

**Lead2pass.1Y0-402.Premium.VCE.146q**

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**Exam A**

**QUESTION 1**

**Scenario:** A Citrix Architect needs to design a new XenApp and XenDesktop environment. Currently, the environment is configured with two locations with identical XenDesktop Sites. Each Site has two Delivery Controllers, two StoreFront servers, and one NetScaler high availability pair. The same applications have been published from both Sites for all the users. Two Zones (Zone A and Zone B) are configured in each Site with one Controller in each zone. The Microsoft Exchange server is only accessible from Virtual Delivery Agent (VDA) machines in Zone A in each Site.

The following access requirements have been identified:

- Users should have a single URL when accessing resources from different Sites.
- Users should always connect to the datacenter closest to their location.
- Applications added to Favorites within Citrix Receiver should be retained when accessed from different Sites.
- Launched applications and desktops should always connect through a local NetScaler.
- No duplication of applications published from different Sites.
- Microsoft Outlook should always launch in Zone A.

The architect should recommend configuring Optimal Gateway routing on \_\_\_\_\_ across both locations to ensure that users connect through a local NetScaler. (Choose the correct option to complete the sentence.)

- A. Delivery Controllers
- B. StoreFront servers
- C. Global Server Load Balancing (GSLB) vServers
- D. NetScaler appliances

**Correct Answer: B**

**Explanation**

**Explanation/Reference:**

**Explanation:**

[https://www.citrix.com/content/dam/citrix/en\\_us/documents/white-paper/ns-optimal-gateway-routing-tech-wp.pdf](https://www.citrix.com/content/dam/citrix/en_us/documents/white-paper/ns-optimal-gateway-routing-tech-wp.pdf)

The NetScaler Gateway Routing solution essentially de-couples or separates the initial logon Gateway from the HDX launch Gateway, based on where the app or desktop is located, not where you log on.

Configuring the NetScaler Gateway routing behavior is straight-forward. There is no special configuration needed on the NetScaler; however, you must have NetScaler 11.0 build 66.11 or later installed on all of your NetScaler Gateway devices. The configuration items necessary to enable NetScaler Gateway Routing are completed on the Citrix StoreFront servers. Note that you must have StoreFront version 3.x or later installed on all of your StoreFront servers, and that you must complete the configuration change on all of your StoreFront servers for NetScaler Gateway routing to work as expected.

**QUESTION 2**

**Scenario:** A Citrix Architect needs to design a new XenApp and XenDesktop environment. While designing Universal Print server (UPS) for the customer, the architect is asked to ensure that the UPS design can handle 500 simultaneous print jobs per minute.

What must the architect deploy to support the load estimated by the customer?

- A. Two UPS servers and configure UPS for load balancing policy
- B. Ten UPS servers and configure UPS for load balancing policy
- C. Five UPS servers and configure NetScaler load balancing
- D. Two UPS servers and configure NetScaler load balancing
- E. Five UPS servers and configure UPS for load balancing policy
- F. Ten UPS servers and configure NetScaler load balancing

**Correct Answer: E**

**Explanation**

**Explanation/Reference:**

**Explanation:**

Double your scalability

Now that we know we can have multiple UPS instances setup (we've scaled to 16 UPS internally) and can fully utilize them all for connections, what else has improved and how can we use this new found

feature? Previously, UPS could handle 50 concurrent active print jobs per minute. With XenApp and XenDesktop 7.9, UPS scalability has improved two-fold, to 100 concurrent active print jobs per minute.

So, let's scale that up to 5 UPS instances and you can have a sustained concurrent active print rate of 500 print jobs per minute across all 5 servers. Need more? Try 1,000 concurrent active print jobs per minute across 10 UPS instances. Yes, UPS load balancing can and does scale linearly. This makes scaling and sizing for your environment a simple matter.

<https://www.citrix.com/blogs/2016/07/20/ups-load-balancing-in-xenapp-and-xendesktop-7-9/>

**QUESTION 3**

**Scenario:** A Citrix Architect is designing an environment for a large company. The company has identified the following user groups and requirements.

- Product Managers - Typically, they work from inside the company network but are able to work from home. They need to use a variety of standard productivity and web-based SaaS applications.
- Field Sales Engineers - They frequently work with mobile devices and tend to access the environment externally. They need access to sales tools and the front-end of the customer database.
- Web Developers - Internal and remote workers who use specialized hardware with a graphics card to handle resource-intensive applications.

Which FlexCast model should the architect assign to Web Developers?

