

IBM

Exam C4040-109

Virtualization Technical Support for AIX and Linux - v2

Version: 7.1

[Total Questions: 180]

Topic break down

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Topic 1, Volume A**Question No : 1 - (Topic 1)**

An administrator is planning to deploy multiple AIX LPARs onto a Power 770. These LPARs will be served with Virtual SCSI storage from a pair of VIO Servers (VIOS). What consideration should be considered with regard to VIOS configuration to ensure suitable performance of the virtualized storage?

- A. Allocate sufficient CPU processing capacity.
- B. Provide sufficient memory allocation.
- C. Assign each virtual disk on a unique virtual SCSI adapter.
- D. Set the hcheck_mode attribute on the vSCSI disks.

Answer: A

Question No : 2 - (Topic 1)

A secondary site is being deployed for application availability and site failover. Servers of identical model and type have been ordered and delivered to the new location.

Additional PowerVM activation keys were obtained for the original location to allow more than 32000 WWNs and enable Active Memory Sharing (AMS).

How can the duplicate systems be updated to enable these additional features?

- A. Create a system plan of the existing configuration and deploy this to the duplicate configuration.
- B. The activation keys must be exported using the PowerVM option within the Capacity On Demand (CoD) panel on the HMC.
- C. Activation keys are generated for a specific system and must be generated for each new server in the failover site.
- D. Contact IBM Support to generate the one-time password required to administer the PowerVM activation keys.

Answer: C

Question No : 3 - (Topic 1)

While reactivating client LPARs following a scheduled power down, some LPARs have lost visibility to their NPIV-allocated SAN LUNs. On investigation it appears the WWNs have changed on the problem LPARs. What is the most likely cause for the change in WWN?

- A. The option to randomly assign WWNs for security reasons has been selected.
- B. The NPIV adapters on the VIOS LPARs were not tagged as being "required for partition activation."
- C. The virtual Fibre Channel client adapters were dynamically allocated to the LPARs before being added to the partition profile.
- D. The WWNs will have changed due to the recycle of the Hypervisor. The `chsyscfg -r` command should be used to recover the previously allocated WWN.

Answer: C

Question No : 4 - (Topic 1)

A Linux LPAR is configured using 802.1Q.

The virtual Ethernet device is configured as an 802.1Q compatible adapter and has VLAN ID 5 configured in the 802.1Q additional VLAN field.

The administrator runs the following commands on the Linux LPAR shell without errors:

```
vconfig add eth0 5ifconfig eth0 10.0.0.2 netmask 255.255.255.0
```

When the administrator tries to ping 10.0.0.1, the request times out.

What is the problem?

- A. The VLAN ID should be in the VLAN-ID field in the virtual Network device configuration.
- B. The administrator is using the incorrect Ethernet device.
- C. The 8021q module is not loaded.
- D. The 802.1Q interfaces are not supported on Linux on Power Systems servers.

Answer: A

Question No : 5 - (Topic 1)

An AIX LPAR has a disk drive known as hdisk17. The administrator would like to change the name of the disk to redolog0. Which command will achieve this?

- A. `rendev -l hdisk17 -n redolog0`
- B. `mv /dev/hdisk17 /dev/redolog0`
- C. `chdisk -dev hdisk17 -id redolog0`
- D. `chdev -l hdisk17 -a name=redolog0`

Answer: A

Question No : 6 - (Topic 1)

A virtual adapter with IEEE 802.1Q enabled for multiple VLANs has been created on a new VIO Server. This has been turned into a Shared Ethernet Adapter (SEA) but the SEA is not passing the tagged traffic to the outside world. Which of the following actions, when taken on the VIO Server, will fix the issue?

- A. Set the trunk priority is to 1.
- B. `mkvdev -vlan ent[Ethernet device] -tagid [VLAN ID]` for each PVID.
- C. Re-create the SEA with `-vlan [VLAN ID]` option.
- D. `chvdev -sea en[Ethernet interface] -vlanid [VLAN ID]`.

Answer: B

Question No : 7 - (Topic 1)

A customer is planning to purchase a fully populated Power 795. There are 65 applications which need to run and all need an AIX 7 environment. The architect is considering whether to use an LPAR for each application or to use a single large LPAR and have a WPAR for each application.

What must be considered before creating the environment?

- A. There is a limit of 64 WPARs in any AIX V7 global environment.
- B. An activation key for LPARs with more than 128 processors is required.
- C. There is a limit of 32 Processors in a WPAR.
- D. Multiple IVE adapters are required to support all the partitions.

Answer: B

Question No : 8 - (Topic 1)

What Shared Ethernet Adapter environment can be implemented to prevent client network outages when the Virtual I/O server needs to be shut down for maintenance?

- A. Shared Ethernet Adapter failover
- B. Link Aggregation on the Virtual I/O Server
- C. Etherchannel on the Virtual I/O Server
- D. Live Partition Mobility

Answer: D

Question No : 9 - (Topic 1)

The administrator of a Power 740 is attempting to define an IVE port as promiscuous for a new VIO server. All LPARs using the IVE port have been shut down, but the administrator still receives a message stating that the VIO server cannot be designated as the promiscuous LPAR. What steps can be performed to enable the IVE port as promiscuous for the VIO server?

- A. Power off the Managed System and reactivate it.
- B. Remove the IVE configuration from the existing LPARs and reactivate them.
- C. Set the promiscuous setting to "none" and save the setting before attempting the operation again.
- D. Change the MCS value from 16 to a lower value.

