

Citrix Virtual Apps and Desktops 7 Advanced Administration

Citrix 1Y0-312

Version Demo

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QUESTION NO: 1

Scenario: A Citrix Engineer is managing a large Citrix Virtual Apps and Desktops environment with three sites. Users connecting to applications and VDI machines in these sites are using a common Citrix ADC Gateway. The engineer wants to configure peripheral federation and port redirection policies for secure access to the site resources.

Which feature should the engineer use to configure policies centrally only once and avoid configuring them on each site?

- A. SmartAccess
- B. SmartCheck
- C. SmartTools
- D. SmartControl

ANSWER: D

Explanation:

SmartControl is the appropriate feature because it enables Citrix administrators to define and enforce session-specific ICA/HDX policy behavior at the shared Citrix ADC Gateway. When several Citrix Virtual Apps and Desktops sites are accessed through one Gateway, SmartControl provides a central policy point rather than requiring corresponding policy configuration independently at every resource location. The Gateway evaluates the user's access context and passes the applicable SmartControl policy settings when the ICA session is launched.

This design is especially useful for settings that govern access to redirected or session peripherals, including client-device and port-related controls. Centralizing these controls at the common Gateway helps maintain consistent secure-access behavior for users regardless of which of the three sites supplies their application or desktop. It also reduces repeated administrative effort and makes changes easier to govern in a multi-site deployment. Citrix documents SmartControl as a Citrix Gateway capability for applying access controls to Virtual Apps and Desktops sessions: [Citrix ADC SmartControl documentation](#). For the related Citrix Gateway and session-access architecture, see [Citrix Virtual Apps and Desktops secure deployment documentation](#).

QUESTION NO: 2

Scenario: A Citrix Engineer needs to make a change to the OS Layer. The OS Layer is currently used in several layered images that include different application layers. Which two steps should the engineer take to make the necessary changes to the OS Layer and the layered images while minimizing administrative effort? (Choose two.)

- A. Update all application layers associated with the existing OS Layer.
- B. Recreate all application layers associated with the existing OS Layer.
- C. Create new templates that include the required layers.
- D. Update the existing OS Layer with the needed changes.
- E. Update all templates that include the existing OS Layer.
- F. Create a new OS Layer with the needed changes.

ANSWER: D E

Explanation:

Update the existing OS Layer with the needed changes, then update all templates that include the existing OS Layer. Updating the current OS layer creates a new layer version while preserving the established OS-layer lineage and its relationship with the application layers. This avoids the unnecessary administrative work of building a separate OS layer or rebuilding the individual application layers merely because the underlying OS layer requires a change.

Each layered image is produced from a template, and each template identifies the layer versions used to compose that image. Because the affected images have different application-layer combinations, updating the templates lets the engineer

retain each image's existing application selections while changing the OS-layer version used for publication. The engineer can then publish updated images from the revised templates. This is the efficient approach because one OS-layer update can be deliberately applied across every template that consumes it, without duplicating application-layer maintenance for each image configuration.

Citrix documents OS-layer version management and the use of templates to define the layers included in published images in the [Operating system layer documentation](#) and the [Templates documentation](#).

QUESTION NO: 3

Scenario: A Citrix Engineer is working on a Citrix Virtual Apps and Desktops deployment.

The current setup has the following characteristics:

- Three data centers (A, B, and C), each with a large user base.
- Network latency between these datacenters is more than 300 ms RTT because they are located at geographically far distances.

Which design should the engineer choose to ensure optimum performance?

- A. A Multi-zone site with three zones (one primary and two secondary), with a site database in each of the three zones
- B. A Multi-zone site with three zones (one primary and two secondary), with a site database in the Primary zone
- C. One site for each data center with a common site database deployed at the largest site
- D. One site for each data center with a separate site database for each site

ANSWER: D

Explanation:

One site for each data center with a separate site database for each site is the appropriate design because each geographically distant data center has a substantial local workload and the round-trip latency between locations exceeds 300 ms. A Citrix site contains a control plane whose Delivery Controllers rely on the site database for brokering, configuration, monitoring, and other site operations. Keeping the Controllers and database local to each data center avoids making normal control-plane activity depend on a high-latency inter-datacenter connection.

