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Microsoft

70-690 PRACTICE EXAM

TS: Windows HPC Server 2008

Question: 1

You are a system administrator for your company. Your company has deployed a Windows HPC Server 2008 cluster. The HPC nodes are deployed by using a node template that is configured to deploy Windows HPC Pack on each node. You need to modify the node template so that HPC PowerShell and the HPC Cluster Manager are installed on the new nodes. What should you do?

A. Install HPC PowerShell and the HPC Cluster Manager on the HPC head node.Recreate the node template by using the same settings.
B. Add a Run OS Command task to the node template after the Install HPC Pack task.Configure the Run OS Command task to install the utilities.
C. Add a Unicast Copy task to the node template before the Install HPC Pack task.Configure the Unicast Copy task to copy HPC PowerShell and the HPC Cluster Manager.
D. Add a Unicast Copy task to the node template to copy the utilities.Add a Run OS Command task to the node template to install the utilities.Delete the original Install HPC Pack task.

Answer: D

Question: 2

You administer a Windows HPC Server 2008 cluster. All jobs submitted to the cluster fail. You discover that the nodes communicate successfully. You need to ensure that the jobs can be submitted successfully. What should you do first?

A. Start the HPC Basic Profile Web Service on all nodes.
B. Start the HPC Cluster Manager and enable job Backfilling.
C. Start the HPC Cluster Manager and run the MPI Lightweight throughput test.
D. Start the HPC Cluster Manager and run the job submission diagnostics tool on all nodes.

Answer: D

Question: 3

You administer a Windows HPC Server 2008 cluster for your company. You plan to configure a new node template to deploy the evaluation edition of Windows Server 2008 HPC Edition. You need to ensure that the deployment of nodes that use the template is successful. What should you do?

A. Add a Tag element to the node XML file. Set the value of the attribute of the Tag element to Evaluation.
B. Add a Template element to the node XML file. Set the value of the Name attribute to Evaluation.
C. Add a Template element to the node XML file. Set the value of the Provisioned attribute to False.
D. Add a Template element to the node XML file. Set the value of the ProductKey attribute to a valid Windows Server HPC Edition product key.

Answer: D

Question: 4

You administer a Windows HPC Server 2008 cluster that has 150 nodes. Users report that cluster jobs take longer than normal to complete. You need to calculate the network latency between the nodes. What should you do?

A. Run a serial ring test across all nodes by using the mpipingpong.exe utility.
B. Run the ping command on all broker nodes by using the clusrun.exe utility.
C. Run the etl2otf command on all nodes by using the mpiexec.exe utility.
D. Run the etl2clog command on all broker nodes by using the mpiexec.exe utility.

Answer: A

Question: 5

You administer a Windows HPC Server 2008 cluster. You have recently deployed 10 new nodes to the cluster. Users report that only seven of the new nodes function as part of the cluster. You discover that three new nodes are in the Unknown state. You need to find out the problem that has prevented the three nodes from joining the cluster. What should you do?

A. Run the Connectivity diagnostics tool and view the results of the DNS Name Resolution test.
B. Run the Connectivity diagnostics tool and view the results of the Internode Connectivity test.
C. Run the System Configuration diagnostics tool and view the results of the Required Software Updates test.
D. Run the System Configuration diagnostics tool and view the results of the Application Configuration test.

Answer: C

Question: 6

You are a system administrator for your company. Your company deploys a new Windows HPC Server 2008 cluster. The company requires a record of performance information over time. The record must include link latency and throughput statistics. You need to periodically execute a command that collects the required information. Which command should you run?

A. ping.exe
B. nltest.exe
C. mpipingpong.exe
D. Get-HPCMetric.ps1

Answer: C

Question: 7

You administer a Windows HPC Server 2008 cluster that has 120 compute nodes. The cluster requires 10 additional compute nodes. You manually install Windows Server 2008 Enterprise Edition on 10 new servers and connect them to the cluster networks. You open HPC Management Console, start the Add Node Wizard, and select an option to add preconfigured compute nodes. You discover that the wizard is unable to list any of the new servers. You need to ensure that all the new servers are available for the wizard. What should you do before you restart the wizard?

A. Install HPC Pack 2008 on the new servers and specify the name of the head node.
B. Create a node template that does not include a step to deploy an operating system image.
C. Configure Windows Deployment Services to respond to all preboot execution environment (PXE) requests.

D. Move the computer accounts for the new servers in the same organizational unit (OU) that contains the computer account of the head node.

Answer: A

Question: 8

You administer a Windows HPC Server 2008 cluster. You plan to deploy new nodes to the cluster by using an existing node template. A folder and its files are stored on the head node. You need to ensure that the folder and its files are copied to each node by using the Server Message Block (SMB) protocol. Which task should you add to the node template?

A. Unicast Copy
B. Multicast Copy
C. Mount Share
D. Apply WIM Image

Answer: A

Question: 9

You are deploying a Windows HPC Server 2008 cluster for your company. The cluster head node is configured with a network topology that has compute nodes isolated on a private network. You want to add new servers as compute nodes to the cluster. You open the HPC Management Console, start the Add Node Wizard, and select an option to add compute nodes from an operating system image. You start the new servers and discover that the wizard is unable to display any of the new servers on the Select New Nodes page. You need to ensure that the new servers are displayed on the Select New Nodes page of the wizard. What should you do?

A. Configure the network switches to support the cut-through switching method.
B. Configure Windows Deployment Services on the head node to respond to all preboot execution environment (PXE) requests.
C. Configure the compute node servers for preboot execution environment (PXE) boot from the NIC that is connected to the private network.
D. Prestage computer accounts for the new servers in Active Directory Domain Services.

Answer: C

Question: 10

You administer a Windows HPC Server 2008 cluster for your company. You plan to add new nodes to the cluster by using bare metal provisioning capabilities. You need to ensure the new nodes adhere to your company naming standards. What should you do?

A. Add a naming series to the head node.
B. Modify the NodeConfigurationFile.xsd file.
C. Modify the NodeInfo.xml file to contain an appropriate name for each node.
D. Create a new node template that contains an appropriate name for each node.

