## InterSystems IRIS System Administration Specialist Exam Practice Questions

This document contains 12 practice questions covering various topics on the exam and is designed to familiarize candidates with the style and format of the exam. As the questions presented here are not comprehensive to all exam topics, additional preparation beyond their review is recommended. The answers are provided on the last page of this document.

### InterSystems® Documentation books available during the exam

Auditing Guide	Authentication Guide	Authorization Guide	Command-Line Security Management Utilities	Configuring Parameter File Reference
<u>Data Integrity</u> <u>Guide</u>	Encryption Guide	High Availability Guide	Installation Guide	InterSystems Error Reference
Monitoring Guide	Orientation Guide for Server-Side Programming Guide	Scalability Guide	Securing Your Instance	Specialized System Tools and Utilities
System Administration Guide	System Management and Security	TLS Guide	Web Gateway Guide	

#### **Practice Questions**

1) Your Information Security Officer has created a security baseline configuration document for InterSystems IRIS instances.

The document contains the statements listed in the choices.

Which of the following statements is considered to be a security best practice?

Manually restrict the permissions on all executables
 Manually modify the user that owns the executables
 Enable the Locked Down security option in the Management Portal
 Disable the Private Apache Web Server

2) Which TWO of the following choices typically consume the SMALLEST total amount of memory (RAM) on a large, busy system that is properly configured?		
Journal buffers		
Routine buffers		
Operating system		
User processes		
Global buffers		

3) W	hich of the following statements is true about InterSystems IRIS license servers?
0	If you are running InterSystems IRIS servers on multiple hosts, a license server must be configured to run on each host.
0	A license server must be configured to use a multiserver license on multiple InterSystems IRIS servers.
0	Multiple instances with different license keys and running on different platforms can NOT use the same license server to coordinate licensing.

O You must configure a license server if you are managing multiple instances on the same machine.

- 4) You are managing an instance of InterSystems IRIS.
  - The database has default expansion settings and unlimited maximum size.
  - The current database size is 50 MB.
  - There are 100 GB of free disk space.

How	How much will the database automatically expand the next time, and why?		
0	6 MB; the default expansion size is 12% of the total size		
0	10 MB; the minimum expansion size is 10 MB		
0	1 GB; the default expansion size is 1 GB		
0	12 GB; the default expansion size is 12% of the remaining space		
0	Insufficient information; the default expansion size is 12% larger than the previous expansion		

5) W	hat is the primary function of the ^JOBEXAM utility?
$\circ$	Inspect user and system processes
0	Determine the growth rate of globals
0	Collect basic performance data
0	Diagnose where time is spent executing selected code in routines

- 6) You are configuring the journal settings in an instance of InterSystems IRIS. You know the following information:
  - there are 5 days between snapshot backups, and
  - it takes 1-3 days to verify backups, including an integrity check.

How many days of journal files need to be retained to recover from a detected database degrade (i.e., what should you replace ANS with in the screenshot below)?

# Journal Settings Save Cancel

### Use the form below to configure journal settings:

Primary journal directory	/jrn/primary	Browse
	Required.	
Secondary journal directory	/jrnAlt/secondary	Browse
Start new journal file every (MB)	1024	
	Required.	
Journal file prefix		
When to purge journal files	After this many days ANS	
	Required. (0 - 100)	
	After this many successive backups 0	
	Required. (0 - 10)	
	If both numbers are defined as nonzero, purging occurs when either cond	lition is met.
Freeze on error		
Journal Web session		
Write image journal directory		Browse
3.,	Activating a WIJ directory change on cluster members requires restart.	
Target size for the wij (MB) (0=not set)	0	
	Required.	

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- n 3
- n 5
- n 6
- n 9
- 13

	7) You are investigating a performance problem in an application, and you wish to identify the busiest routines, and also the lines of code where the busiest routines spend the most amount of time.		
Whic	Which TWO of the following actions are the most suitable for gathering this information?		
	Use the ^BLKCOL utility from the IRIS command prompt		
	Use the ^%SYS.MONLBL utility from the IRIS command prompt		
	Use the ^JOBEXAM utility from the IRIS command prompt		
	Use the ^PERFMON utility from the IRIS command prompt		
	Use the ^mgstat utility from the IRIS command prompt		

,	ou are asked to set-up a mirror that provides high availability through automatic failover in case of a er outage.
Whic mirro	ch TWO of the following features are NOT required by InterSystems when setting up the described or?
	Mirror service enabled
	Two failover members
	TLS configured
	An arbiter
	Virtual IP
	ISCAgent

9) Which of the following statements describes an appropriate sequence of steps to follow to upgrade an Enterprise Cache Protocol (ECP) application server ahead of the database server?		
$\circ$	Upgrade the application server, then recompile the code on the database server.	
0	Recompile the code, then place a copy of it on the application server, then upgrade.	
0	Place a copy of the code on the application server and compile it, then upgrade the application server.	
0	Compile the code on an already upgraded instance, then upgrade, then place a copy of upgraded code on the application server.	

	10) You are planning on producing a zero-downtime external backup of a journaled database using an external snapshot utility.		
Wł	nich of the following actions should be performed immediately before you take the snapshot?		
C	Switch the journal file		
C	Dismount the database		
C	Freeze writes to the database		
C	Disable journaling for the database		
С	Perform a database integrity check on the database		

	Vhich of the following statements is true in a default instance of InterSystems IRIS with a Normal or a ed Down initial security configuration?
$\circ$	Audit information is available in the IRISAUDIT database.
$\circ$	If auditing is enabled, the system will freeze automatically if the audit database encounters an error.
$\circ$	Database activity (such as inserts, updates, or deletes for a table) is automatically audited.
0	Auditing is disabled in a default instance with this initial security configuration.

12) You have been asked to configure an InterSystems IRIS Web Gateway to connect to your IRIS instances using mutual TLS encryption.

Which of the following statements is true about implementing the Web Gateway configuration described above?

- The SSL libraries (libssl.so and libcrypto.so) in use by the IRIS Web Gateway must be compatible with the Web Server, and with those in use by the InterSystems IRIS superserver.
- The InterSystems IRIS superserver must be configured to require TLS encryption.
- In the InterSystems IRIS Web Gateway, the server's connection security level must be changed to SSL/TLS, certificates and keys must be supplied, and the username/password removed.
- The %Service\_WebGateway service in InterSystems IRIS must allow encrypted connections.

### **ANSWERS**

- 1) Disable the Private Apache Web Server
- 2) Journal buffers
  - Routine buffers
- 3) A license server must be configured to use a multiserver license on multiple InterSystems IRIS servers.
- 4) 10 MB; the minimum expansion size is 10 MB
- 5) Inspect user and system processes
- 6) 9
- 7) Use the ^%SYS.MONLBL utility from the IRIS command prompt Use the ^PERFMON utility from the IRIS command prompt
- 8) TLS configured
  - Virtual IP
- 9) Compile the code on an already upgraded instance, then upgrade, then place a copy of upgraded code on the application server.
- 10) Freeze writes to the database
- 11) Audit information is available in the IRISAUDIT database.
- 12) The SSL libraries (libssl.so and libcrypto.so) in use by the IRIS Web Gateway must be compatible with the Web Server, and with those in use by the InterSystems IRIS superserver.