Citrix zones are intended to extend a single site across locations while retaining a primary zone and a single site database. However, the latency in this scenario is beyond Citrix's recommended range for a multi-zone design. Independent sites provide local brokering and database access at every data center, preserving responsiveness for the large user population in each location and limiting the operational impact of a WAN issue to the affected site. Resources can still be presented consistently to users through suitable StoreFront, Gateway, and Workspace configuration, while each site remains independently managed and resilient. Citrix documents zone design and its latency considerations in its [Zones documentation](#); broader architecture guidance is available in the [Citrix Virtual Apps and Desktops technical overview](#).

QUESTION NO: 4

The main transformer setting within Workspace Environment Management (WEM) changes the WEM Agent machine so that it _____.

- A. only runs white-listed applications
- B. functions in kiosk mode
- C. can be accessed remotely using HDX
- D. intelligently adjusts RAM, CPU, and I/O resources

ANSWER: B

Explanation:

The correct completion is **functions in kiosk mode**. WEM Transformer is designed to convert a managed Windows endpoint into a kiosk-style device. When the main Transformer setting is enabled for an agent machine, WEM replaces or restricts the normal Windows shell experience and presents users with a controlled interface. This helps administrators deliver a simplified, purpose-built workspace in which the endpoint behaves more like a thin client than a general-purpose desktop.

The Transformer configuration can be used to control the user experience, including the applications and interface elements made available through the WEM-managed environment. This is particularly useful for shared terminals, task workers, public-access devices, and locked-down endpoints where users should be directed to an approved workspace rather than the standard Windows desktop. Citrix describes Transformer as a feature for transforming Windows devices into high-performance thin-client-style devices while providing a secure and streamlined user environment. See the Citrix [Transformer configuration documentation](#) and the [Workspace Environment Management documentation](#) for implementation details.

QUESTION NO: 5

Scenario: A Citrix Engineer is working on an existing Citrix Virtual Apps and Desktops environment with two Delivery Controllers each in Primary zone and Secondary zone located in two different datacenters respectively. Due to an outage in the Primary zone datacenter, both Delivery Controllers in the Primary zone failed to start.

Which three statements will be true in this scenario? (Choose three.)

- A. Site performance will increasingly degrade until the Delivery Controllers in the Primary zone become available.
- B. Connections to Virtual Delivery Agent (VDA) machines in the Secondary zone cannot be made.
- C. Studio cannot connect to the site.
- D. Connections to Virtual Delivery Agent (VDA) machines in the Primary zone cannot be made.
- E. Existing sessions in the Primary zone will be disconnected.

ANSWER: A C D

Explanation:

Site performance will increasingly degrade until the Delivery Controllers in the Primary zone become available because the primary zone hosts the core site control-plane role. When its Controllers are unavailable, normal site-wide coordination and management capabilities are impaired. Controllers in a secondary zone can continue to provide brokering capability for resources in that zone, but the site is operating in a reduced-capability state while the primary zone is unavailable.

Studio cannot connect to the site because Studio relies on a Delivery Controller to access and administer the site configuration. With the primary-zone Controllers unavailable during this datacenter outage, normal administrative access to the site is not available. This condition affects administration rather than immediately terminating already-established user sessions.

Connections to Virtual Delivery Agent (VDA) machines in the Primary zone cannot be made because no functioning Delivery Controller remains in that zone to broker new connections to its VDAs. The secondary-zone Controllers continue to serve VDAs and workloads associated with their own zone, which is the resilience benefit of distributing Controllers across zones. Citrix describes the primary-zone role and the behavior of multi-zone sites in its [Zones documentation](#); related Controller resiliency behavior is covered in the [Local Host Cache documentation](#).

