

# **Citrix Presentation Server 4.5 and XenApp 5.0 for Windows Server 2003: Administration**

## **1Y0-259 Exam**

**Preparation Guide**

**Citrix Education**

**3.0**

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**851 W. Cypress Creek Road**  
**Ft. Lauderdale, FL 33309**  
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**This Exam Preparation Guide is designed to allow you to assess the types of items that may be asked during the subject Citrix certification exam. Please be aware that the content of this guide in no way ensures a passing score on the certification exam.**

Author: Lourdes Soler, Senior Exam Developer

Citrix Systems, Inc.

**Item Development Team**

Lourdes Soler, Senior Exam Developer, Citrix Education  
Jo Harder, Senior Architect, Citrix Systems Worldwide Field Services  
Jeff Picazio, Lead Software Test Engineer, Engineering  
Karla Stagray, Senior Courseware Development Lead, Citrix Education  
Kapildev Ramlal, Escalation Engineer, Global Escalation Team  
Stacy Scott, Product Readiness Manager, Technical Support  
James West, Escalation Engineer, Support  
Jacob Summers, Software Development Engineer, Engineering, VSG  
Gary Barton, Principle Engineer, Presentation Server Product Development  
Alejandra Amador, Experienced Exam Developer, Citrix Education  
Robert Hollinger, Senior Test Engineer, Client Server Products

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# 1. The Purpose

This document provides a list of exam objectives for the Citrix Presentation Server 4.5 and XenApp 5.0 for Windows Server 2003: Administration exam (259) and a list of resources that will help prepare exam-takers for items associated with these objectives. This document outlines, at a high level, topics that are covered in the exam and instruction on how to obtain information about these topics. Exam-takers should read this document carefully before preparing for the exam.

This exam certifies that successful candidates have the knowledge and skills necessary to install, administer and support a Citrix Presentation Server 4.5 and/or XenApp 5.0 implementation in a Windows Server 2003 environment.

# 2. The Exam

This guide pertains to the 259 exam. The 259 exam is a 66-item exam written in English. Native English speakers have 90 minutes to complete the exam. Non-native English speakers who take the exam in English have 120 minutes to complete the exam. The passing score for this exam is 68%.

This version of the exam is based on Citrix Presentation Server 4.5. It includes product nomenclature and features consistent with this version of the product.

The exam is administered through Pearson VUE. For details on the rules and procedures associated with registering for and taking the exam, please visit the Exams section of the Citrix Education web site: [www.citrixtraining.com](http://www.citrixtraining.com).

# 3. The Intended Audience

The 259 exam is a rigorous examination of subjects that are critical to an administrator's role as defined by Citrix Systems' subject matter experts. This role includes, but is not limited to:

- Citrix Administrators of Presentation Server or XenApp
- Help desk personnel
- Systems Engineers
- Technical Consultants
- Trainers
- Systems Administrators

## 4. Preparatory Recommendations for the Exam

It is recommended that exam-takers have the knowledge, skills and abilities necessary to install, administer and support Citrix Presentation Server 4.5 prior to taking this exam.

### 4.1 Recommended Knowledge and Skills

Exam-takers should have the following knowledge and skills prior to taking this exam:

- Basic administration of Citrix Presentation Server 4.5
- Basic Microsoft Windows Server 2003 administration
- Basic network administration, including the ability to:
  - Log on/Log off
  - Navigate the system
  - Create users
  - Manage user permissions and administrator rights
  - Configure operating system options
- Application installation in a multi-user environment
- Network management using SNMP

### 4.2 Recommended Experience

It is recommended that exam-takers have at least six months of experience with the following:

- Installing, configuring and administering Citrix Presentation Server 4.5
- Installing and managing Citrix Licensing
- Publishing applications and enabling access for users
- Configuring and maintaining printers in the environment
- Configuring farm and zone settings
- Creating and administering Citrix Presentation Server 4.5 policies

It is also recommended that exam-takers attend the Citrix course, CTX-1259BI Citrix Presentation Server 4.5 and XenApp 5.0 for Windows Server 2003: Administration or CTX-4100BI Citrix Presentation Server 4.5 and XenApp 5.0 for Windows Server 2003: Skills Update.