Answer: A

Question: 11

You administer a Windows HPC Server 2008 cluster for your company. You plan to use a node XML file to specify the nodes that you want to add to the HPC cluster. You also plan to use a node template named Template1 to deploy the images. You need to configure the node XML file to specify the nodes that will be installed from bare metal. What should you do?

A. Run the Add-HpcImage PowerShell cmdlet and specify the CPath option.
B. Run the New-HpcImage PowerShell cmdlet and specify the CPath option.
C. Add a Provisioned attribute to the Template element and set the Provisioned attribute to True.
D. Add a Provisioned attribute to the Template element and set the Provisioned attribute to False.

Answer: A

Question: 12

You administer a Windows HPC Server 2008 cluster that has 150 nodes. Some nodes are located in remote sites that do not have connectivity to port 3389 of the node. You need to develop a monitoring plan for events from all nodes including newly provisioned nodes. What should you do to view node events from all nodes?

A. Use the Windows Event Viewer on each node.
B. Run the diagnostic tests on all nodes by using the system diagnostics tool.
C. View the events by using the Cluster Administration tool on the head node.
D. View the operations log by using the Cluster Administration tool on the head node.

Answer: C

Question: 13

You administer a Windows HPC Server 2008 cluster. You have recently deployed five new nodes to the cluster. You discover that after deployment, the Heat Map view for all nodes appears shaded and no metrics is reported. You need to ensure that the Heat Map view works correctly. What should you do?

A. Delete and recreate the node template that is used to deploy new nodes.
B. Stop and restart the hpcmanagement and hpcsdm services on the cluster head node.
C. Run the Connectivity diagnostics tool and view the results of the internode connectivity test.
D. Run the System Configuration diagnostics tool and view the results of the DNS Name Resolution test.

Answer: B

Question: 14

You administer a Windows HPC Server 2008 cluster that uses an InfiniBand switch for the application network. The cluster requires five additional compute nodes. The WinOF InfiniBand software is installed on all compute nodes and servers. You install Windows Server 2008 HPC Edition on the five new servers and connect them to the cluster networks. You need to verify whether the OpenIB Network Direct provider is installed on the new compute nodes before you join them to the cluster. Which command should you run on each node?

A. cmtest.exe
B. osmtest.exe
C. vstat.exe -v
D. installsp.exe Cl

Answer: D

Question: 15

You administer a Windows HPC Server 2008 cluster. You have recently deployed three new nodes by using bare metal provisioning capabilities. After deployment, you discover that the new nodes are in the Unknown state. You need to identify the cause of the Unknown state of the nodes. What should you do?

A. View the operations log by using the Cluster Administrator tool.
B. View the event log on the cluster head node by using the Cluster Administrator tool.
C. Run the System Configuration diagnostics tool and view the result of the Application Configuration test.
D. Run the System Configuration diagnostics tool and view the result of the Service Configurations report.

Answer: A

Question: 16

You administer a Windows HPC Server 2008 cluster for your company. You plan to add new nodes to the cluster by using bare metal deployment capabilities. You want to use an existing node that is customized as the template to deploy the new nodes. You need to customize the deployment image to match the existing customized node. What should you do?

A. Edit the NodeConfigurationFile.xsd file.
B. Apply the updates to the existing node template by using the HPC Cluster Manager.
C. Install HPC Pack 2008 on the head node. Then, modify the template on the head node.
D. Run the Sysprep tool on the existing customized node. Then, create a new node template that uses the results of the Sysprep tool.

Answer: D

Question: 17

You are a system administrator for your company. Your company has recently deployed a Windows HPC Server 2008 cluster that uses InfiniBand switched-fabric communications. You plan to customize a node template. You need to ensure that when the customized node template is used to deploy a new HPC node, the InfiniBand network device drivers are installed. What should you do?

A. Add the InfiniBand network device drivers to the setup folder that is used to create the operating system image.
B. Edit the NodeConfigurationFile.xsd file on the head node and specify the location of the InfiniBand network device drivers.
C. Create the template by using an appropriate operating system image. Then, edit the template to add a deployment step that runs the MSIExec.exe command.
D. Create the template by using an appropriate operating system image. Then, edit the template to add a deployment step that runs the ndinstall.exe command.

Answer: D

Question: 18

You administer a Windows HPC Server 2008 cluster. You run the MPI Ping Pong: Quick Check cluster diagnostics test on all cluster nodes. The test executes and displays the result as "Failed". You need to get detailed information about the test execution progress. What should you do?

A. Use the HPC Cluster Manager Operations view.
B. Run the Get-HpcTestResult PowerShell cmdlet.
C. Run the Export-HpcTestResult PowerShell cmdlet.
D. Run the mpipingpong.exe command.

Answer: A

Question: 19

You are a system administrator for your company. Your company plans to install a Windows HPC Server 2008 cluster that has 11 compute nodes. You install the cluster head node and create a domain user account that will be used to deploy the cluster compute nodes. You need to ensure that the account has user rights to create Active Directory computer accounts for all compute nodes. What should you do?

A. Grant the Create global objects user right to the account.
B. Grant the Add workstations to domain user right to the account.
C. Add the account to the Administrators group on the cluster head node.
D. Increase the value of the ms-DS-MachineAccountQuota attribute for the domain.

Answer: D

Question: 20

You are a system administrator for your company. Your companys data center network uses 24-port 10-gigabit switches. Your company deploys a new Windows HPC Server 2008 cluster that has 100 compute nodes in the data center network. You need to configure the switches to support private and application cluster networks. What should you do?

A. Configure a layer 3 routing protocol on the switches.
B. Configure the cut-through switching method on the switches.
C. Configure the fragment-free switch forwarding method on the switches.
D. Configure the multiple VLAN registration protocol (MVRP) on the switches.

Answer: D

Question: 21

You administer a Windows HPC Server 2008 cluster for your company. The cluster has an application that requires custom records for the application network interface in the Hosts file. You add the required names to the Hosts file and synchronize the file on all nodes. You discover that the application is unable to run because the name resolution

for the custom names has failed. You need to configure the name resolution for the custom records in the Hosts file. What should you do?