QUESTION NO: 6

What does a Citrix Engineer need to consider when upgrading the Workspace Environment Management (WEM) Administration Console?

- A. The PowerShell command New-DatabaseConfiguration must be run prior to updating the Administration Console.
- B. The Agent must be upgraded prior to upgrading the Administration Console.

- C. The associated .DLL files must be updated using the command-line interface after upgrading the Administration Console.
- D. The infrastructure service and the database must be upgraded prior to upgrading the Administration Console.

ANSWER: D

Explanation:

The infrastructure service and the database must be upgraded prior to upgrading the Administration Console. The WEM Administration Console is a management client that connects to the WEM infrastructure service and uses the database schema supported by that service. Citrix's upgrade process therefore establishes the server-side foundation first: back up the WEM database, upgrade the database schema as required by the target WEM release, and upgrade the infrastructure service. Once those components are at the intended version, the Administration Console can be upgraded and will communicate with the corresponding infrastructure service version.

This order is important because WEM releases can introduce service capabilities and database-schema changes that the updated console expects. Completing the database and infrastructure-service work first keeps the management plane consistent and lets the console use the correct service interfaces and configuration data immediately after its upgrade. Citrix documents the WEM component upgrade sequence and prerequisites in its WEM upgrade guidance: [Citrix WEM upgrade documentation](#). For planning the target release and confirming supported component versions, consult the [Citrix WEM system requirements](#).

QUESTION NO: 7

Which two FlexCast Management Architecture (FMA) services will have an additional connection to a secondary database apart from having a connection with the Site database? (Choose two.)

- A. Citrix Configuration service
- B. Configuration Logging service
- C. Monitoring service
- D. Broker service

ANSWER: B C

Explanation:

The **Configuration Logging service** and **Monitoring service** each use the Site database while also requiring a separate, purpose-specific database connection. Configuration Logging records administrative changes made within the site, such as changes to policies, machine catalogs, delivery groups, and assignments. Its service accesses the dedicated Configuration Logging database to store and retrieve those audit records, while retaining access to Site configuration information as needed.

The Monitoring service similarly has an additional connection to the dedicated Monitoring database. This database stores historical session and machine telemetry, including connection information, user-session activity, failures, and performance data used by Director and monitoring reports. Keeping monitoring data separate from core Site configuration data supports reporting and historical analysis without placing that workload exclusively on the Site database.

Citrix documents the Site, Configuration Logging, and Monitoring databases as distinct databases in a Citrix Virtual Apps and Desktops deployment, and identifies Configuration Logging and Monitoring as the services associated with the respective auxiliary databases. See [Citrix Virtual Apps and Desktops database overview](#) and [Citrix monitoring documentation](#).

QUESTION NO: 8

Scenario: A Citrix Engineer administering a Citrix Virtual Apps and Desktops environment is experiencing inconsistency with Virtual Delivery Agent (VDA) registration. After much investigation, the engineer determined the issue is resulting from intermittent problems with the Windows services on the VDA machine and the Delivery Controller.

Which set of Citrix services should the engineer troubleshoot to find the root cause?

- A. BrokerAgent.exe and BrokerService.exe
- B. BrokerAgent.exe and Citrix.Host.exe
- C. BrokerService.exe and Citrix.Host.exe
- D. PicaSvc2.exe and BrokerService.exe

ANSWER: A

Explanation:

BrokerAgent.exe and BrokerService.exe is correct because these executables underpin the VDA-to-Delivery Controller registration path. On the VDA, BrokerAgent.exe is the Citrix Desktop Service (BrokerAgent), which starts during system startup, contacts the configured Controllers, and maintains the VDA registration state. Its ability to communicate reliably with a Controller is essential for the machine to appear as registered and available for brokering.

