

Exam : IBM 000-180

Title : P5 and PSeries Enterprise
Technical Support AIX 5L

Update : Demo

1. A customer has several AS/400 servers in their IT infrastructure running V5R2 that they wish to consolidate. The customer wants to simplify their environment and install i5/OS on a p5 590 with 16 1.65GHz processors and 20 i5/OS partitions. The customer plans to use the Advanced Power Virtualization to share their storage, processors, and memory. What considerations and limitations should be reviewed with the customer before the purchase?

A.Resources cannot be shared with an i5 partition when it is put on a pSeries. The i5 partition needs its own 9411-100 tower because of IOP. V5R3 OS or later is required. There is a maximum of two partitions in a 590.

B.Resources cannot be shared between partitions when i5/OS is put on a pSeries. The i5 partition needs its own 9411-100 tower because of IOP. i5/OS can be at V5R2 or a V5R3. Currently only one i5 partition is allowed.

C.V5R3 is required for the i5 partitions. Virtual IO Server is not supported for the i5/OS partitions to share storage. Up to 10 i5 partitions per processor are allowed (a maximum of two processors for up to 20 partitions).

D.Processor and memory resources can be shared between AIX 5L, Linux and i5/os partitions. i5/OS needs to be at V5R3, and Virtual IO Server is not supported for the i5/OS partition to share storage. On a 1.65 GHz POWER5 p5 590 there is a maximum of one partition.

Answer: C

2. A customer wants to use Virtual SCSI disks to boot multiple operating systems from the same disk. How will the volumes appear in the Virtual IO Server and how will the logical volumes appear in the partition?

A.The Virtual SCSI disks are defined as logical volumes in the Virtual IO Server. The logical volumes appear as real devices (hdisk) in the client partitions.

B.The Virtual IO adapters are connected to a virtual host bridge. On the Virtual IO Server they are vdisks, on the client partition, the exported disks are visible as virtual disks.

C.The Virtual SCSI disks are represented in the ODM as a bus device whose parent is sysplanar0. Logical volumes will be assigned to the Virtual IO Server and virtual disks, vdisks, in the client partition.

D.The Virtual IO adapters are represented as adapter devices with the virtual host bridge as their parent.

On the Virtual IO Server they are vdisks attached to vscsi, on the client partition the exported disks are visible as virtual disks.

Answer: A

3. A customer has purchased a p5 590 with 16 CPUs. To run Simultaneous Multi-Threading (SMT) with a 4-way virtual processor partition with 2.0 processing units of entitlement, how many logical CPUs will be allocated?

A.8-way logical CPU partition, where each logical CPU has the power of 25% of a logical processor

B.4-way logical CPU partition, where each logical CPU has the power of 50% of a physical processor

C.8-way logical CPU partition, where each logical CPU has the power of 25% of a physical processor

D.16-way logical CPU partition, where each logical CPU has the power of 25% of a physical processor

Answer: C

4. A customer wants to buy a new p5 570 running AIX 5.3. The applications require 4 processors and 8GB of memory. There is a requirement to have a Virtual IO Server. What is the smallest p5 570 that should be sold to this customer?

A.4 processors 8GB of memory

B.5 processors 8GB of memory

C.4 processors 10GB of memory

D.5 processors 10GB of memory

Answer: D

5. A customer has just installed a p5 595 with four uncapped LPARs in a shared processor pool. The system and profile settings are still in their default states. One of the LPARs has an application that is consuming all of the available shared processor resources. Users of this application are complaining about response time. Which of the following changes to the slow LPAR would improve response time?

A.Enable SMT

B.Reduce the weight

C.Renice the process

D.Increase the weight

Answer: D

6. A customer has restored their mksysb. They notice that the external volume groups cannot be seen. What should be done to access the volume groups?

- A.Run importvg command
- B.Run synclvodm command
- C.Recreate volume groups
- D.Update /etc/filesystems

Answer: A

7. A customer is purchasing a p5 595 as part of a large server consolidation. They are planning on using micropartitioning and Virtual IO to consolidate small machines. They used the rPerf numbers for AIX 5.3 to size their solutions. They discovered that their application is not yet certified on AIX 5.3, so they will have to use AIX 5.2. What changes should be made to their configuration?