## 5. Exam Sections and Weights

The Citrix Presentation Server 4.5 and XenApp 5.0 for Windows Server 2003: Administration exam (259) is divided into ten (10) sections. Each section of the exam is weighted as follows, totaling 100%:

Installing and Managing Citrix Presentation Server	5%
Configuring Farm Settings	14%
Configuring ICA Sessions	13%
Configuring Policies	13%
Publishing Applications and Content	13%
Deploying Applications	7%
Creating and Assigning Load Evaluators	4%
Configuring Printing	19%
Enabling Web Access to Published Applications and Content	8%
Securing Access to Published Applications and Content	4%

## 6. Exam Objectives and Resources Used to Develop the Exam

The items for the exam were developed directly from the exam objectives. The exam objectives are used to test exam-takers' knowledge, skills and abilities related to each section of the exam.

Some of the exam objectives will correspond, or map, to field experience. Exam-takers should have at least six months of experience with implementations of Citrix Presentation Server 4.5 to increase their likelihood of passing this exam.

For optimal performance on this exam, Citrix recommends that exam-takers attend the CTX-1259BI Citrix Presentation Server 4.5 and XenApp 5.0 for Windows Server 2003: Administration or CTX-4100BI Citrix Presentation Server 4.5 and XenApp 5.0 for Windows Server 2003: Skills Update course and obtain field experience.

## 6.1 Resources Used to Develop the Exam

The following resources were used to develop this exam:

Resource	How to Obtain
CTX-1259AI Citrix Presentation Server 4.5: Administration	This course is available at Citrix Authorized Learning Centers (CALCs) worldwide. To find the CALC nearest you, please visit the <a href="https://secureportal.citrix.com/MyCitrix/listings/Calc.aspx">https://secureportal.citrix.com/MyCitrix/listings/Calc.aspx</a> web site.
Citrix Presentation Server 4.5 Administrator's Guide	The administrator's guide is available on the CD for Citrix Presentation Server 4.5 for Windows. It is also available for download at <a href="http://support.citrix.com/article/CTX112223&amp;searchID=42412314">http://support.citrix.com/article/CTX112223&amp;searchID=42412314</a> .
Getting Started with Citrix Licensing Guide	The licensing guide is available on the CD for Citrix Presentation Server 4.5 for Windows. It is also available for download at <a href="http://support.citrix.com/article/CTX109108&amp;searchID=-1">http://support.citrix.com/article/CTX109108&amp;searchID=-1</a> .
Clients for Windows Administrator's Guide	This guide is available on the components CD for Citrix Presentation Server 4.5 for Windows. It is also available for download at <a href="http://support.citrix.com/article/CTX112190&amp;searchID=42414773">http://support.citrix.com/article/CTX112190&amp;searchID=42414773</a> .
Installation Manager Administrator's Guide	This guide is available on the components CD for Citrix Presentation Server 4.5 for Windows. It is also available for download at <a href="http://support.citrix.com/article/CTX106469&amp;searchID=42416181">http://support.citrix.com/article/CTX106469&amp;searchID=42416181</a> .
Load Manager Administrator's Guide	This guide is available on the components CD for Citrix Presentation Server 4.5 for Windows. It is also available for download at <a href="http://support.citrix.com/article/CTX112423&amp;searchID=42416472">http://support.citrix.com/article/CTX112423&amp;searchID=42416472</a> .

## 6.2 Exam Objectives

For each exam objective, the chart below lists the corresponding Citrix course and/or available technical publications used to create items in the exam to meet the objective.

**For all sections, at least six months of experience administering a Citrix Presentation Server 4.5 implementation is recommended.**

Section	Objectives	Citrix Course and/or Technical Publication
<b>Installing and Managing Citrix Presentation Server</b>	<ul style="list-style-type: none"> <li>▪ Determine the most appropriate database or configuration to meet stated requirements.</li> <li>▪ Given a list of installation options, specify which ones are applicable within a specific scenario.</li> </ul>	Citrix Presentation Server Administrator's Guide  Getting Started with Citrix Licensing Guide