On the Delivery Controller, BrokerService.exe is the Citrix Broker Service. It receives and manages VDA registrations, maintains machine and session information, and provides the brokering functions required for Citrix Virtual Apps and Desktops. Intermittent failure, restart activity, dependency problems, or communication errors involving either of these services can therefore produce inconsistent VDA registration. The investigation should correlate Windows service status and event logs on both sides, including service start times and connectivity events, to identify whether registration failures originate on the VDA or at the Controller.

Citrix describes VDA registration behavior and troubleshooting considerations in its [VDA registration documentation](#). For service architecture and Controller responsibilities, see the [Citrix Delivery Controller technical overview](#).

QUESTION NO: 9

Scenario: A Citrix Engineer is deploying a Citrix Virtual Apps and Desktops environment. The engineer noticed some Virtual Delivery Agent (VDA) machines are having registration issues.

Which three items should the engineer review within the company infrastructure to determine the root cause of the issue? (Choose three.)

- A. Time synchronization (NTP) configuration of the VDA machines with the domain
- B. The SSL certificates on the VDA machines and the Delivery Controller servers
- C. The VDA machines registry setting for ListOfDDCs entries
- D. DNS configurations on either the VDA machines or the Delivery Controller servers
- E. A firewall with a blocked or failing inbound port 8080

ANSWER: A C D

Explanation:

Time synchronization (NTP) configuration of the VDA machines with the domain is relevant because VDA registration relies on domain authentication and secure communication with the Delivery Controller. Significant clock skew can prevent successful Kerberos authentication, so the VDA, domain controllers, and Controllers should use a reliable, consistent time source.

The VDA machines registry setting for ListOfDDCs entries is a primary registration setting. A VDA must be able to identify the correct Delivery Controller addresses; incorrect, obsolete, or unavailable Controller entries prevent the VDA from establishing registration. Citrix documents that Controller discovery information can be configured during installation or maintained through policy and registry settings.

DNS configurations on either the VDA machines or the Delivery Controller servers must also be reviewed. The VDA must resolve the configured Controller names to reachable addresses, and name-resolution problems can cause intermittent or

persistent registration failures. DNS is especially important where Controller addresses, machine records, or network segments have changed. Citrix's VDA-registration troubleshooting guidance identifies Controller discovery, domain connectivity, and communication reachability as core diagnostic areas. See [Citrix VDA registration troubleshooting](#) and [Citrix communication protocols](#).

QUESTION NO: 10

Scenario: A Citrix Engineer needs to use Citrix App Layering to create layered images for use with a Citrix Virtual Apps and Desktops environment.

The environment requires the following (MCS) Machine Creation Services-provisioned images:

Windows 10 Virtual Delivery Agent (VDA) machines with App A, App B, and App C installed

Windows Server 2016 VDA machines with App A, App B, and App C installed

The environment is in the middle of long-term hypervisor migration and uses both Citrix Hypervisor and Microsoft Hyper-V to host VDA machines. The images must be available on both hypervisor types.

The engineer has determined that Elastic and User Layers will NOT be used in this environment.

In this scenario the engineer will need layered image(s) and OS Layer

(s) to meet the image requirements while minimizing administrative effort.

A. 4; 4

B. 4; 1

C. 2; 1

D. 2; 2

E. 4; 2

F. 2; 4

ANSWER: C E

Explanation:

The required design uses separate operating-system layers for Windows 10 and Windows Server 2016, because an OS Layer represents a specific installed operating system and serves as the base for the applicable VDA image. The shared applications can be captured once as application layers and then included in each appropriate image composition, avoiding separate installations of App A, App B, and App C for every image.

For published MCS workloads, the image output must be available for both Citrix Hypervisor and Microsoft Hyper-V. Since the two operating systems must each be deployed to both hosting platforms, the resulting deployment requirement is four published layered images: Windows 10 for Citrix Hypervisor, Windows 10 for Hyper-V, Windows Server 2016 for Citrix Hypervisor, and Windows Server 2016 for Hyper-V. This arrangement minimizes administration by reusing the OS and application layers while publishing the required platform-specific outputs.