- A.Increase memory
- B.Add more adapters
- C.Increase both processors and adapters
- D.Increase the number of processors by 20 - 30%

Answer: C

8. A customer is moving their application to a p5 590 and at the same time moving to a new version of the application. The customer knows only about the resource requirements of the old version. Which of the following is the best method to migrate their application to POWER5?

- A.Add CPU and memory COD so they have room to grow if required
- B.Make the server configuration twice as large as the current requirement
- C.Configure the server for the current capacity requirements
- D.Make the server configuration a little larger than the current capacity requirements

Answer: A

9. A large customer is consolidating their pSeries systems onto a p5 590. They will have a requirement for a single device (disk, lun) to have multiple paths through different adapters in a single LPAR. The primary applications were written for AIX 5.2. Which of the following would be the recommended solution to satisfy this requirement?

- A. Assign the adapters to a Virtual IO partition
- B. Use the MPIO function included in AIX 5.2
- C. Migrate the application to AIX 5.3 and use the MPIO function
- D. Set up two Virtual IO partitions and attach both partitions to the device

Answer: B

10. A customer has a requirement for an LPAR in their p5 595 to run SUSE Linux. They also require an adapter that is not currently supported in Linux. Which of the following would be the best solution to recommend?

- A. Assign the adapter to an IO Hosting partition
- B. Use AIX 5L affinity to move the application from SUSE to AIX
- C. Use AIX 5.3 drivers to install the adapter in the Linux LPAR
- D. Assign the adapter to an AIX 5.3 partition running Linux Affinity

Answer: A

11. A customer has seven days of vmstat data on four p5 590 production LPARs of four processors each. The data shows that all four LPARs have periodic utilizations of 90-95% lasting several minutes in duration. However, the average utilizations of the four LPARs were between 15-30%. The vmstat data shows that the peak utilizations of each LPAR do not occur at the same time. Which of the following should be set up?

- A. A shared pool with four capped LPARs
- B. A shared pool with four uncapped LPARs
- C. Four dedicated LPARs and use DLPAR to manage resources effectively
- D. The server in SMP mode and use WLM to manage resources effectively

Answer: B

12. A customer has seven days of vmstat data on a p5 590. The server has a total of four test/dev LPARs and 4 production LPARs of one processor each. On the four test/dev LPARs, the data shows 90-95% peak utilizations with a duration of from 5 to 10 minutes. The average utilizations of all LPARs were between 15-30%. All of the applications have different times when they peak. What is the best configuration to fully utilize the processor resource?

- A. Set up the server in SMP mode and use WLM to manage resources effectively
- B. Set up eight dedicated LPARs and use DLPAR to manage resources effectively
- C. Set up a shared pool with eight capped LPARs including production and test/dev
- D. Set up a shared pool with eight uncapped LPARs with priority weight to Production

Answer: D

13. A customer is purchasing a p5 590 which was configured with 60 Amp line cords. They have just indicated that their large datacenter is already wired for 100 Amp power circuits in the location where the server will be installed. What would be the recommended action?

- A. Use the 60 Amp line cords
- B. Change the 100 Amp connector to a 60 Amp circuit
- C. Submit an RPQ to order the p5 590 with 100 Amp power cords
- D. Change the configuration and order the p5 590 with the 100 Amp power cords

Answer: D

14. A customer is purchasing a 64-way p5 595. They have determined the location for the server is in a datacenter which does not have a raised floor. Which of the following would best meet the server requirements?

- A. The server must be installed into a location with a raised floor for optimum system cooling and cable management.
- B. The server should be purchased as a p5 590 and then upgraded to a p5 595. This will eliminate the need for a raised floor environment.

C.The server should be purchased as 32-way p5 595 and then upgraded to a 64-way. This will eliminate the need for a raised floor environment.

D.The server can be installed into a location without a raised floor if an RPQ is obtained. It is a strong IBM recommendation for a raised floor, not a requirement.

Answer: A

15. A customer has plans to deploy a large database solution. Their primary requirement is minimal user access downtime. They are comparing a single server implementation with a two server deployment.

What solution would they use to avoid downtime for OS software maintenance?

A.Apply OS updates once a year

B.Utilize a GPFS cluster solution

C.Implement a two server deployment with HACMP

D.Install a single server implementation with HACMP failover to a second LPAR

Answer: C

16. A customer wants to deploy WebSphere in an HACMP environment, running on two servers in LPARs.

These servers will also host the test and dev LPARs. The customer would like to use the test and dev resources to support an HACMP failover. What is the best way to accomplish this task?