A. Add the #ManageFile = false command to the Hosts file.
B. Add "#HPC" as a suffix to all manually created records in the Hosts file.
C. Add "#HPC" as a prefix to all manually created records in the Hosts file.
D. Remove the #ManageFile = true command from the Hosts file.

Answer: A

Question: 22

You design a new Windows HPC Server 2008 cluster for your company. You procure servers that have the following ports: Dual 1-Gb Ethernet ports named NIC1 and NIC2 Dual high-speed interconnect ports named IB1 and IB2 Users submit Microsoft Message Passing Interface (MPI) jobs that require optimum performance of the network. You need to ensure that the applications that run on the HPC cluster receive maximum throughput with minimal latency. What should you do?

A. Connect NIC1 to the enterprise network and IB1 to the private network.
B. Connect NIC1 to the enterprise network and NIC2 to the private network.
C. Connect IB1 to the enterprise network, IB2 to the private network, and NIC1 to the application network.
D. Connect NIC1 to the enterprise network, NIC2 to the private network, and IB1 to the application network.

Answer: D

Question: 23

You are a system administrator for your company. Your company deploys a Windows HPC Server 2008 cluster that has a head node installed on a failover cluster. The failover cluster has two servers named Server1 and Server2. You configure the head node on Server1. You discover that in the HPC Management Console, the state of Server2 is set to Unknown. You need to configure the head node on Server2. What should you do?

A. Disable User Account Control on Server2.
B. Initiate a failover of the HPC cluster group.
C. Run the HPC Pack 2008 setup on Server2.
D. Run the Set-HpcNodeState cmdlet on Server2.

Answer: C

Question: 24

You are a system administrator for your company. Your company network includes a DHCP server. You install a new Windows HPC Server 2008 cluster that has compute nodes isolated on a private network. The cluster compute nodes are configured for automatic IP address assignment. You also create a new DHCP scope for the private network on the DHCP server. You need to configure the cluster to support automatic IP address assignment for the compute nodes from the new DHCP scope. What should you do?

A. Add the cluster head node to the list of authorized DHCP servers.
B. Enable the DHCP relay agent on the cluster head node.

C. Enable the DHCP relay agent on one of the cluster compute nodes.
D. Enable the network address translation (NAT) protocol and DHCP allocation on the cluster head node.

Answer: B

Question: 25

You are a system administrator for your company. You are configuring a new Windows HPC Server 2008 cluster. The cluster must have the following configuration: Two Windows Communication Foundation (WCF) broker nodesFifty compute nodesThe Windows Deployment Services role installed automatically on the head node You need to configure the nodes to meet the requirements of the cluster. Which configuration should you choose?

A. All nodes connected only to the enterprise network.
B. All nodes connected to the enterprise and private networks.
C. Compute nodes connected only to an isolated private network.
D. Compute nodes connected only to the private and application networks.

Answer: B

Question: 26

You are a system administrator for your company. Your company deploys Windows HPC Server 2008 that has compute nodes on a private network and an application network. You install an InfiniBand subnet manager service and a DHCP service on the cluster head node. The InfiniBand host channel adapter (HCA) cards on the cluster nodes must use the IP addresses assigned by the DHCP service. You need to configure the DHCP service to support the outlined network configuration. What should you do?

A. Configure the DHCP service to start after the subnet manager service.
B. Configure the DHCP service to start before the subnet manager service.
C. Configure the DHCP service to provide a default gateway for the InfiniBand HCA cards.
D. Configure the DHCP service to provide at least one address of a DNS server for the InfiniBand network.

Answer: A

Question: 27

You administer a Windows HPC Server 2008 cluster that has four compute nodes. Each compute node is configured on the following three networks: Network A192.168.15.0/255.255.255.0Network B10.2.0.1/255.255.255.0Network C10.4.0.0/255.255.255.0 You need to ensure that Microsoft Message Passing Interface (MPI) uses Network C. Which command should you run on the head node?

A. set CCP_MPI_NETMASK=10.4.0.0/255.255.255.0
B. clusrun set CCP_MPI_NETMASK=10.4.0.0/255.255.255.0
C. cluscfg setenvs CCP_MPI_NETMASK=10.4.0.0/255.255.255.0
D. clusrun /env:CCP_MPI_NETMASK=10.4.0.0/255.255.255.0 set

Answer: C

Question: 28

You are a system administrator for your company. Your company network includes a Windows HPC Server 2008 cluster. All nodes of the cluster are connected to the enterprise and private networks. All network interfaces on the cluster compute nodes are configured for dynamic IP address assignment.
The DHCP server infrastructure is deployed as shown in the following table.

DHCP Scope Name	DHCP Scope Options	DHCP Option Value
Enterprise network	003 Router	192.168.4.48
	006 DNS servers	192.168.4.101 192.168.4.102
Private network	003 Router	10.0.0.201
	006 DNS servers	10.0.0.201

You discover that the cluster compute nodes are unable to access one of the file servers by using the host name or the 192.168.5.12 IP address. You need to configure the DHCP server infrastructure to resolve the problem. What should you do?

A. Configure the same 003 Router option for both DHCP scopes.
B. Configure the same 006 DNS Servers option for both DHCP scopes.
C. Remove the 003 Router option from the Private network DHCP scope.
D. Add the 012 Host name option to the Enterprise network DHCP scope.

Answer: C

Question: 29

You are a system administrator for your company. You install a 64-bit version of Windows Server 2008 Standard Edition and a set of company standard applications on a new server. You install HPC Pack 2008 and configure a head node for a new Windows HPC Server 2008 cluster. You are unable to submit commands to the cluster from the command-line tools because of an authentication error. However, you are able to communicate with the cluster by using Windows PowerShell and the HPC Management Console. You need to resolve the authentication error. What should you do?

A. Restart the HPC Management Service on the head node.
B. Reset the password for the computer account of the head node.
C. Enable firewall exception for the TCP port 5802 on the head node.
D. Ensure that the HPC Job Scheduler service is able to listen to the TCP port 5800 on the head node.