Section	Objectives	Citrix Course and/or Technical Publication
<b>Installing and Managing Citrix Presentation Server (continued)</b>	<ul style="list-style-type: none"> <li>▪ Based on the needs of a given environment, choose the appropriate steps to migrate an existing Citrix Presentation Server farm to a Citrix Presentation Server 4.5 farm.</li> <li>▪ Based on a scenario, identify the required steps to configure licensing for Citrix Presentation Server.</li> </ul>	
<b>Configuring Farm Settings</b>	<ul style="list-style-type: none"> <li>▪ Given a list of privileges and/or a representation of the GUI from the management console, identify steps and/or options to manage administrator rights and access.</li> <li>▪ Given a scenario which includes customer requirements and information on a Citrix Presentation Server implementation, specify the appropriate election preferences that should be configured for a data collector.</li> <li>▪ Based on specific application types and/or client connections, determine when and/or how to configure CPU Optimization, Virtual Memory Utilization, Virtual IP, Connection Limits, ICA Keep Alive or ICA settings.</li> <li>▪ Based on a description of an existing farm, determine which Health Monitoring and Recovery tests should be run or which recovery action should be configured when checking for a specific problem.</li> </ul>	<p>CTX-1259AI Citrix Presentation Server 4.5: Administration</p> <p>Citrix Presentation Server Administrator's Guide</p> <p>Field experience configuring farm settings</p>

Section	Objectives	Citrix Course and/or Technical Publication
<b>Configuring Farm Settings (continued)</b>	<ul style="list-style-type: none"> <li>▪ Given requirements, identify the appropriate step(s) to log and audit events to meet these requirements.</li> </ul>	
<b>Configuring ICA Sessions</b>	<ul style="list-style-type: none"> <li>▪ Given a scenario, identify the appropriate client to use.</li> <li>▪ Given various client deployment methods, including Active Directory Services, a network share and manual installation, identify steps for successful deployment of the client.</li> <li>▪ Given a scenario that includes a list of requirements, identify the steps to create and deploy clients using the Client Packager.</li> <li>▪ Given a scenario and/or description of user challenges and/or interactions with the environment, determine which SpeedScreen solution is appropriate and/or how to optimize the user experience.</li> </ul>	<p>CTX-1259AI Citrix Presentation Server 4.5: Administration</p> <p>Citrix Presentation Server Administrator's Guide</p> <p>Clients for Windows Administrator's Guide</p>
<b>Configuring Policies</b>	<ul style="list-style-type: none"> <li>▪ Based on stated requirements, choose the correct steps to configure and/or the rationale for configuring Citrix Presentation Server policies.</li> <li>▪ Given a scenario describing an environment, identify the appropriate steps to apply a policy.</li> </ul>	<p>CTX-1259AI Citrix Presentation Server 4.5: Administration</p> <p>Citrix Presentation Server Administrator's Guide</p> <p>Field experience configuring policies</p>

Section	Objectives	Citrix Course and/or Technical Publication
<b>Configuring Policies (continued)</b>	<ul style="list-style-type: none"> <li>▪ Given a scenario in which a Citrix Presentation Server 4.5 implementation contains multiple policies and requirements for specific users to have an exception to a policy, make decisions for increasing or decreasing the priority of policies to ensure that exceptions are made.</li> <li>▪ Given requirements, choose the steps to assign Citrix Presentation Server policies to meet those requirements.</li> </ul>	
<b>Publishing Applications and Content</b>	<ul style="list-style-type: none"> <li>▪ Based on stated requirements, choose the appropriate configurations to publish applications or content.</li> <li>▪ Given a scenario, choose the appropriate method to provide users access to published applications or content.</li> <li>▪ Given a scenario that may contain requirements for a specific configuration, identify the appropriate type, configuration options, or published applications and content to configure content redirection for the scenario.</li> <li>▪ Given a scenario, choose when and/or how to install or associate an application into an application isolation environment and/or how to test or correct a problem associated with an isolated application error.</li> </ul>	<p>CTX-1259AI Citrix Presentation Server 4.5: Administration</p> <p>Citrix Presentation Server Administrator's Guide</p> <p>Field experience publishing applications and content</p>