Answer: B

Question No : 10 - (Topic 1)

During the migration of a partition that uses Active Memory Sharing (AMS) the following error is received:

HSCLA304: A suitable shared memory pool for the mobile partitions was not found on the destination managed system...

Which of the following is the most probable cause?

- A. The source is using redundant VIO server paging partitions and the destination has only one paging VIO server partition in the shared memory pool.
- B. The source and destination servers have different Logical Memory Block sizes.
- C. The shared memory pool on the destination is larger than that specified on the source.
- D. The available paging devices on the destination are all marked as redundant capable.

Answer: B

Question No : 11 - (Topic 1)

An architect is designing a new POWER7 implementation consisting of a VIO Server (VIOS) and 6 AIX partitions.

AIX partitions need to occasionally access a tape drive for restoration and backup of application data and tape access will not be required by more than one partition at any time.

The performance of the solution is not critical and the architect wants to keep the cost to a minimum.

Which of the following configurations will address the architect's requirements?

- A. Allocate a SCSI tape drive to the VIOS partition.
Virtualize connections from the tape drive to the AIX clients using vSCSI.
- B. Allocate a FC tape drive to the VIOS partition.
Virtualize connections from the tape drive to the AIX clients using NPIV.
- C. Allocate a USB tape drive to the VIOS partition.
Virtualize connections from the tape drive to the AIX clients using NPIV.
- D. Allocate a SAS tape drive to the VIOS partition.
Virtualize connections from the tape drive to the AIX clients using vSCSI.

Answer: D

Question No : 12 - (Topic 1)

During the validation of a planned partition migration between managed servers, the following error message is displayed: HSCLA297 The DLPAR Resource Manager (DRM) capability bits 0x0 for mover service partition (MSP) VIOS indicate that partition mobility

functions are not supported on the partition. What is the most likely cause of this error?

- A. An RMC error has occurred on one of the VIOS partitions.
- B. The mobile partition has an HEA logical port configured.
- C. There is a mismatch in VIO Server versions between the two systems.
- D. The network connection to the mobile partition is not working.

Answer: A

Question No : 13 - (Topic 1)

Which of the following are advantages of configuring a management IP address on a VIO Server?

- A. Allows trunking on the SEA failoverAllows DLPAR of CPU and MemoryAllows network based OS upgrades
- B. Allows the VIO Server to be used as an MSPAllows VIO Server management without access to an HMCAllows browser-based access to ASMI
- C. Allows DLPARAllows network based OS upgradesAllows VIO Server management without access to an HMC
- D. Allows a control channel to be used on SEAsAllows for the use of Live Partition MobilityAllows for security inside a hostile network

Answer: C

Question No : 14 - (Topic 1)

Which of the following provides resilience when dynamically allocating CPU and memory resources on IBM Power Systems servers?

- A. PowerHA System Mirror for Virtualization
- B. PowerVM Enterprise Extended Edition
- C. Redundant VIO server partitions
- D. Redundant Hardware Management Consoles

Answer: D

Question No : 15 - (Topic 1)

An administrator has a hardware environment including POWER5, POWER6 and POWER7 architectures. A requirement exists to improve availability across all platforms without additional costs. What technology should be considered?

- A. Live Application Mobility
- B. Live Partition Mobility
- C. Multiple Shared Storage Pools
- D. Resource Monitoring and Control

Answer: A

Question No : 16 - (Topic 1)

A partition that uses an LHEA for network connectivity needs to be moved to another managed system. The administrator has the LHEA configured in an Etherchannel with a virtual Ethernet adapter as the backup adapter. When attempting to perform the migration using the Migration Wizard, it fails. What is necessary for the migration to be successful?

- A. The HMC command line interface needs to be used to perform the migration.
- B. The migration must be initiated from the operating systems of the mobile partition.
- C. The LHEA must be removed from the Etherchannel before the migration.
- D. The destination server does not have an LHEA available for the migration.

Answer: B

Question No : 17 - (Topic 1)

An administrator would like to perform a Live Partition Mobility (LPM) operation between two systems. The source system has been configured with a single VIO Server (VIOS) partition and the destination system has been configured with dual VIO server partitions. What must be considered when planning for LPM?

- A. A second VIO Server partition must be configured on the source system to allow for LPM.
- B. An LPAR must be configured on the target system before the LPM operation is invoked.
- C. Device-level virtualization provided by the single VIOS of the source system must be matched by both of the dual VIOS on the target system.
- D. Access to all the disk data must be completely provided by at least one of the destination VIO Server partitions.

Answer: D

Question No : 18 - (Topic 1)

An architect is looking at the implications of uncapped weights for a new POWER7 system. The system will consist of four uncapped logical partitions with the following weightings:

LPAR Weight

A	125
B	150
C	100
D	125

Assuming all partitions have equal entitlement and virtual processor configurations in the partition profiles, and request additional resources from the shared processor pool over a period of 1000 cycles, how many cycles will be allocated to LPAR B?

- A. 150
- B. 250
- C. 300
- D. 1000

Answer: C

Question No : 19 - (Topic 1)

A system with two WPARs is reaching the memory limits imposed on them. Both have been set to a hard limit of 50%.

WPAR1 has a peak from 8am-10am of 70% memory resources

WPAR2 has a peak from 2pm-6pm of 65% memory resources

At peak times the system may kill processes which request more memory, as paging space