Citrix App Layering documentation describes OS Layers as the foundational layer containing the operating system, while application layers are reusable components that can be assigned to image templates. See [Citrix App Layering planning documentation](#) and [Citrix guidance for creating an OS Layer](#).

QUESTION NO: 11

Scenario: A newly created Citrix Virtual Apps and Desktops site has sensitive information. The users consistently use different browsers for their daily tasks. A Citrix Engineer is looking for ways to minimize attacks like ransomware, phishing, and session hijacking.

Which two steps can the engineer take to minimize attacks without interfering with user productivity? (Choose two.)

- A. Disable access to specific browsers.
- B. Disable all the user plugins.
- C. Implement HTTP Strict Transport Security (HSTS).
- D. Use HTTP response headers to send security policies to endpoint browsers.

ANSWER: C D

Explanation:

Implement HTTP Strict Transport Security (HSTS) and use HTTP response headers to send security policies to endpoint browsers. HSTS instructs compatible browsers to access the Citrix web service only through HTTPS for a defined period. This reduces the opportunity for protocol-downgrade and SSL-stripping attacks, helping ensure that authentication tokens, credentials, and session traffic are not exposed through an unintended unencrypted HTTP connection. Citrix documents HSTS configuration as a StoreFront security hardening measure: [Citrix: Configure HTTP Strict Transport Security](#).

Security-focused HTTP response headers allow the Citrix web service to communicate enforceable browser protections consistently, regardless of the user's preferred browser. For example, a Content-Security-Policy can restrict the sources from which scripts, frames, and other active content may load. Properly scoped policies reduce exposure to injected or malicious web content and strengthen protection of the StoreFront or web access workflow without requiring users to abandon their normal browser choice. Other relevant headers can control framing and browser handling of content. The security value and deployment model of Content Security Policy are described in the [OWASP Content Security Policy Cheat Sheet](#).

QUESTION NO: 12

Which command can a Citrix Engineer use to get information about a Citrix Virtual Apps and Desktops setup?

- A. Get-BrokerSite
- B. Get-BrokerController
- C. Get-BrokerDesktop
- D. Get-BrokerSession

ANSWER: A

Explanation:

`Get-BrokerSite` is the appropriate command because it retrieves configuration information for the Citrix Virtual Apps and Desktops site itself. In the Broker PowerShell SDK, a site represents the overall CVAD deployment managed by the Delivery Controller. The cmdlet returns key site-level properties, such as the site name, version, licensing configuration, database connection details, and other settings that identify and describe the environment. This makes it a useful first command when an engineer needs general information about the CVAD setup rather than details limited to a particular resource type.

Citrix administers and queries a CVAD site through PowerShell cmdlets provided by the Delivery Controller's Broker SDK. Site-level discovery is particularly valuable during routine health checks, configuration reviews, troubleshooting, and documentation of an existing deployment. Citrix documents `Get-BrokerSite` as the cmdlet that gets site configuration information: [Citrix Broker SDK: Get-BrokerSite](#). The broader SDK cmdlet reference is available at [Citrix Delivery Controller PowerShell SDK](#).

QUESTION NO: 13

Scenario: A Citrix Engineer is maintaining a Citrix Virtual Apps and Desktops environment. The engineer recently received reports from users that logons have been slow, and their desktops take a long time to load.

The engineer has decided to implement Workspace Environment Management (WEM) within the infrastructure and utilize its Profile Management capabilities to address the user issue.

Which option should the engineer configure to improve the users' desktop load time?

- A. Cross-Platform Settings
- B. Synchronization
- C. Profile Handling
- D. Streamed User Profiles

ANSWER: D

Explanation:

Streamed User Profiles is the appropriate configuration because Citrix Profile Management profile streaming is specifically designed to reduce the time a user waits at logon for their profile to become usable. With profile streaming enabled, the user can log on once the core profile structure is available, while profile files and folders are retrieved from the user store on demand as they are accessed. This avoids requiring the entire profile to be copied across the network before the desktop can load.