- A. VM Hosted Applications
- B. Published Apps
- C. Published Desktops
- D. Hosted VDI

**Correct Answer: D**

**Explanation**

**Explanation/Reference:**

**Explanation:**

[https://www.citrix.com/content/dam/citrix/en\\_us/documents/products-solutions/virtualize-3d-professional-graphics-design-guide.pdf](https://www.citrix.com/content/dam/citrix/en_us/documents/products-solutions/virtualize-3d-professional-graphics-design-guide.pdf)

The Web Developers need to handle resource-intensive applications with graphic cards.

Criteria	Decision for apps	Decision for desktops
Operating system	Windows Server 2008 R2	Windows 7 SP 1
Delivery	Machine creation services	Machine creation services
CPU	8 vCPU	4 vCPU
Memory	32 GB RAM	8 GB RAM
Disk	60 GB	60 GB
Application(s) <sup>2</sup>	Autodesk AutoCad, SolidWorks, PTC Creo, Siemens SolidEdge, etc.	Autodesk AutoCad, SolidWorks, PTC Creo, Siemens SolidEdge, etc.
Graphics acceleration	GPU pass-through on XenServer 6.2	NVIDIA GRID (vGPU) on XenServer 6.2
User group	Power users (Contractors, operators)	Designers, engineers, power users
Number of VMs	12	84

Use case	User group	Number of users	GRID K2 vGPU type	VM's supported per server (2 slots)	Total servers
1.A	Designers	12	Pass-through	4	3
1.B	Engineers	24	K260Q	8	3
2.A	Operators	48	K240Q	16	3
2.B	Contractors	116	Pass-through (Windows server)	4 (40 users)	3
	Redundancy	N+1	One card failure		2

Table 2: Sizing recommendation based on the assumptions

### Use case 1 – Designers and engineers

For ultra-high-end 3D compute requirements, such as the **designers** in use-case 1.A, a dedicated desktop environment is made available to each user, while the underlying hardware resources are shared using Citrix XenDesktop. With XenServer **GPU pass-through** users share a single server but each user has 1:1 GPU assigned to them.

**Shared GPU for desktops** with high-end vGPU types such as **K260Q** may be suitable for **engineers** (use-case 1.B) who have high end 3D compute requirements, and perform graphics intensive operations on 3D models. 2:1 GPU assignment doubles the user density per server.

An additional server with two GRID K2 cards is required to handle failure of any one card on the primary hosts. Two servers and four GRID K2 cards are required for full server redundancy.

Total servers for use-case 1, with card level redundancy = 3 + 3 + 1 = **7 servers**

### QUESTION 4

**Scenario:** A Citrix Architect needs to design a new XenApp and XenDesktop environment.

The architect has identified printing requirements for certain user groups and locations, as shown in the Exhibit.

Click the Exhibit button to view the requirements.

User Groups	Endpoint	Location	Receiver Type	Printer Types	Driver Installed on VDA	Print Features Needed
Accountants	Corporate-owned	Corp HQ Home	Receiver 4.10	Accountant Network Printer	Yes	Special ERP Print
Executives	Corporate-owned	Corp HQ & Home	HTML5 Receiver	Executive Network Printer & Home Printer	Yes	Office Print
Graphic Designers	Mac BYOD	Home	MAC Receiver 4.10	Design Network Printer	No	High-Resolution Print
Customer Service	Corporate-owned	India Branch Office	Receiver 4.10	Main Client Printer	No	Basic A4 Single-Side

Currently, no printer settings or policies have been configured, and as such, the environment is using default settings. Universal Print Server will NOT be used in this design.

Which two settings should the architect configure to allow the Executives group to achieve the desired print behavior and to ensure their print jobs are optimally routed? (Choose two.)

- A. Set Auto-create Client Printers policy to auto-create local printers only
- B. Enable Auto-create PDF Universal Printer policy
- C. Set Direct connections to print servers policy to Enabled
- D. Set Direct connections to print servers policy to Disabled
- E. Configure Session Printers policy
- F. Configure Default Printers policy

G. Set Auto-create Client Printers policy to auto-create all client printers

**Correct Answer:** CG

**Explanation**

**Explanation/Reference:**

**Explanation:**

**Direct connections to print servers**

This setting enables or disables direct connections from the virtual desktop or server hosting applications to a print server for client printers hosted on an accessible network share.

By default, direct connections are enabled.

Enable direct connections if the network print server is not across a WAN from the virtual desktop or server hosting applications. Direct communication results in faster printing if the network print server and the virtual desktop or server hosting applications are on the same LAN.