Answer: D

Question: 30

You administer a Windows HPC Server 2008 cluster for your company. The cluster uses a network topology that has compute nodes isolated on a private network. Network address translation (NAT) services are disabled on the head node. Your company deploys a new service-oriented architecture (SOA) application. You need to configure the cluster to support the SOA application. What should you do?

A. Enable NAT services on the head node.
B. Add a Windows Communication Foundation (WCF) broker node role to the head node.

C. Modify the cluster network topology to connect all nodes to the enterprise and private networks.
D. Modify the cluster network topology to connect the compute nodes to the enterprise and application networks.

Answer: B

Question: 31

You are a system administrator for your company. You install a head node of a new Windows HPC Server 2008 cluster. You preconfigure 20 new compute nodes. You need to add the preconfigured compute nodes to the cluster. What should you do?

A. Import a custom XML file for the nodes.
B. Prestage computer accounts for the compute nodes.
C. Specify a new series of names for the compute nodes.
D. Create a node template that does not include an operating system image.

Answer: A

Question: 32

You are a system administrator for your company. Your company plans to install a new Windows HPC Server 2008 cluster. The company requires that the HPC cluster head node be installed on a failover cluster. You need to prepare the failover cluster nodes before you install HPC Pack 2008. Which two actions should you perform? (Each correct answer presents part of the solution. Choose two.)

A. Add a Web Server (IIS) role to the nodes.
B. Add a Windows Deployment Services role to the nodes.
C. Install Windows Server 2008 HPC Edition on the nodes.
D. Install Microsoft SQL Server 2008 Standard Edition on the nodes.
E. Install a 64-bit Windows Server 2008 Enterprise Edition on the nodes.

Answer: DE

Question: 33

You administer a Windows HPC Server 2008 cluster for your company. Your company network has computers that run non-Microsoft operating systems. These computers must access the cluster resources. You need to configure the cluster to accept jobs from the computers that run non-Microsoft operating systems. Which two actions should you perform? (Each correct answer presents part of the solution. Choose two.)

A. Install the HPC Basic Profile Web Service.
B. Add the Windows Communication Foundation (WCF) broker node role to the head node.
C. Obtain an X.509 certificate that includes the fully qualified domain name (FQDN) of the head node.
D. Run the following HPC PowerShell script: Set-HpcClusterProperty -BrokerTaskProgram %CCP_HOME%bin\HpcWcfBroker.exe

Answer: AC

Question: 34

You are a system administrator for your company. Your company network has an Active Directory domain named contoso.com. All servers in the network run Windows Server 2008. The company plans to install a new HPC cluster and configure it as a separate forest named hpc.fabrikam.com. You create a new Active DirectoryCintegrated DNS zone named hpc.fabrikam.com that is hosted on the contoso.com DNS server. You need to configure the hpc.fabrikam.com DNS zone to accept automatic registration of the cluster nodes. What should you do?

A. Allow zone transfers for the hpc.fabrikam.com DNS zone.
B. Configure hpc.fabrikam.com as a primary standard DNS zone.
C. Configure the hpc.fabrikam.com DNS zone such that it will be replicated across the contoso.com forest.
D. Enable non-secure and secure updates for the hpc.fabrikam.com DNS zone.

Answer: D

Question: 35

You are a system administrator for your company. Your company implements a new Windows HPC Server 2008 cluster. The cluster head node has two NICs connected to different networks and one InfiniBand host channel adapter (HCA) card connected to an InfiniBand switch. The most recent device drivers are installed. You start the Network Configuration Wizard on the head node. You discover that the wizard allows you to select only the network topologies that do not include an application network. You need to configure the cluster that has a network topology in which all nodes are connected to the enterprise, private, and application networks. What should you do before you restart the wizard?

A. Turn off Windows Firewall on the head node.
B. Enable a DHCP service on the InfiniBand network.
C. Enable subnet manager on the InfiniBand network.
D. Remove the Network Direct service provider from the head node.

Answer: C

Question: 36

You administer a Windows HPC Server 2008 cluster for your company. Your company plans to use a new cluster application that requires additional nodes. You plan to acquire new servers and add them to the cluster as compute nodes. You need to ensure that the new servers meet the system requirements for Windows HPC Server 2008. Which hardware component should you include on the new servers?

A. a multi-core processor
B. a 64-bit processor (x64)
C. a RAM that has a minimum of 4 GB
D. a hardware-assisted virtualization
E. a Trusted Platform Module (TPM), version 1.2 or later

Answer: B

Question: 37

You administer a Windows HPC Server 2008 cluster. The cluster nodes are based on non-uniform memory access

(NUMA) architecture. You need to ensure that processors prioritize local memory. What should you do?

A. Run the mpiexec.exe command with the /np parameter.
B. Run the mpiexec.exe command with the /cores parameter.
C. Run the mpiexec.exe command with the /affinity parameter.
D. Run the Job Submit command with the /numcores parameter.

Answer: A

Question: 38

You administer a Windows HPC Server 2008 cluster for your company. You notice that the performance of a primary application on the cluster is poor. You discover that the poor performance of the application is because of processor contention. You need to create a job template that specifies the correct resource allocation for jobs that are processor-bound. Which resource allocation model should you use in your job template?

A. Core
B. Node
C. Socket
D. Exclusive

Answer: A

Question: 39

You administer a Windows HPC Server 2008 cluster for your company. A user named Bob plans to create a new job template based on an existing template named HighMem. Bob runs the following PowerShell command on the head node: Copy-HpcJobTemplate CName HighMem CNewName BobsTemplate. The command returns an error. You need to ensure that Bob can create the new job template. What should you do?

A. Grant modify rights to Bob on the template.
B. Grant administrator rights to Bob on the head node.
C. Instruct Bob to run the following command: Import-HpcJobTemplate CName HighMem CNewName BobsTemplate
D. Instruct Bob to run the following command: Copy-HpcJobTemplate CName "HighMem" CNewName "BobsTemplate"

Answer: B

Question: 40

You administer a Windows HPC Server 2008 cluster for your company. The cluster serves 15 users who are members of only the Domain Users group. Users report that they do not know when their jobs have failed and so they are unable to resolve the issues. You need to ensure that the users can obtain information about their jobs that have failed. What should you instruct the users to do?