<b>Section</b>	<b>Objectives</b>	<b>Citrix Course and/or Technical Publication</b>
<b>Deploying Applications</b>	<ul style="list-style-type: none"> <li>▪ Based on stated requirements, choose the pre-requisite for deploying applications in a multi-user environment with Installation Manager.</li> <li>▪ From a list, choose the required steps to publish a package, roll back the Packager or package an unattended installation.</li> </ul>	<p>CTX-1259AI Citrix Presentation Server 4.5: Administration</p> <p>Installation Manager Administrator's Guide</p> <p>Field experience deploying applications</p>
<b>Creating and Assigning Load Evaluators</b>	<ul style="list-style-type: none"> <li>▪ Given requirements, select the rules that must be configured and/or the options required to configure load evaluators.</li> <li>▪ Given a description of issues related to load balancing, choose the causes and/or appropriate options to resolve the issue(s).</li> </ul>	<p>CTX-1259AI Citrix Presentation Server 4.5: Administration</p> <p>Load Manager Administrator's Guide</p> <p>Field experience creating and assigning load evaluators</p>
<b>Configuring Printing</b>	<ul style="list-style-type: none"> <li>▪ Given a scenario, identify the appropriate filters to use when assigning network printers to users.</li> <li>▪ Choose the appropriate options to configure printer policies when assigning users to printers.</li> <li>▪ Given a scenario depicting user issues with printing and/or client requirements, choose the appropriate options to configure client printing policies.</li> <li>▪ Given stated requirements, determine when it is appropriate to implement the universal driver.</li> <li>▪ Specify when and/or how to configure printer driver mapping to meet stated requirements.</li> </ul>	<p>CTX-1259AI Citrix Presentation Server 4.5: Administration</p> <p>Citrix Presentation Server Administrator's Guide</p> <p>Field experience configuring printing</p>

Section	Objectives	Citrix Course and/or Technical Publication
<b>Configuring Printing (continued)</b>	<ul style="list-style-type: none"> <li>▪ Identify appropriate considerations for managing printer bandwidth.</li> <li>▪ From a list of required steps, choose the appropriate method to add and/or replicate printer drivers to a server.</li> <li>▪ Choose the appropriate options to configure client, network and local printers to meet stated requirements.</li> </ul>	
<b>Enabling Web Access to Published Applications and Content</b>	<ul style="list-style-type: none"> <li>▪ Given requirements, identify the appropriate steps to create Web Interface sites.</li> <li>▪ Based on stated requirements, identify the appropriate options to configure Web Interface sites.</li> <li>▪ For an implementation of Web Interface that includes a DMZ, specify the required configurations needed.</li> </ul>	<p>CTX-1259AI Citrix Presentation Server 4.5: Administration</p> <p>Citrix Presentation Server Administrator's Guide</p> <p>Field experience enabling web access to published applications and content</p>
<b>Securing Access to Published Applications and Content</b>	<ul style="list-style-type: none"> <li>▪ Given a security scenario, identify which options should be selected to configure ICA encryption.</li> <li>▪ Identify the appropriate options to secure access to Citrix Presentation Server using SSL relay.</li> <li>▪ Choose the appropriate options and/or steps required to implement address translation for an implementation of Web Interface that includes Secure Gateway.</li> </ul>	<p>CTX-1259AI Citrix Presentation Server 4.5: Administration</p> <p>Field experience securing access to published applications and content</p>

## 7. Non-traditional Item Types

The Citrix Presentation Server 4.5 and XenApp 5.0 for Windows Server 2003: Administration exam consists primarily of traditional multiple-choice items. This exam also includes non-traditional *Drag and Drop*, *Point and Click*, and *Low Fidelity Interactive* items. Traditional multiple-choice items store the selected answers so that exam-takers may revisit the item and see their chosen answers. For non-traditional items, this is **not** the case. If exam-takers navigate away from a non-traditional item, their chosen answer is stored. However, this selection is **not** visible to exam-takers if they revisit the item. **If exam-takers revisit a previously answered non-traditional item, they will be prompted to answer the item again.** Specific features of non-traditional items will be discussed in this section.

### 7.1 Drag and Drop Items

Drag and Drop items allow for exam-takers to answer items by dragging objects to predefined destinations. Predefined destinations are marked by rectangular objects called destination panels. Destination panels indicate where objects can be placed in the user interface. These panels contain instructions, such as “Place Here” or “Place First Here” (as shown in Figures 7.1.a and 7.1.b on the next page) or similar text to signal to exam-takers that this is a panel onto which an object should be dragged. Objects which can be moved are marked by an action word or sentence.