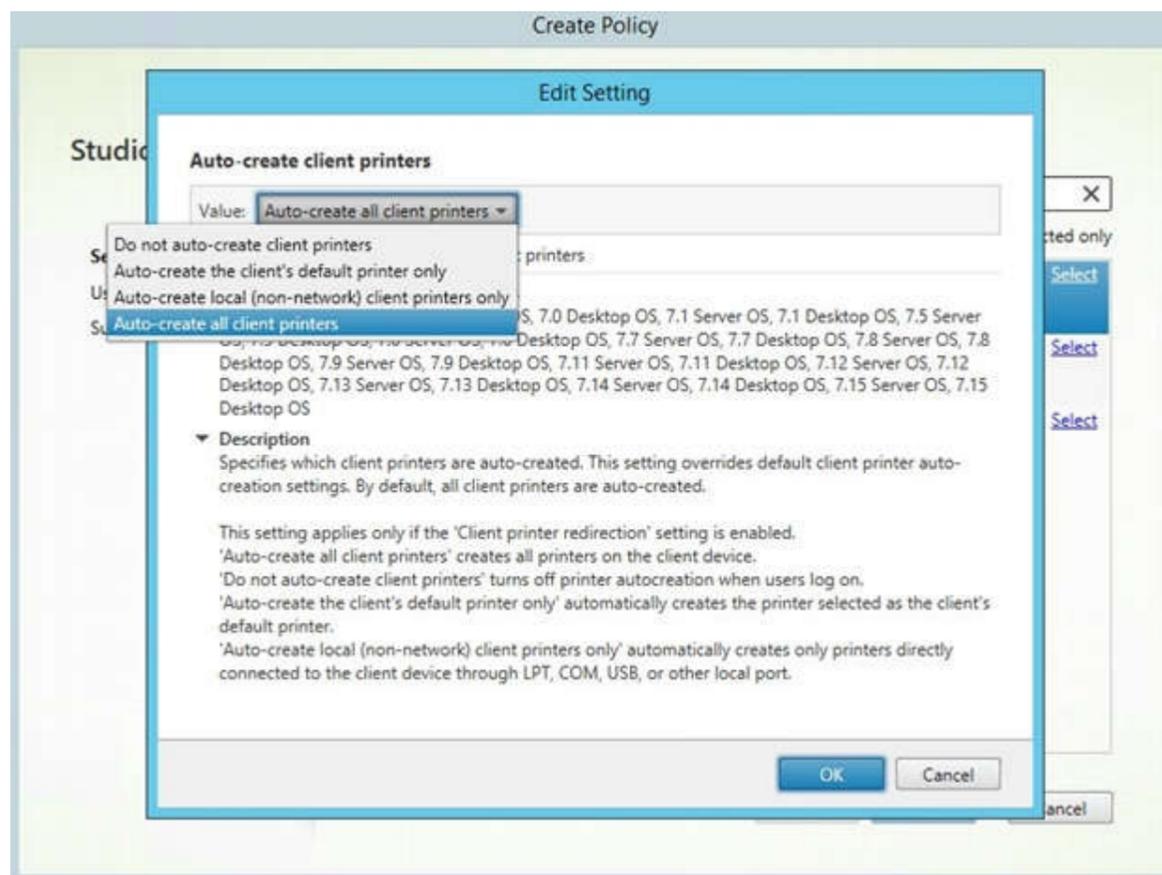
Disable direct connections if the network is across a WAN or has substantial latency or limited bandwidth. Print jobs are routed through the user device where they are redirected to the network print server. Data sent to the user device is compressed, so less bandwidth is consumed as the data travels across the WAN.

If two network printers have the same name, the printer on the same network as the user device is used.

[https://docs.citrix.com/en-us/xenapp-and-xendesktop/7-15-ltsr/policies/reference/ica-policy\\_settings/printing-policy-settings/client-printers-policy-settings.html](https://docs.citrix.com/en-us/xenapp-and-xendesktop/7-15-ltsr/policies/reference/ica-policy_settings/printing-policy-settings/client-printers-policy-settings.html)