A. Run the following command: job list /user:*
B. Run the following command: Job view /detailed
C. In the HPC Cluster Manager, on the Diagnostics page, in the Test Results section, select the Failure option.
D. In the HPC Job Manager, on the Options menu, select Customize view, and then enable the Taskbar notifications

option.

Answer: D

Question: 41

You administer a Windows HPC Server 2008 cluster for your company. The cluster is used as a testing platform for software development. A job that has a job ID of 101 is submitted to the scheduler without the use of a job template. Default values are used for job resource assignment. You need to identify the nodes, cores, and process IDs that are allocated for the job. What should you do?

A. In PowerShell, run the following command: Get-HpcJob CId 101
B. On the command line, run the following command: job list /state:all
C. On the command line, run the following command: Job view 101 /detailed
D. In the HPC Job Manager, open the properties of the job ID 101, and view the Results and Statistics page.

Answer: C

Question: 42

You administer a Windows HPC Server 2008 cluster for your company. You create two user groups named EngGroup and DevGroup on the cluster. The cluster also contains two node groups named Development and Production. You create the following job templates: HpcProdto submit jobs to the Production node group.HpcDevto submit jobs to the Development node group. You need to ensure that the following requirements are met: Users in EngGroup can access only the nodes of the Production node group.Users in DevGroup can access only the nodes of the Development node group. Which three actions should you perform? (Each correct answer presents part of the solution. Choose three.)

A. Grant submit permissions to the DevGroup user group on the HpcDev job template.
B. Grant submit permissions to the EngGroup user group on the HpcDev job template.
C. Grant submit permissions to the EngGroup user group on the HpcProd job template.
D. Grant submit permissions to the DevGroup user group on the HpcProd job template.
E. Revoke submit permissions from the Users group on the HpcProd and Default job templates.
F. Revoke submit permissions from the Users group on the HpcProd and HpcDev job templates.
G. Revoke submit permissions from the Users group on the HpcProd, HpcDev, and Default job templates.

Answer: ACG

Question: 43

You administer a Windows HPC Server 2008 cluster. The cluster is used by 30 users for three different projects. You need ensure that users are restricted to a predetermined list of project names when submitting jobs. What should you do?

A. Run the Export-HpcJobTemplate PowerShell cmdlet.Edit the exported XML file to include an <AllowedProject> tag with the predetermined list of allowed project names.Save the XML file as DefaultJobTemplate.xml on the head node.
B. Run the Export-HpcJobTemplate PowerShell cmdlet.Edit the exported XML file to include a <Project> tag with the predetermined list of allowed project names.Run the job new command specifying the XML filename for the /name parameter.
C. Run the HPC Cluster Manager and export a node XML file for the cluster.Edit the exported node XML file to include

an <AllowedProject> tag for each node.Save the node XML file on the head node.
D. Run the HPC Cluster Manager. Edit the project property in the default job template to include only the project names that are valid.

Answer: D

Question: 44

You administer a Windows HPC Server 2008 cluster that has four compute nodes. You need to submit a parametric sweep job to run myapp.exe with the following syntax: depth 1 for the first iterationdepth 2 for the second iterationdepth 3 for the third iteration Which command should you run?

A. job submit /parametric:1-2:3 myapp.exe Cdepth *
B. job submit /parametric:1-3:1 myapp.exe Cdepth *
C. job submit /parametric:1-3:3 myapp.exe Cdepth *
D. job submit /parametric: 2-3:1 myapp.exe Cdepth *

Answer: B

Question: 45

You administer a Windows HPC Server 2008 cluster that has four compute nodes isolated on private and application networks. Each compute node has two single-core processors. The CCP_MPI_NETMASK environment variable is set to the application network with a value of 157.59.0.0/255.255.255.0. The private network is set to 10.0.0.0/255.255.255.0. You have a Microsoft Message Passing Interface (MPI) executable file named myapp.exe. The MPI job must use the private network instead of the default application network. You need to submit myapp.exe to the cluster by using the job command. Which command should you run on the head node?

A. job submit /np:8 mpiexec -env CCP_MPI 10.0.0.0/255.255.0.0 myapp.exe
B. job submit /numprocessors:8 mpiexec -env MPI_NETMASK 10.0.0.0/255.255.0.0 myapp.exe
C. job submit /np:8 mpiexec Cenv HPC_NETMASK 10.0.0./255.255.0.0 myapp.exe
D. job submit /numprocessors:8 mpiexec -env MPICH_NETMASK 10.0.0.0/255.255.0.0 myapp.exe

Answer: D

Question: 46

You administer a Windows HPC Server 2008 cluster that has three nodes named node1, node2, and node3. You have the following script: Job Submit /ID:28job add 28 /requirednodes:node1,node2 /name:Task1 task1.exejob add 28 /requirednodes:node1,node2 /name:Task2 /depend:Task1 task2.exejob add 28 /requirednodes:node1,node2 /name:Task3 /depend:Task2 task3.exejob submit 28 You need to find out the result of the script. Which option correctly defines the result of the script?

A. Task1 completes before Task2 starts.Task3 completes before Task2 starts.All three tasks are added to the existing job ID 28. All tasks gain exclusive access to node1 and node2, but not node3.
B. Task1 completes before Task2 starts.Task2 completes before Task3 starts.All three tasks are added to the existing job ID 28. All tasks gain exclusive access to node1 and node2, but not node3.
C. Task1 completes before Task2 starts.Task2 completes before Task3 starts.All three tasks are added to the existing job ID 28. All tasks can run on node1 or node2, but do not have exclusive access to any node.

D. Task1 completes before Task2 starts.Task2 completes before Task3 starts.All three tasks are added to the existing job ID Task1. All tasks gain exclusive access to node1 and node2, but not node3.

