0 0      1      12     0
afd4118  ---P--D 9      informix - 0      0      0      0      1
afd4940  Y--P--D 15     informix - a140738 0      0      0      0      0
afd5168  Y--P--- 38     informix 10 be28550 0      1      0      0
afd5990  Y--P--- 40     informix 10 b4e8c50 0      1      0      0
10 active, 128 total, 18 maximum concurrent
```

Users are reporting that they cannot access a table because they are getting errors indicating that the table is locked. The Lock address 'a155380' is holding a lock on the table. What is the session id for lock address 'a155380'?

- A. 34
- B. 40
- C. 36
- D. 38

Answer: B

QUESTION NO: 7

Once the MIRROR configuration parameter has been set to 1 and the database server shared memory has been re-initialized, which of the following describes the correct method to start mirroring on the root dbspace?

- A. Set the MIRRORPATH configuration parameter to the appropriate pathname. The database server's root dbspace must be re-initialized in order to start mirroring.
- B. Set the MIRRORPATH configuration parameter to the appropriate pathname, restart the database server's shared memory, then start mirroring by using the onspaces command.
- C. Start mirroring using the onspaces command by specifying the pathnames and offsets of the mirror devices to use for every chunk in the root dbspace.
- D. Set the MIRRORPATH configuration parameter to the appropriate pathname. Mirroring is enabled automatically after restarting the database server's shared memory.

Answer: C

QUESTION NO: 8

A DBA decides to create an 8 KB page size dbspace. Which of the following lines should be added to the ONCONFIG file to make an 8000 KB buffer pool?

- A. BUFFERPOOL size=default,buffers=1000,lrus=8,lru_min_dirty=50,lru_max_dirty=60
- B. BUFFERPOOL buffers=1,size=8000k,lrus=8,lru_min_dirty=50,lru_max_dirty=60
- C. BUFFERPOOL size=8000k,buffers=1,lrus=8,lru_min_dirty=50,lru_max_dirty=60
- D. BUFFERPOOL size=8k,buffers=1000,lrus=8,lru_min_dirty=50,lru_max_dirty=60

Answer: D

QUESTION NO: 9

A company is trying to determine the best connection type to use for client applications to connect to the Informix database server. The company will have 100 clients connecting from different platforms in various locations. The connections must be able to support multithreaded client connections, multiple connections to the database server, and they must be secure. Which of the following connection types would be the most effective?

- A. Network connection
- B. Shared memory connection
- C. Streamed pipes or named pipes
- D. Multiplexed connection

Answer: A

QUESTION NO: 10

A machine with four tape drives is available for database backups. The Database Administrator wants to enable parallel backups for the database server. Which of the following backup methods will utilize the tape devices simultaneously for each backup process running?

- A. Submit one ontape command (ontape -s -L 0); it will back up all dbspaces in parallel.
- B. Submit one onbar command (onbar -b -L 0); it will back up all dbspaces in parallel.
- C. Submit four onbar commands; each onbar command will back up a subset of dbspaces.
- D. Submit four ontape commands; each ontape command will back up a subset of dbspaces.

Answer: B

QUESTION NO: 11

A newly created table 'foo' was just loaded with 1000 rows. UPDATE STATISTICS has not yet been run for the table. The following query is executed:

```
select nrows from systables where tabname='foo';
```

Which of the following results will be returned by this query?

- A. 1000
- B. 0
- C. null
- D. 1

Answer: B

QUESTION NO: 12

Index corruption is reported on a table named 'tab1' in the database 'test'. Which of the following commands is one of the steps to fix the problem?

- A. oncheck -cD tab1
- B. oncheck -cl test:tab1
- C. oncheck -cT test:tab1
- D. oncheck -cl tab1

Answer: B

QUESTION NO: 13

A Database Administrator is configuring the number of CPU virtual processors on a machine with four physical processors. The machine is dedicated to the OLTP database server. According to IBM Informix guidelines, how many CPU VPs should be configured?

- A. 8
- B. 4
- C. 1
- D. 3

Answer: D

QUESTION NO: 14

A mission critical database system has 10GB of data, and continuously processes large numbers of transactions. To minimize data loss and system recovery time, which of the following is the best backup strategy for this database system?

- A. Perform the physical backup weekly; do not back up logical logs.
- B. Perform the physical backup daily; run continuous backup of logical logs.
- C. Perform the physical backup hourly; do not back up logical logs.
- D. Perform the physical backup weekly; run continuous backup of logical logs.

Answer: B

QUESTION NO: 15

A Database Administrator needs to establish distributed communications between two database servers that reside on separate UNIX machines. Both database servers are currently configured for TCP connectivity. Neither NIS nor DNS are enabled on either machine. Which of the following files needs to be modified to enable connectivity between the two servers?

- A. /etc/hosts
- B. sqlhosts
- C. /etc/services
- D. onconfig

Answer: B

QUESTION NO: 16

A database server is experiencing performance problems related to disk I/O bottlenecks. The database server has three dbspaces and all of them reside on a single disk. The most active dbspace receives up to 50% of total I/O on this disk. Which of the following is the best solution to improve performance?

- A. Merge the most active dbspace with one of the other two dbspaces.
- B. Move the most active dbspace to another disk.
- C. Move some data from the most active dbspace to the other two dbspaces.
- D. Merge the three dbspaces into one dbspace.

Answer: B

QUESTION NO: 17

A cold restore has been performed using the ontape utility. The logical logs were applied as well. Which of the following commands should be executed to allow users to access the database?

- A. onmode -j
- B. onmode -m
- C. onmode -s
- D. onmode -c

Answer: B

QUESTION NO: 18

Which of the following storage types can be used when creating chunks?

- A. Cooked files, Raw devices, NFS mounted file system directories
- B. Cooked files, Entire raw device, Portions of raw devices
- C. Raw devices, Cooked files, File systems directories
- D. Remote raw device or remote cooked file

Answer: B

QUESTION NO: 19

It has been determined that more logical logs are needed in order to run a mass delete without dynamically allocating logs. Which of the following database server operating modes will not allow the administrator to configure additional logical logs?

- A. Quiescent
- B. Online
- C. Offline
- D. Recovery

Answer: C

QUESTION NO: 20

Which of the following oncheck commands shows the number of rows in a tablespace?

- A. oncheck -pr
- B. oncheck -pe
- C. oncheck -nr
- D. oncheck -pt

Answer: D

QUESTION NO: 21

A Database Administrator is configuring the NETTYPE configuration parameter to set the number of poll threads for shared memory connections. The administrator would like to allow 100 users, 2 poll threads, and run the poll threads on a CPU VP. Based on the above information, the Database Administrator should configure the NETTYPE parameter with which of the following entries?

- A. ipcshm,100,2,CPU
- B. ipcshm,2,100,CPU
- C. ipcshm,50,2,NET
- D. ipcshm,2,50,CPU

Answer: D

QUESTION NO: 22

Assuming system resources are sufficient, what is the number of database server instances that can run on a single machine simultaneously?

- A. Only one instance can run at a time.
- B. Two instances can run simultaneously.
- C. The number of instances that can run simultaneously is equal to the number of CPUs on the system.
- D. There is no practical limit to the number of instances that can run simultaneously.

Answer: D

QUESTION NO: 23

Poll threads can run on which of the following VP classes?

- A. MSC VP
- B. LIO VP

- C. CPU VP
- D. AIO VP

Answer: C

QUESTION NO: 24

Several users running the same application have reported that they are receiving deadlock errors. Which command can be used to monitor the number of deadlocks that have occurred?

- A. onstat -g ses
- B. onstat -k
- C. onstat -p
- D. onstat -g spi

Answer: C

QUESTION NO: 25

The database server page size is 4 Kilobytes. Given the following the partial onstat -d output:

```

dbspaces
number      fchunk      nchunks      name
..
3           1           2           dat1dbs
..
chunks
chk/dbs     offset      size         free        flags        pathname
1 3         0           5000        2500        PO-         www.page4988.com
2 3         0           5000        2500        PO-         /dev/rawdev2

```

What is amount of free space in the dat1dbs DBSpace?

- A. 20000 kilobytes
- B. 10000 kilobytes
- C. 5000 kilobytes
- D. 2500 kilobytes

Answer: A

QUESTION NO: 26

Using the following output of an onstat -k command: