

Exam : C4040-109

Title : Virtualization Technical
Support for AIX and Linux -
v2

Version : Demo

1.An administrator is attempting to configure a new deployment of 56 POWER7 Blades across 4 IBM BladeCenter H chassis. Each blade will be installed with an IVM and 2 LPARs.IVM is installed and the administrator checks that both LHEA ports are reporting a Link State of "Up." 2 LPARs are created and the network traffic balanced by allocating one LHEA port to the first LPAR, the second port to the other. After successfully installing the first LPAR via NIM, the administrator finds the second LPAR fails to netboot.

What should the administrator verify on the BladeCenter Chassis?

- A. That 4 power supplies (PSU) have been installed.
- B. That both the external LHEA ports have been cabled.
- C. That a secondary I/O module has been installed and cabled.
- D. That the Multi-Core Scaling (MCS) attribute is correctly set on both LHEA ports.

Answer: C

2.An administrator has a requirement to back up a VIO server (VIOS) so that it can be rebuilt in the event of a disaster.

Which set of actions will achieve this requirement.?

- A. Backup all non rootvg volume groups using savevg. Backup all Storage Pool Information. Run a mksysb of the system.
- B. Save "Upgrade Data" on the HMC. Backup all non rootvg volume groups using savevg. Run a mksysb of the VIOS with the -U flag.
- C. Backup non rootvg structures using savevgstruct. Capture virtual mappings to a file using viosbr. Run a backupios
- D. Capture the virtual network tuning to a file using the optimizenet command. Capture all virtual device attributes to a file using the lsattr command. Run a backupios.

Answer: C

3.An administrator must remove any installed efices before attempting to install a new VIO Fix Pack.

Which VIO command will advise if any VIO efices are actually present?

- A. lspp
- B. emgr
- C. lssw
- D. oem_platform_level

Answer: C

4.Requirements for a disaster recovery site are being collected. When considering restoring a VIO Server mksysb to disaster recovery hardware,

what is required to ensure automatic virtual device recreation?

- A. LPAR profiles must be accurately recreated on the foreign machine
- B. Backups of both mksysb and user-defined structures are required from the VIO Server
- C. The foreign machine must be of the same model and type
- D. Configuration of the existing HMC needs to be preserved

Answer: A

5.When attempting to install a VIO client using NIM, an administrator finds that no disks are available for installation. The disks are provided by NPIV through the virtual Fibre Channel adapter as described here:

Name	Physloc	ClntID	ClntName	ClntOS
vfchost3	U9117.MMB.104200P-V2-C35	11	VIOclient	AIX

Status:LOGGED_IN
 FC name:fcs1 FC loc code:U78C0,001,DBJ8223-P2-C2-T2
 Ports logged in:3
 Flags:a<LOGGED_IN,STRIP_MERGE>
 VFC client name:fcs1 VFC client DRC:U9117.MMB.104200P-V11-C35-T1

Which of the following explains why is the administrator unable to see the disks?

- A. The virtual fibre channel device has not been assigned to the client.
- B. The HBA on the VIO server is not connected to the SAN.
- C. The fibre device drivers are missing from the SPOT.
- D. The LUNs have been incorrectly zoned.

Answer: D

6.Which of the following is required to support AME?

- A. AIX LPARs
- B. Virtual I/O Server
- C. A maximum of 4GB of RAM per LPAR
- D. On-demand memory feature enabled

Answer: A

7.What tool can an architect use to determine which is the smallest POWER7 server that will provide equal or better overall performance than a POWER5 570?

- A. Facts and Features Guide
- B. LPAR Validation Tool
- C. Configurator for eBusiness
- D. Server Magic

Answer: A

8.A Power 720 is being used to build 2 environments: Test and Production, with 2 LPARs in each environment. Processor resources must be separated between the Test and Production environments to reduce possible contention, while still being able to share processor resources inside each own environment.

What are the two features required, as a minimum, to accomplish this? (Select 2)

- A. IVM
- B. HMC
- C. PowerVM Express
- D. PowerVM Standard
- E. IVE
- F. IBM Systems Director

Answer: B,D

9.An administrator has the following configuration on a VIO Server:

ent0 and ent1 are Physical ports made into an EtherChannel ent3
ent2 is a virtual device
ent4 is a SEA mapping virtual device ent2 to ent3

The administrator runs the `entstat -d ent3` command to analyze EtherChannel statistics and receives this error:

entstat: 0909-003 Unable to connect to device ent3, errno = 19

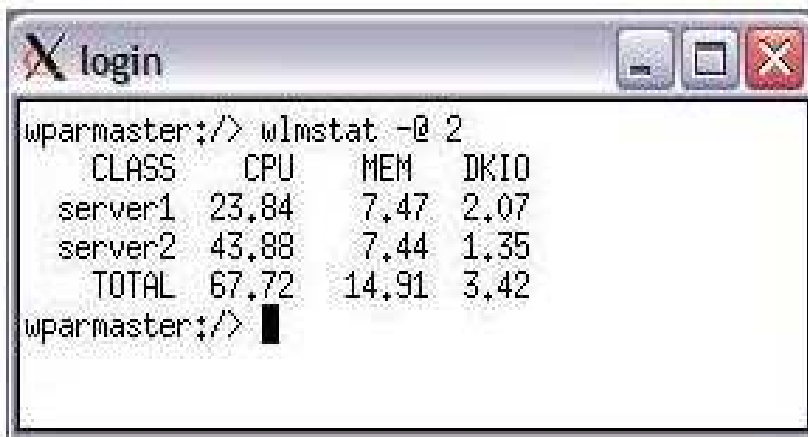
Why is this error being displayed?