Answer: B

Question: 47

You administer a Windows HPC Server 2008 cluster that has four compute nodes. Each compute node has two single-core processors. You have a Microsoft Message Passing Interface (MPI) executable file named myapp.exe. You have the following requirements: The MPI compute job must use all processes across all compute nodes. When the MPI compute job runs, no other job must process. You need to submit the myapp.exe file to the cluster by using the job command. Which command should you run on the head node?

A. job submit mpiexec Cnp 8 myapp.exe
B. job submit /numprocessors:8 myapp.exe
C. job submit /exclusive:true mpiexec Cnp 8 myapp.exe
D. job submit /numprocessors:8 /exclusive:true mpiexec myapp.exe

Answer: D

Question: 48

You administer a Windows HPC Server 2008 cluster for your company. The cluster contains 64 nodes. You create two node groups named BigMem and HaveGPU and assign 32 nodes to each node group. An urgent update has been released for the nodes in the HaveGPU node group. All nodes currently process jobs. The queue has 100 additional long-running jobs waiting for the availability of compute resources. You need to prepare all the nodes in the HaveGPU node group to apply the urgent update without terminating the running jobs or accepting new jobs. What should you do?

A. Run the following command: node pause "HaveGPU"
B. Run the following PowerShell command: Set-HpcNodeState CForce CName HaveGPU CState Offline
C. In the HPC Cluster Manager, select the HaveGPU node group and set the state of the node group to Offline, including the force option.
D. In the HPC Cluster Manager, select the HaveGPU node group and set the state of the node group to Offline, excluding the force option.

Answer: D

Question: 49

You administer a Windows HPC Server 2008 cluster for the Engineering department of your company. The Engineering users are members of the EngineeringUsers group. The EngineeringUsers group has permission to use all existing templates. The Finance department wants to find out whether Windows HPC Server 2008 can meet their requirements. You create a user group named FinanceUsers and add all the Finance users to the group. You need to ensure that the following requirements are met: Jobs submitted by the Engineering users must have a higher priority than other jobs.The number of nodes available to the Engineering users must not be reduced. What should you do?

A. Remove the Users group from the default job template permissions.Create a job template, which specifies that the jobs must run on the ComputeNodes node group.Assign submit permissions to this template to the FinanceUsers

group.
B. Create two node groups, one for the Engineering users and the other for the Finance users.Assign permissions to allow only the Engineering users to access the engineering node group and only the Finance users to access the finance node group.
C. Remove the Users group from the default job template permissions.Create a job template that specifies a limited run-time and lower priority for the jobs submitted by the Finance department. Assign submit permissions to this template to the FinanceUsers group.
D. Remove the FinanceUsers group from the default job template permissions.Create a job template that specifies a limited run-time and lower priority for the jobs submitted by the Engineering department. Assign submit permissions to this template to the EngineeringUsers group.

Answer: C

Question: 50

You are the administrator of a Windows HPC Server 2008 cluster. Jobs are assigned different project names for job cost accounting. You need to retrieve a list of all the jobs that have completed without errors for a project named Project1. What should you do?

A. Run the get-HpcNodeStateHistory PowerShell cmdlet.
B. Run the job list command with the appropriate options.
C. Run the etl2clog command with the appropriate options.
D. Run the clusrun.exe command to execute the eventvwr.exe command on each node.

Answer: B

Question: 51

You administer a Windows HPC Server 2008 cluster for your company. A user submits a job that has a job ID of 13. The job is set to run until it is canceled. You need to allow job 13 to complete and set the state of the job to Finished. Which command should you run?

A. Job cancel 13 /message:"finished"
B. Job modify 13 /rununtilcanceled:false
C. Job list /jobid:13 /state:canceled
D. Job list /jobname:13 /state:running /status:finished

Answer: B

Question: 52

You administer a Windows HPC Server 2008 cluster for your company. The cluster initially had 8 nodes and was recently expanded to 16 nodes. The original 8 nodes have 8 GB of RAM. The new 8 nodes have 16 GB of RAM. You discover that some jobs fail because of resource unavailability. You need to configure the jobs to run on selected resources. What should you do?

A. Create a new node template that contains all nodes that have 16 GB of RAM.Create a job template and set the Priority to lowest.
B. Assign the Default ComputeNode node template to the nodes that have 8 GB of RAM.Create a job template; set the

Default Priority to highest and assign the template to all users.
C. Create two node templates; one template for the nodes that have 8 GB of RAM and the other template for the nodes that have 16 GB of RAM.Create two job templates, each specifying one of the node templates that must be used.
D. Create two node groups; one node group must contain the nodes that have 8 GB of RAM and the other node group must contain the nodes that have 16 GB of RAM.Create two job templates, each specifying one of the node groups that must be used.

Answer: D

Question: 53

You administer two Windows HPC Server 2008 clusters for your company. One cluster is named Development and the other cluster is named Production. You manage the clusters from your Windows Vista workstation. You need to retrieve a list of only the jobs that have their states set to Queued or Running in the queue on the Development cluster. Which command should you run?

A. Job list /jobname:development
B. Job list /scheduler:development
C. Job list /scheduler:development /all
D. Job list /scheduler:development /user:*

Answer: D

Question: 54

You administer a Windows HPC Server 2008 cluster for your company. The cluster contains 16 nodes and each node has 8 cores and 16 GB of RAM. You have a Microsoft Message Passing Interface (MPI) job named MyMpiJob.exe. You need to ensure that MyMpiJob.exe runs only on half of the available cores on all 16 nodes. Which command should you run?

A. Job submit /corespernode:4 mpiexec MyMpiJob.exe
B. Job submit /numcores:4 mpiexec /cores 4 MyMpiJob.exe
C. Job submit /numnodes:16 mpiexec /cores 4 MyMpiJob.exe
D. Job submit /numcores:4 mpiexec MyMpiJob.exe

Answer: C

Question: 55

You administer a Windows HPC Server 2008 cluster that has three compute nodes named node1, node2, and node3. You need to view only the top five processes that use the CPU for a long time on node1. Which command should you run on the head node?