This is particularly beneficial when user profiles contain substantial data, such as large application settings, caches, or documents redirected into the profile. Rather than making initial desktop availability dependent on the total profile size, streaming prioritizes rapid session startup and retrieves less immediately necessary content only when required. The result is a faster perceived logon and quicker access to the Citrix desktop while retaining centrally stored profile data.

Citrix documents profile streaming as a Profile Management feature that streams profile files on demand to improve logon performance. Review the Citrix guidance for [Profile streaming](#) and the [Workspace Environment Management documentation](#) when planning and validating the configuration.

QUESTION NO: 14

How can a Citrix Engineer use Session-Based Computing/Hosted Virtual Desktop (SBC/HVD) Tuning to optimize a user's desktop?

- A. Control user permissions to external drives.
- B. Intelligently modify CPU resource allocation.
- C. Modify settings that improve the user experience.
- D. Enable Single Sign-on to the virtual desktop.

ANSWER: B

Explanation:

Intelligently modify CPU resource allocation is correct because SBC/HVD Tuning is a Citrix Workspace Environment Management optimization feature designed to improve responsiveness and scalability in shared-session and virtual-desktop environments. It applies intelligent CPU management to processes that consume excessive processor time, helping prevent a single poorly behaving application or background process from degrading the desktop experience for the user or, in multi-session scenarios, for other users on the same host. This dynamic adjustment is especially valuable on session hosts, where CPU contention can lead to delayed application launches, sluggish interaction, and reduced host density. The tuning policy is not simply a fixed CPU limit: it identifies process behavior and manages processor priority or allocation to preserve interactive performance while workloads are active. A Citrix Engineer can configure these optimization policies in Workspace Environment Management and apply them to the appropriate users, machines, or organizational units. Citrix documents CPU management as part of Workspace Environment Management system optimization, including CPU priority and CPU clamping capabilities that support efficient resource usage on managed hosts. See the [Citrix Workspace Environment Management system optimization documentation](#) and the [Workspace Environment Management administration console documentation](#).

QUESTION NO: 15

Scenario: A Citrix Engineer needs to use Citrix App Layering to create layered images for use with a Citrix Virtual Apps and Desktops environment.

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The environment is in the middle of long-term hypervisor migration and uses both Citrix Hypervisor and Microsoft Hyper-V to host VDA machines. The images must be available on both hypervisor types.

The engineer has determined that Elastic and User Layers will NOT be used in this environment.

In this scenario the engineer will need _____ layered image(s) and _____ OS Layer(s) to meet the image requirements while minimizing administrative effort.

A. 4; 4

B. 4; 1

C. 2; 1

D. 2; 2

E. 4; 2

F. 2; 4

ANSWER: C E

Explanation:

Citrix App Layering separates the operating system, applications, and platform-specific components so that common application content can be reused while images are published for the required deployment targets. The required Windows 10 and Windows Server 2016 workloads require distinct operating-system baselines, because an OS layer represents a particular operating system and cannot serve as the common OS layer for both client and server editions. The application layers for App A, App B, and App C can then be shared and included when publishing the required layered images.

For the complete deployment design, the image output must account for both operating systems and both target hypervisors. A platform layer contains the hypervisor- and deployment-specific elements needed by the VDA image; consequently, publishing for Citrix Hypervisor and Microsoft Hyper-V requires platform-appropriate image outputs. This results in four layered images—one for each operating-system and hypervisor combination—while retaining two OS layers, one for Windows 10 and one for Windows Server 2016. Citrix documents the separation and reuse of OS, platform, and application layers in its [Citrix App Layering documentation](#) and describes image publishing requirements in the [layering concepts documentation](#).