While dragging these objects, exam-takers should pay careful attention to the cursor. Figures 7.1.a and 7.1.b on the next page illustrate the two cursors exam-takers will see while completing a Drag and Drop item in this exam. Learning to recognize and interpret these can make all the difference in answering these types of items correctly.



Figure 7.1.a: In this figure, an exam-taker is attempting to drag an object to a destination panel and the prohibited symbol appears. The exam-taker will not be able to drop the source panel into the destination panel when the prohibited symbol is present. The exam-taker should reposition the source panel on the desired destination panel until he or she sees the insert symbol shown in Figure 7.1.b below.



Figure 7.1.b: In this figure, an exam-taker is attempting to drag an object to a destination panel and the insert symbol appears. The exam-taker will be able to drop the source panel into the desired destination panel when the insert symbol is present. Once all panels have been moved to their desired destination panels, exam-takers must click the Done button to record their answer before moving to the next item.

## 7.2 Point and Click Items

Point and Click items allow exam-takers to answer items by clicking a point (hotspot) on an image. When exam-takers move the pointer over the hotspot image, the pointer appears as a cross. Once exam-takers click a point on the image, a cross-hair symbol marks the spot clicked (as shown in Figure 7.2 below). If exam-takers click the wrong spot, they can deselect the spot by clicking it again. Once the spot has been deselected, the cross-hair symbol will disappear. Once the desired spot has been clicked, exam-takers must click the “Done” button within the task window in order to record their answer and move on to the next item.

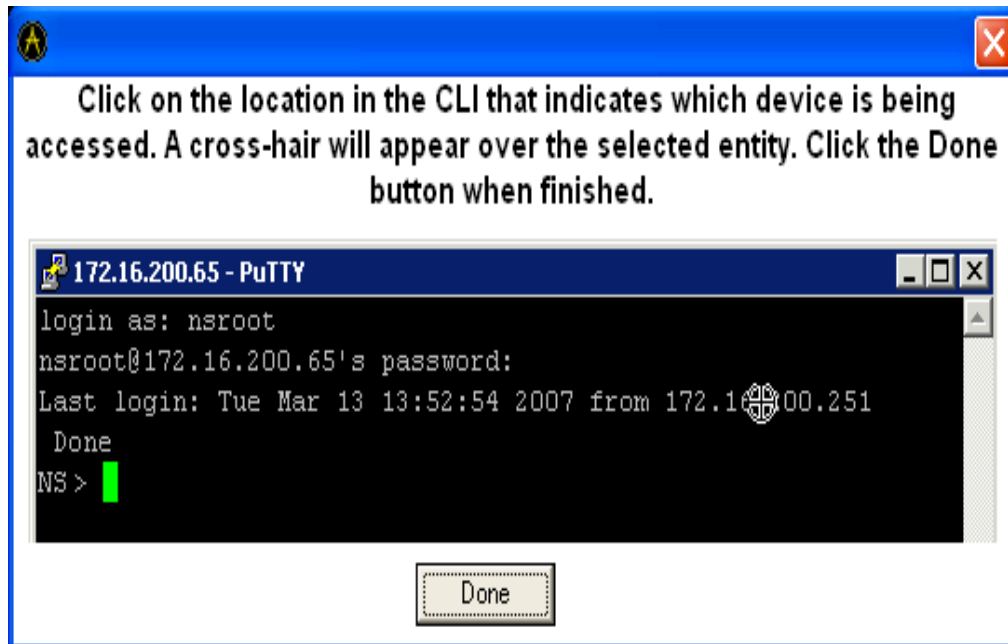


Figure 7.2: In this figure an exam-taker has selected the spot he or she believes correctly answers the item. The spot he or she chose is indicated by the cross-hair symbol.

## 7.3 Low Fidelity Interactive Items

Low Fidelity Interactive Items allow exam-takers to input data or select things within a selected portion of the user interface for the product. For this exam, text boxes associated with different points on an image are presented to exam-takers and they answer the item by typing an “x” in the appropriate text box (as shown in Figures 7.3.a and 7.3.b on the next page). As with the other non-traditional items, exam-takers must click the “Done” button within the task window when finished in order to record their answer(s) and move on to the next item.