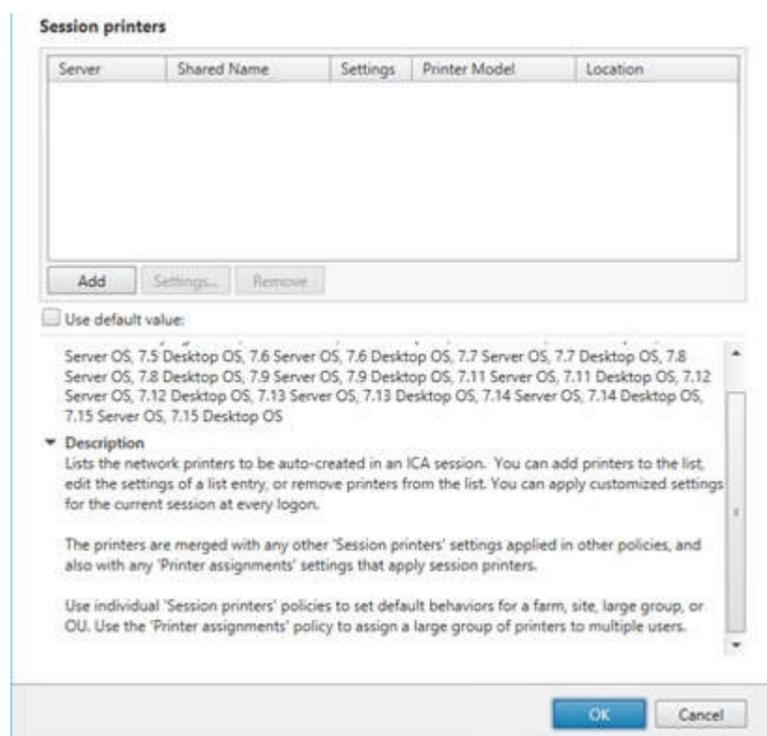
**Note:**

G. Why?



A. Set Auto-create Client Printers policy to auto-create local printers only. No, because we want all client printers which will include local (non-network) and network printers.

E. Configure Session Printers policy - No, because we will have to list all the network printers to be auto- created.



**QUESTION 5**

**Scenario:** A Citrix Architect needs to design a new XenApp and XenDesktop environment. The following design requirements have been identified:

- External Partner users should be denied access to published resources unless connecting from a corporate laptop running up-to-date antivirus software.
- External users and partners authenticate using Two-Factor authentication.
- External employees are logged off Citrix Receiver for Web after 10 minutes of inactivity.
- Clipboard mapping is enabled for external engineering users.
- Once authenticated to a company device, internal users do NOT authenticate a second time to access published apps and desktops.

Later in the Assess phase, the architect creates the Access Matrix shown in the Exhibit.

Click the Exhibit button to view the Access Matrix.

User Group	Location	Device Type	Hidden Resources	Authentication Type	Timeouts (minutes)	Client Redirection	Drive/ Printer Mapping	SmartAccess/ SmartControl Policies	SmartAccess/ SmartControl Actions
HR	Internal	Corporate laptop	None	Pass-through	20 StoreFront No session 20 idle 180 disconnect	Audio LPT	All fixed drives  All client printers	None	None
Partners	External	Corporate laptop	None	Two-Factor	10 StoreFront No session 10 idle 180 disconnect	Disabled	Disabled	Domain-joined Up-to-date antivirus	None
Call Center	Internal	Thin client (WEM)	None	Pass-through	20 StoreFront No session 20 idle No disconnect	Local drives Printing Clipboard Audio COM port USB TWAIN LPT	All fixed drives  All client printers	None	None
Engineering	External	Personal device	All published resources except for Microsoft Office hosted apps	Two-Factor	10 StoreFront No session 10 idle No disconnect	Printing Clipboard	Disabled	User is member of Engineering group on an external connection	Hide all published resources except for Microsoft Office hosted apps
Sales	External	Personal device	None	Username & password	10 StoreFront No session 20 idle 180 disconnect	Local drives Printing Clipboard Audio COM port USB TWAIN LPT	All fixed drives  All client printers	None	None

During the quality assurance review, the architect determines that one of the user groups does NOT align with the design requirements.

Which user group should the architect modify to match the design requirements identified?

- A. HR
- B. Engineering
- C. Call Center
- D. Partners
- E. Sales

**Correct Answer: E**  
**Explanation**

**Explanation/Reference:**

**Explanation:**

The Sales is external and does not use Two Factor Authentication and has Clipboard mapping.

**QUESTION 6**

**Scenario:** A Citrix Architect needs to design a new XenApp and XenDesktop environment.

The architect has determined the user groups and FlexCast model listed in the Exhibit during the high-level design. Click the Exhibit button to view the user group and FlexCast model details.