A.Run the test and dev LPARs in an uncapped mode

B.Activate COD resources if a failover should occur

C.Use DLPAR to move resources between the test and dev and the HACMP LPAR

D.Stop the test and dev environments, bring up new profile for HACMP failover

Answer: C

17. When doing the Solution Assurance for a p5 570 with several LPARs, it is discovered that the customer plans to back the system up using mksysb. The customer would like to do unattended automated system backups and incorporate them into their off-site data recovery system. Which mksysb solution should be implemented?

A.A local DVD-ROM drive

B.A NFS mount on a NIM Master

C.A SSA disk array and mirror the data

D.A local tape drive and use DLPAR to move the tape to each LPAR

Answer: B

18. A current Sun Solaris customer has just purchased their first p5 590. During the Solution Assurance, the backup requirements were discussed. Which of the following should be recommended to the customer with regards to restoring rootvg?

A.mksysb

B.restvg

C.AIX install CDs

D.Veritas NetBackup

Answer: A

19. A customer has the following:

If the customer has a requirement for all four LPARs to be moved to a p5 590 and assigned to a shared pool, which of the following would best describe the profile requirements?

A.LPARs 1 and 2, capped, SMT on, Weights between 25-30, min CPU 0.1, max CPU 1.0

LPARs 3 and 4, uncapped, SMT on, Weights between 100-130, min CPU 2.7, max CPU 3.0

B.LPARs 1 and 2, capped, SMT on, Weights between 100-130, min CPU 0.1, max CPU 1.0

LPARs 3 and 4, uncapped, SMT on, Weights between 25-30, min CPU 2.7, max CPU 3.0

C.LPARs 1 and 2, uncapped, SMT on, Weights between 25-30, min CPU 0.1, max CPU 1.0

LPARs 3 and 4, capped, SMT on, Weights between 100-130, min CPU 2.7, max CPU 3.0

D.LPARs 1 and 2, uncapped, SMT off, Weights between 25-30, min CPU 0.1, max CPU 1.0

LPARs 3 and 4, capped, SMT on, Weights between 100-130, min CPU 2.7, max CPU 3.0

Answer: A

20. A customer has the following:

If the customer has a requirement for all four LPARs moved to a p5 590 and to have dedicated CPU resources, which of the following would best describe the profile requirements?

A.LPARs 1 and 2, SMT on, min CPU 1.0, max CPU 1.0, desired CPU 1.0

LPARs 3 and 4, SMT on, min CPU 1.0, max CPU 3.0, desired CPU 2.0

B.LPARs 1 and 2, SMT on, min CPU 1.0, max CPU 1.0, desired CPU 1.0

LPARs 3 and 4, SMT on, min CPU 2.0, max CPU 3.0, desired CPU 3.0

C.LPARs 1 and 2, SMT on, min CPU 1.0, max CPU 3.0, desired CPU 3.0

LPARs 3 and 4, SMT on, min CPU 1.0, max CPU 3.0, desired CPU 2.0

D.LPARs 1 and 2, SMT off, min CPU 1.0, max CPU 1.0, desired CPU 1.0

LPARs 3 and 4, SMT off, min CPU 1.0, max CPU 3.0, desired CPU 3.0

Answer: B

21. A customer is considering a large partitioned p5 590 to consolidate several smaller systems in their data center. Due to the complexity of the consolidation, the customer is asking the technical support specialist to give them a report which shows pre order PCI adapter placement and validates them against IBM's recommendations. The concern is that the factory will not install the adapters in the appropriate slots as the customer pre-selected. What IBM tool is available to provide this?

A.LPAR Validation Tool (LVT)

B.Personal Systems Configurator (PSC)

C.IBM Configuration for eBusiness (eConfig)

D.Advanced System Management Interface (ASMI)

Answer: A

22. A customer is planning to do server consolidation on POWER5. The customer has a test environment, a QA environment and a production environment for two applications. Both the test and QA environments are very small and are only utilized when new releases are being developed and tested. They require less than 1 CPU each. Both production applications require 2 CPUs for day-to-day operation and can require up to an additional 2 CPUs each during abrupt peak requirements. What is the best design for the LPARs?