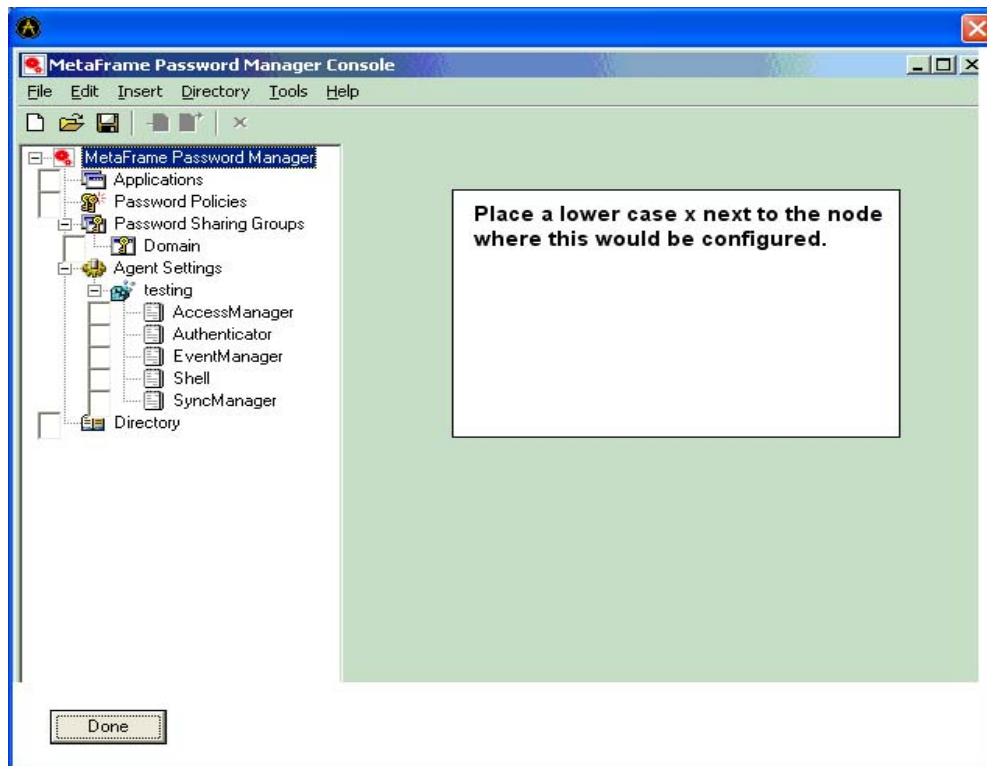


Figure 7.3.a: In this figure, an exam-taker must type a lower case x next to the node(s) he or she believes correctly answers the item. As can be seen in this example, text boxes mark the spots where a lower case x can be typed.