A. Node view node1 /detailed:true /lastdays:5
B. Get-process|Sort-Object CPU |Select-Object Cfirst 5
C. Get-HPCNode CName node1 CTemplatename "-last 5" CVerbose
D. clusrun /nodes:node1 powershell Ccommand "& {Get-Process|Sort-Object CPU |Select-Object Clast 5}"

Answer: D

Question: 56

You administer a Windows HPC Server 2008 cluster. You submit a compute job to the cluster. The job has four tasks and the ID of the job is 12. You want to find out the amount of free disk space on the C drive for the compute nodes that currently run job 12. You need to ensure that the following requirements are met: The amount of free disk space on all nodes that run job 12 is displayed in a single list.The list contains the name of the appropriate node on each line. Which command should you run on the head node?

A. clusrun /job:12 /sorted fsutil volume diskfree C:
B. clusrun /job:12 /interleaved fsutil volume diskfree C:
C. clusrun /job:12 /task:1-4 /sorted fsutil volume diskfree C:
D. clusrun /job:12 /task:1-4 /interleaved fsutil volume diskfree C:

Answer: B

Question: 57

You administer a Windows HPC Server 2008 cluster. All cluster nodes are members of the Contoso domain. A new group of engineering users named Contoso\EngAdmins needs to manage the cluster. You need to ensure that the Contoso\EngAdmins group can fully administer the cluster. Which command should you run?

A. Add-HpcGroup
B. Add-HpcMember
C. Set-HpcGroup
D. Set-HpcJobCredential

Answer: B

Question: 58

You administer a Windows HPC Server 2008 cluster. You need to obtain the current values of the HPCDiskSpace and HPCCpuUsage metrics for a compute node named node1. Which command should you run?

A. Get-HpcMetricValue -Name HPCCpuUsage,HPCDiskSpace -Node node1
B. Get-HpcMetricValue -Name HPCCpuUsage,HPCDiskSpace CMetricTarget node1
C. Get-HpcNode CName node1 | Get-HpcMetricValue -Name HPCCpuUsage,HPCDiskSpace
D. Get-HpcNode CName node1 | Get-HpcMetricValue -Name HPCCpuUsage,HPCDiskSpace -MetricTarget {$_}

Answer: C

Question: 59

You administer a Windows HPC Server 2008 cluster for your company named Contoso, Ltd. The cluster is integrated into a forest that hosts three domains named CONTOSO1, CONTOSO2, and CONTOSO3. You plan to remove the saved credentials of a user named User1 on the CONTOSO2 domain. The password of User1 was compromised. You need to remove the saved password of User1 from the cluster without accessing the workstation of User1. What should you do?

A. Run the following command: cluscfg delcreds /user:User1
B. Run the following PowerShell cmdlet: Remove-HpcJobCredential CUserName CONTOSO2\User1
C. Run the following command: clusrun /all "cmdkey /del %computername%"
D. Run the following PowerShell cmdlet: Remove-HpcJobCredential CUserName User1

Answer: B

Question: 60

You are managing a Windows HPC Server 2008 cluster that has four compute nodes. The HPC Pack Client Utilities are installed on each compute node. For new cluster applications to locate their license server, the applications require a new environment variable named LM_LIC that must be set to contoso1 for all cluster jobs. You need to set LM_LIC to contoso1 permanently on all compute nodes for all user jobs that are submitted to the cluster. What should you do?

A. Run the set LM_LIC=contoso1 command on the head node.
B. Run the set LM_LIC=contoso1 command on each compute node.
C. Run the cluscfg setenvs LM_LIC=contoso1 command on the head node.
D. Run the job submit /env:LM_LIC=contoso1 hostname.exe command on each compute node.

Answer: C

Question: 61

You administer the Windows HPC Server 2008 cluster for your company. The Finance department plans to use a new service-oriented architecture (SOA) application. You need to configure the cluster to run the SOA job. You also need to ensure that the number of compute nodes is not reduced. What should you do?

A. Include an additional node to the cluster. Assign the WCF Broker Node role to the additional node and set the state of the node to Offline.
B. In the HPC Cluster Manager, in the Node Management view, assign the WCF Broker Node role to the head node and set the state of the head node to Offline.
C. In the HPC Cluster Manager, in the Node Management view, assign the WCF Broker Node role to the head node and set the state of the head node to Online.
D. In the HPC Cluster Manager, in the Node Management view, select a compute node and set the state of the node to Offline. Then, assign the WCF Broker Node role to the node and set the state of the node to Online.

Answer: C

Question: 62

You administer a Windows HPC Server 2008 cluster that is integrated into the Active Directory domain of your company. HPC Pack 2008 is installed on your computer for remote administration. You schedule maintenance of the cluster for the third Sunday of every month. You need to move all nodes in the cluster to the Offline state to start the maintenance tasks. Which command should you run?

A. node pause /all
B. node pause ComputeNodes
C. Get-hpcnode Cstate offline

D. Get-hpcnode Cgroup ComputeNodes | set-hpcnodestate Cstate draining

Answer: A

Question: 63

You administer a Windows HPC Server 2008 cluster. Two nodes in a group named Default are in the Unknown state. You need to assign the node template named DefaultNodeTemplate to the nodes in the Unknown state by using Windows PowerShell. Which command should you run?

A. Get-HpcNodeTemplate CName DefaultNodeTemplate | Set-HpcNodeState CNode CState Online
B. Get-HpcNodeTemplate CName DefaultNodeTemplate | Assign-HpcNodeTemplate -Name DefaultNodeTemplate
C. Get-HpcNode CGroupName Default -State Unknown | Assign-HpcNodeTemplate -Name DefaultNodeTemplate
D. Get-HpcNode CGroupName Default -State Unknown | Assign-HpcNodeTemplate CTemplate DefaultNodeTemplate

Answer: C

Question: 64

You administer a Windows HPC Server 2008 cluster that has 16 nodes. Three compute nodes are configured in a group named Maintenance. You need to shut down all compute nodes in the Maintenance group from the command line. Which command should you run?