A.Use micropartitioning for test and QA environments, and DLPAR for the production applications

B.Use micropartitioning for test and QA environment, and CPU pooling for the production applications

C.Create standard LPARs for all test, QA, and production applications to keep all partitions separate and isolated.

D.Create DLPAR partitions for all test, QA, and production applications to keep test from disturbing production environment.

Answer: B

23. A system administrator for a business recovery service center needs to test disaster recovery strategies for their clients running Linux. Each client has a different system configuration. Each time a client comes in, the system configuration of the managed system must change. What is the best way to handle this using LPAR?

- A. Create a system profile. Reconfigure the managed system by activating and deactivating the system profiles.
- B. Create one partition profile for each client. Reconfigure the managed system by activating the partition profiles for that client.
- C. Dynamically move processors and memory as needed into each logical partition. Reconfigure the managed system by activating and deactivating partition profiles.
- D. Dynamically move processors and memory into each logical partition on the server if additional resources are needed. Reconfigure the managed system by activating and deactivating the system profiles.

Answer: B

24. A customer is planning a p5 595 running AIX 5L 5.3 LPARs. They would like to design the system using physical resources with maximum resource efficiency. One LPAR requires a peak load of 30 processors during the week with a low of 1 processor required on the weekend. The other LPAR requires only a single processor most of the time, but needs at least 24 processors at the beginning of the weekend to finish its weekly processing in the window allocated. Which of the following solutions is most appropriate to continuously maximize resource use for these two LPARs?

- A. Dynamic LPAR
- B. Workload Manager
- C. Partition Load Manager
- D. Shared Processor Pools

Answer: C

25. A customer is considering a partitioned solution with one of the LPARs utilizing 12 CPUs. Multiple applications will be loaded on this large LPAR. However, the customer wants to ensure some tasks will

have higher priority access to the CPU and memory resources. Which of the following solutions would best satisfy the requirement?

- A. Loadleveler
- B. AIX Workload Manager
- C. Partition Load Manager
- D. Tivoli Provisioning Manager

Answer: B

26. A solution for two batch applications was proposed in a customer meeting. They are currently running in two LPARs on a p690. On a daily basis, both applications use 15% of the machine for their workload, and increase to 100% when their weekly reports are run. Since the reports are not run on the same day, what is the best solution?

- A. COD
- B. DLPAR
- C. One big LPAR
- D. Two separate p690 machines

Answer: B

27. One of the key decision making factors in a very competitive opportunity will be cost. A customer needs an aggregate rPerf rating of 120. What is the best solution?

- A. Two p5 570 16 way 1.9 MHz machines
- B. One p5 590 32 way 1.65 MHz machines
- C. One p5 595 32 way 1.65 MHz machines
- D. Two p5 570 16 way 1.65 MHz machines

Answer: D

28. A customer is considering a partitioned solution which will require cumulative rPerf total of 150. The original sizing came back recommending a 32-way p5 590. However, they have a requirement for future scalability and availability is important. Which of the following would be the best reason to recommend a

p5 595?

- A.The p5 595 would allow for COD
- B.The p5 595 includes the Advanced Power Virtualization hardware and software
- C.The p5 595 is priced the same as the p5 590 given the same number/type of CPUs
- D.The p5 595 performance would be equivalent to the p5 590 given the same number/type of CPUs

Answer: A

29. A customer is buying an application solution that bases its software licensing on the number of CPUs per machine. They will be running two instances of this application and will require 8 CPUs each. A second application is priced based on CPUs per LPAR as well as the class of machine. That application will require 8 CPUs. What is the best hardware to propose to keep the software cost low?

- A.A 24 way p5 595 with 3 LPARs
- B.A 24 way p5 595 with 2 LPARs
- C.One p5 570s 16 way and one p5 570 8 way
- D.One p5 595 12 way active and 12 way inactive, and one p5 570 8 way

Answer: C

30. A customer is about to purchase a POWER5 Enterprise server which requires two Ethernet ports and two disks for each of the four LPARs. It has been configured and validated using the IBM eConfig tool.

Which of the following is very important to verify in addition to the eConfig validation?

- A.Total number of SCSI adapters
- B.Total number of Ethernet adapters
- C.Total number of Ethernet adapters and number of SCSI paths per LPAR
- D.Total number of SCSI paths available and total number of SCSI adapters

Answer: C