User Groups	Endpoint	Network	Virtual Desktop	Desktop	Comments
Accountants	Corporate-owned	LAN	Pooled VDI	Windows 7	Office Applications
Executives	Corporate-owned	LAN	Hosted Shared App	Windows 2016	None
Graphic Designers	Mac BYOD	LAN	Hosted Shared Desktop	Windows 2008R2	Multimedia with High Frame Rate
Customer Service	Corporate-owned	WAN	Personal Hosted Desktop	Windows 10	None
Field Engineers	Mobile broadband tablet	Satellite link	Hosted Shared Desktop	Windows 2008R2	3D CAD

Which graphics protocol should the architect select for the highlighted group in the Exhibit?

- A. Thinwire (Legacy)
- B. Framehawk
- C. Thinwire+
- D. H.264

**Correct Answer: A**  
**Explanation**

**Explanation/Reference:**

**Explanation:**

Thinwire+ is for Win8, Win10, Win2012 and newer. Legacy Thinwire is for Win7 and Win2008R2.

**QUESTION 7**

**Scenario:** A Citrix Architect needs to design a new XenApp and XenDesktop environment The architect has identified the requirements, based on the assessment and early stages of the design

Click the Exhibit button to view the requirements.

Design Topic	Design Decision
Deployment type	On-premises datacenter
Licensing	XenApp Enterprise edition, concurrent licenses
Max concurrent users	500
Images	<ul style="list-style-type: none"> <li>• Windows Server 2012 R2                             <ul style="list-style-type: none"> <li>◦ FlexCast model: Published apps</li> </ul> </li> </ul>
Primary Applications	<ul style="list-style-type: none"> <li>• Microsoft Office 2016: All users</li> <li>• Adobe Acrobat: All users</li> <li>• Mozilla Firefox: All users</li> </ul>

Additionally, the IT team has identified the following general requirements:

- The provisioning strategy should be compatible with the planned design decisions.
- The provisioning strategy should minimize the steps required to perform image and application updates.

Which three follow-up questions should the architect ask about this environment, based on the planned design decisions? (Choose three.)

- A. How much storage is available for the Virtual Delivery Agent (VDA) machines?
- B. What is the VM uplink speed in the current deployment?
- C. Is PXE currently being used in the subnets where the Virtual Delivery Agent (VDA) machines will be placed?
- D. Will the machines using the images be physical or virtual?
- E. Are there any applications which must only be accessed by a subset of users?

**Correct Answer: ABC**

**Explanation**

**Explanation/Reference:**

**QUESTION 8**

A Citrix Architect needs to conduct a capabilities assessment for an organization that wants to design and build a new XenApp and XenDesktop environment. Which four capabilities will directly influence whether the existing Citrix administrative team will have the capacity to support the new environment? (Choose four.)

- A. Network architecture
- B. Current backup solutions
- C. Users and applications
- D. Existing XenApp and XenDesktop environments
- E. Training and certifications of support staff and users
- F. Current storage solutions
- G. Image management processes

**Correct Answer: ACEF**

**Explanation**

**Explanation/Reference:**

**Explanation:**

<https://www.citrix.com/blogs/2011/06/30/desktop-transformation-capabilities-assessment/>

**Users and Applications.** Establish the pain points experienced by the user community by distributing a questionnaire to a representative sub-section of users. The characteristics of the user estate need to be established so that that the High-Level Design can be scaled appropriately. Therefore it's necessary to capture the following metrics:

- Total number of users (available from the user segmentation phase)
- Number of third-party users
- Number of concurrent internal users
- Number of concurrent remote users

In addition, identify the application delivery mechanism(s) currently in use and establish whether the applications have already been packaged.

**Network Architecture.** So that the High-Level Design can determine if there's sufficient network capacity, map the location of the users against the existing network topology. Review existing monitoring solutions for periods of latency, lost packets and insufficient bandwidth. Check that there are a sufficient number of IP addresses available to support the proposed virtual desktop solution. Also, examine the topology for single points of failure and potential bottlenecks as well as determining whether Quality of Service (QoS) and network optimization devices are available.

**Training and Certifications.** Desktop transformation projects should involve training for both support staff and end users. During the capabilities assessment, capture the current certification level of the support staff as well as their experience across the environment including Citrix, Microsoft, Storage, Networking, Virtualization, etc.

**Virtualization and Storage.** Perform a thorough review of the virtualization and storage solutions currently in use. Establish their resilience, scalability, performance and redundancy so that the most appropriate solution can be selected for the High-Level Design.