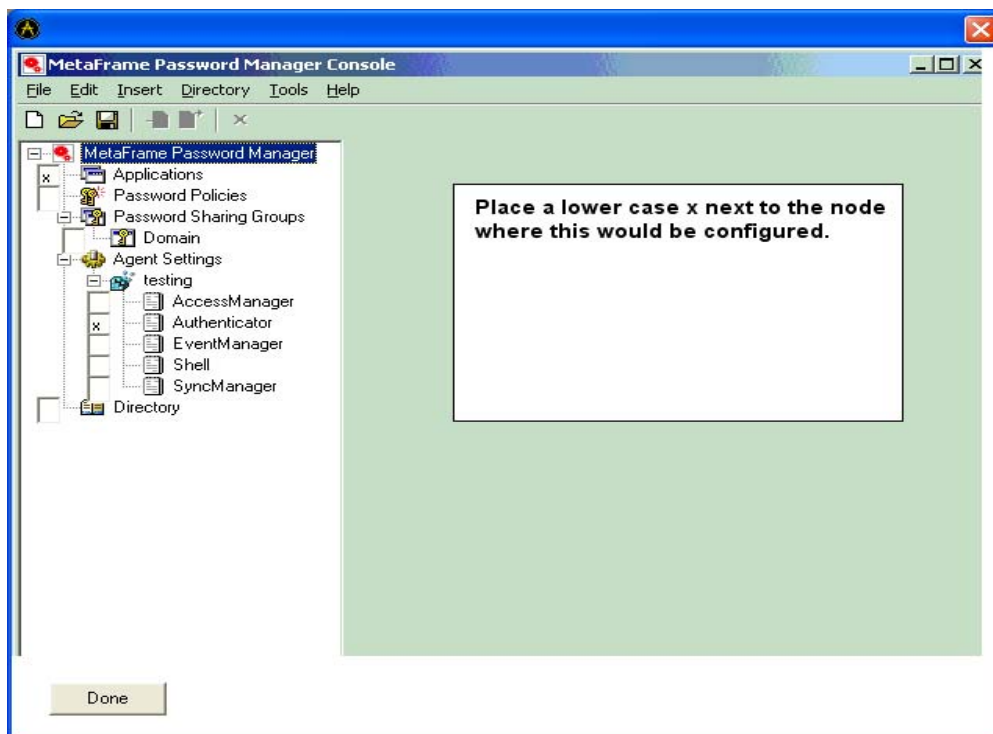


Figure 7.3.b: In this figure, the exam-taker has typed a lower case x next to the nodes he or she believes correctly answers the item.

## 8. Appendix: Practice

1. **Scenario:** The Senior Citrix Administrator has trained the help desk staff to address common issues related to Citrix Presentation Server. The administrator now plans to delegate rights in the Access Management Console to the help desk staff so they are empowered to help users with basic issues. Specifically, the administrator wants the help desk staff to be able to view everything within the Access Management Console and have rights to make all types of changes to user connections including the ability to terminate processes.

Which three of the listed permissions should be granted to the help desk staff? (Choose three.)

- A. Terminate Processes
- B. Edit RM Information
- C. View Server Information
- D. Edit Other Server Settings
- E. Move and Remove Servers
- F. View RM Information and Alerts

Answers: A, C and F

2. An administrator must roll back the Packager after packaging \_\_\_\_\_. (Fill in the blank with the correct answer.)

- A. a hotfix
- B. files and folders
- C. an .MSI or .MST file
- D. the installation of an application

Answer: D

3. Which two statements are true regarding packaging unattended installations? (Choose two.)

- A. An administrator can package an unattended installation program locally.
- B. Installation Manager can package unattended installations from .DOC and .XLS files.
- C. Installation Manager can package unattended installations of .MSP and .MSI packages.
- D. An administrator can package an unattended installation program from a network share.

Answers: A and D

4. **Scenario:** A company has multiple buildings. Employees use kiosk style workstations with static network addresses to access their work. Employees move between buildings and need to be able to print to the closest printer. The network printers have already been imported and the administrator is creating a policy to assign network printers for the users.

Which two filters may be used to assign network printers? (Choose two.)

- A. Users
- B. Servers
- C. Client Name
- D. Access Control
- E. Client IP Address

Answers: C and E

5. **Scenario:** A company's security policy requires that all remote offices access Presentation Server through Secure Gateway. Users are grouped by remote office location. The administrator has already imported the network printers and is creating policies to assign them to users in the remote offices.

Which filter must the administrator use to appropriately assign network printers to remote users?

- A. Users
- B. Servers
- C. Client Name
- D. Access Control
- E. Client IP Address

Answer: A

6. **Scenario:** An enterprise environment has of Terminal Services mandatory profiles implemented. Users complain that printing properties, designated during each session, are not retained from session to session.

Which two settings in the printer properties retention policy will address this complaint? (Choose two.)

- A. Enable session printers
- B. Retained in user profile only
- C. Enable legacy client printers
- D. Saved on the client device only
- E. Held in profile if not saved on client

Answers: D and E

7. **Scenario:** Previously, departments ordered computer and printing supplies independently of the IT department. This led to the reduction of server functionality due to all the different types of printers and print drivers. The company has changed the policy so that computer and printer procurement is done through the IT department. The Citrix Administrator has a list of approved printers and print drivers and needs to modify all the servers in the farm so that they only have the printer drivers on the list installed and no others.

Which two steps must the administrator perform to accomplish this? (Choose two.)

- A. Replicate the drivers to the other servers.
- B. Install the listed drivers on any server in the farm.
- C. Create a policy to enable native driver auto install.
- D. Install the listed drivers on a server running the Presentation Server Console.

Answers: A and B