A. clusrun /nodes:maintenance | shutdown
B. Get-HpcNode CGroupName maintenance | Shutdown-HpcNode
C. Get-HpcNode CGroup maintenance | Shutdown-HpcNode Cnodes *
D. Get-HpcGroup CName maintenance | Shutdown-HpcNode Cnodes *

Answer: B

Question: 65

You administer a Windows HPC Server 2008 cluster that has four compute nodes. The HPC Pack Client Utilities are installed on each compute node. A user reports that during the last week, a compute node named node1 was unavailable intermittently. You need to view the node events and the time of each event that occurred during the last week for node1. Which command should you run on the head node?

A. node view node1 /history
B. node view node1 /detailed
C. Get-HpcNodeStateHistory -StartDate (Get-Date).AddDays(-7) -EndDate (Get-Date)
D. Get-HpcNodeStateHistory -StartDate (Get-Date) -EndDate (Get-Date)

Answer: A

Question: 66

You administer a Windows HPC Server 2008 cluster. You install the Windows Performance Tool Kit on all compute nodes. You need to periodically monitor and enable trace on all the nodes. Which tool should you use?

A. Xperf
B. Event Viewer
C. Task Manager
D. HPC Cluster Manager

Answer: A

Question: 67

You administer a Windows HPC Server 2008 cluster in a domain named contoso1.com. The forest includes two domains named contoso1.com and contoso2.com. User accounts from both domains access the cluster by using the scheduler named headnode.contoso1.com. A user named allison@contoso2.com must manage jobs for all users. You need to grant the appropriate permissions to allison@contoso2.com. Which command should you run?

A. Add-HpcMember Crole administrator Cuser "contoso2.com\allison"
B. Set-Hpcgroup Cgroup administrators Cname "contoso2.com\allison"
C. cluscfg setparams task=add jobadmin=allison@contoso2.com
D. cluscfg setcreds /user:administrator@contoso1.com /password:xxxxxxxx /scheduler:headnode.contoso1.com

Answer: A

Question: 68

You administer a remote Windows HPC Server 2008 cluster. HPC Pack 2008 is installed on your client computer. Users report that job queue length is increasing. You need to retrieve a list of compute nodes that cannot be contacted by the head node. Which command should you run?

A. node list /state:offline
B. node view Head_Node /detailed:true
C. Get-HpcNode CGroup:ComputeNodes CState:Offline
D. Get-HpcNode CHealth:Unreachable CGroup:ComputeNodes

Answer: D

Question: 69

You administer a Windows HPC Server 2008 cluster. You need to monitor the usage of CPU of the compute nodes. What should you do?

A. Run the following command on the head node: clusrun xperf Cproviders K
B. Run the following PowerShell command on the head node: (get-wmi win32_processor).loadpercentage
C. Examine the heat map in the Node Management view of the HPC Cluster Manager tool.
D. Examine the output of the MPI ping-pong tool in the Diagnostic view of the HPC Cluster Manager tool.

Answer: C

Question: 70

You administer a Windows HPC Server 2008 cluster. The default node template contains an Apply Updates task. You

discover that one of the nodes in the cluster requires software updates. You need to apply the updates to the node. Which PowerShell cmdlet should you run before you apply the updates?

A. Set-HpcNode
B. Set-HpcNodeState
C. Remove-HpcNode
D. Remove-HpcMember

Answer: B

Question: 71

You administer a Windows HPC Server 2008 cluster that has four compute nodes. The HPC Pack Client Utilities are installed on each compute node. A software update was manually performed on the compute nodes. The compute nodes must be restarted after the software update. You need to restart the compute nodes. What should you do?

A. Run the shutdown /r /f /t 5 command on the head node.
B. Run the shutdown /s /t 5 command on each compute node.
C. Run the clusrun shutdown /f /r /t 5 command on the head node.
D. Run the clscfg setenvs shutdown="/r /f /t 5" command on each compute node.

Answer: C

Question: 72

You administer a Windows HPC Server 2008 cluster. Diagnostic tests are successfully executed on the cluster. Users report that jobs have failed occasionally during the last week. You discover that the jobs have failed when they were sent to a node group named DataManagement. You need to identify the nodes in the node group that have failed. Which command should you run?

A. Node list /group:DataManagement /lastdays:7
B. Node view /history:true /group:DataManagement
C. Get-HpcNodeStateHistory CDebug CGroup DataManagement
D. Get-HpcNodeStateHistory CVerbose CGroup DataManagement

Answer: A

Question: 73

You administer a Windows HPC Server 2008 cluster for your company. The cluster is installed at the main office. Users of the cluster are located in remote offices connected to the main office by a WAN. All users of the cluster are added to an Active Directory global group named HpcUsers. A user attempts to execute the Get-HpcNode PowerShell cmdlet and receives the following error message: "Get-HpcNode : Unable to find assembly 'Microsoft.Ccp.Sdm.Store, Version=2.0.0.0, Culture=neutral, PublicKeyToken=null'. At line:1 char:12 + get-hpcnode <<<< + CategoryInfo: NotSpecified: (Microsoft.ComputeCluster.CCPPSH.GetNode:GetNode) [Get-HpcNode], SerializationException + FullyQualifiedErrorId : Microsoft.ComputeCluster.CCPPSH.GetNode." You need to ensure that the user can successfully execute the command. What should you do?

A. Add the HpcUsers group to the Job Administrators role on the cluster.

B. Add the HpcUsers group to the local Administrators group on each compute node.
C. Add the HpcUsers group to the local Administrators group on the cluster head node.
D. Add the following registry key to the client workstation: Name: HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\HPC\BinDirValue: C:\Program Files\Microsoft HPC Pack\Bin

Answer: D

Question: 74

You administer a Windows HPC Server 2008 cluster for your company. A workstation has been configured to submit jobs to the cluster named headnode.cluster.local. You need to ensure that a user named CLUSTER.LOCAL\HPC_USER can successfully submit jobs to the cluster. Which command should you run?

A. set USER=CLUSTER.LOCAL\HPC_USER
B. Clusrun /scheduler:headnode.cluster.local /setcreds:CLUSTER.LOCAL\HPC_USER
C. cluscfg setenvs USER=CLUSTER.LOCAL\HPC_USER
D. cluscfg setcreds /scheduler:headnode.cluster.local /user:CLUSTER.LOCAL\HPC_USER

Answer: D