- A. ent3 is configured as 'standard' instead of '802.3ad'
- B. ent3 is a LHEA port and requires the -L flag
- C. ent3 has no interface connected
- D. ent3 is controlled by the SEA

Answer: D

10.The `wlmstat -@ 2` command has been run from a global environment with the following results:

What action can an administrator take to set limits, so that both server1 and server2 use the same amount of CPU resources?



```

login
wparmaster:/> wlmstat -@ 2
  CLASS   CPU    MEM  DKIO
server1  23.84    7.47  2.07
server2  43.88    7.44  1.35
  TOTAL  67.72   14.91  3.42
wparmaster:/>
    
```

- A. Use the `cpu_deallocate -P` command to reduce the CPU resources on server2
- B. Use the `chsysres` command to assign the same CPU attributes to both servers.
- C. Use the `chwpwr -R` command to set the CPU attributes for each server.
- D. Use the `syncwpwr -E` command to copy the CPU resource allocation from server1 to server2.

Answer: C

11.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

12.What will cause a broadcast storm when configuring redundant VIO servers with SEA failover?

- A. The secondary SEA is brought online before the configured primary SEA.
- B. A mismatch of defined VLANs between the primary and secondary SEA.
- C. The secondary SEA is created before enabling failover on the primary SEA.
- D. Incorrect EtherChannel configuration on one SEA

Answer: C

13.How can an existing AIX 5.2 LPAR, which is using SAN storage, be migrated into a versioned WPAR (Workload Partition)?

- A. Using LPM, but downtime will be required.
- B. Dynamically using LAM.
- C. Backup and restore a mksysb.
- D. Rezone the SAN storage and use NPIV.

Answer: C

14.An LPAR is configured using Virtual IO. It has two Virtual SCSI adapters, connecting it to two VIO servers.

The disks presented over Virtual SCSI are available across both Virtual SCSI adapters (2 paths). Assuming 20 disks are required, what is the maximum recommended queue depth to maximize performance?

- A. 20
- B. 22
- C. 510
- D. 512

Answer: A

15.An administrator is preparing to upgrade the environment's dual Virtual I/O servers (VIOS) from V1.2 to V2.1

What must be considered in preparation for this upgrade?

- A. All client LPARs must be shutdown as both VIO servers have to be upgraded to V2.1 at the same time.
- B. The VIOS must be upgraded to the latest fixpack of V1.5 before upgrading to V2.1.
- C. The only upgrade method that will be supported is using NIM because the current VIOS is lower than V1.3.
- D. VIOS V2.1 requires AIX clients to be running AIX V6.1 at a minimum.

Answer: B

16.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:

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?

LPAR Weight

A	125
B	150
C	100
D	125

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

Answer: C

17.Which interface must be used to provide virtualization of tape library devices to client LPARs?

- A. USB
- B. LTO
- C. Virtual SCSI
- D. Virtual Fibre Channel

Answer: D

18.An administrator is creating several LPARs on a new Power Systems server. The administrator knows that Live Partition Mobility (LPM) will be used to distribute the workload between this new machine and several others in the environment.

In addition to ensuring all storage is allocated through Virtual IO servers, what else must the administrator take into consideration when creating the new LPARs?

- A. LPAR names in the environment must be unique.
- B. Redundant error path reporting must be configured.
- C. Only LPARs belonging to the same workload group can be moved between servers.
- D. The Virtual IO server code level must be the same across all servers.

Answer: A

19.An administrator is performing a Live Partition Mobility (LPM) operation between two servers managed by different HMCs.

While monitoring the performance of the partition, the virtual console window suddenly closes. What is the most likely cause?

- A. The virtual console is controlled by the HMC and closes when the second takes control of the partition.
- B. The virtual console is a connection to the FSP of the physical server and closes when the LPAR migrates.
- C. The SSH keys have not been exchanged between HMCs.
- D. The FSP has the MAC address for the first HMC cached in NVRAM.

Answer: B

20.An administrator is designing a new system for their existing batch environment. The current system is a POWER5 570 with 16 cores and 128GB of RAM with a single LPAR running AIX 5.3. It takes 12 hours to run their large batch job which is heavily CPU bound on 4 the available CPUs.

The new system will be a Power 770 with 16 cores, 128GB of RAM and the LPAR will run AIX 6.1.What

should be done to maximize the batch performance?

- A. Activate TurboCore mode during batch processing
- B. Disable Simultaneous Multi-threading
- C. Disable Multiple Shared Processor Pools
- D. Set the processor compatibility mode to POWER7

Answer: B