Citrix Design, Integration and Methodology

611 Exam

Enablement Guide

Citrix Education

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Disclaimer—

This Exam Enablement Guide is designed to allow you to assess the types of questions that may be asked during the subject Citrix certification exam. Please be aware that the contents of this guide in no way ensure a passing score on such certification exam.

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1 Purpose

This document provides a list of exam objectives for Exam 611 and resources that will help prepare exam-takers for items associated with these objectives. In developing this exam, subject matter experts determined which tasks are essential to designing and integrating a MetaFrame XP Presentation Server farm into an IT environment. These tasks are listed and are the base upon which Exam 611 was created. Lists of resources available to help exam-takers prepare for the exam are also presented in Section 5: Exam Objectives and Resources for the Exam.

This document outlines, on a high level, topics that are covered in the exam and instruction on how to obtain information on these topics. Exam-takers should read this document carefully before beginning preparation for the exam.

2 The Exam

This Enablement Guide pertains to the Citrix Design, Integration and Methodology Exam (611). The exam is a sixty (60)question exam written in English. Native English speakers have one-hundred-and-five (105) minutes to complete the exam. Non-native English speakers who take the exam in English are allotted one hundred thirty-five (135) minutes to complete the exam. The passing score for this exam is 61%. This is a rigorous examination on the subject of the role of an architect as defined by Citrix Systems' Subject Matter Experts.

This version of the exam is based on MetaFrame XP Presentation Server, Feature Release 3 and MetaFrame Secure Access Manager 2.0. It includes nomenclature and features consistent with these products.

The exam is administrated through Prometric. For details on the rules and procedures associated with registering for the exam, please go to the http://citrix.com/edu website.

3 Preparatory Recommendations for the Exam

Prior to taking this exam, it is recommended that exam-takers have the knowledge and skills necessary to design and integrate Citrix products into an enterprise using Citrix methodology.

3.1 Recommended Knowledge

Knowledge of the following is recommended:

- MetaFrame XP Presentation Server, Feature Release 3 administration
- MetaFrame XP Presentation Server farm design
- Microsoft IIS Web-server administration
- Basic Microsoft SQL/MSDE database administration
- Microsoft Management Console administration
- Windows Active Directory, Microsoft Windows 2000 Server or Advanced Server administration
- MetaFrame Secure Access Manager 2.0 administration

3.2 Recommended Experience

Experience with the following is recommended:

- Minimum of two years of experience designing and integrating Citrix technologies
- Minimum of one year of experience using Citrix methodology

It is also recommended that exam-takers attend or self-study:

- CTX-6101AI, Citrix MetaFrame XP Presentation Server: Design and Integration
- CTX-6102AB, Citrix Web Access: Design and Integration
- CTX-6103AB, Citrix Methodology: Successful Implementation of Citrix Solutions
- CTX-6105AW (eLearning), Citrix Methodology: Conducting Infrastructure Assessments

4 Exam Sections and Weights

4.1 Sections of the Exam

The Citrix Design, Integration and Methodology Exam (611) is divided into fourteen (14) sections. Each section pertains to an item on the list of most important tasks as identified in a Job Task Analysis (JTA). The JTA defines the role of an architect and identifies all the related knowledge, skills and abilities of that role. The fourteen sections are:

- Application Compatibility Testing and Integration
- Server Build, Security and Optimization
- Hardware Configuration, Sizing and Scalability
- Directory Services, User Design and Integration
- Network Design and Integration
- Systems Management Design and Integration
- Disaster Recovery
- Design and Integration for MetaFrame Secure Access Manager
- Design and Integration of Web Interface with Secure Gateway
- Infrastructure Assessment
- Proof of Concept
- Implementations
- MetaFrame Access Suite Architecture Design
- Project Basics

4.2 Weights of the Exam Sections

Subject matter experts determined the importance and frequency of the identified tasks in the daily work environment of an architect. After the subject matter experts evaluated each section, each section was weighted based on the importance and frequency of the tasks. This weighting helped determine the number of questions that each section would contain. The following is the weight of each exam section. The total of all sections is 100%.

- Application Compatibility Testing and Integration 7%
- Server Build, Security and Optimization 10%
- Hardware Configuration, Sizing and Scalability 12%
- Directory Services, User Design and Integration 5%
- Network Design and Integration 3%
- Systems Management Design and Integration 3%
- Disaster Recovery 5%
- Design and Integration for MetaFrame Secure Access Manager 13%
- Design and Integration of Web Interface with Secure Gateway 10%
- Infrastructure Assessment 5%
- Proof of Concept 5%
- Implementations 15%
- MetaFrame Access Suite Architecture Design 5%
- Project Basics 2%

5 Exam Objectives and Resources for the Exam

The questions for the exam were produced directly from the exam objectives. The exam objectives were used to test the exam-taker's knowledge, skills and abilities related to each section of the exam. The exam is administered in a computer-based testing environment.

Some of the exam objectives will correspond, or map, to field experience. Exam-takers are expected to have at least two years of experience using Citrix methodology to design and integrate Citrix implementations into an existing environment to increase the chance of passing this exam.

It is HIGHLY RECOMMENDED that exam-takers attend the Citrix courses associated with the task/content objectives. Citrix courses are available at Citrix Authorized Learning Centers (CALCs). To locate the CALC nearest you, visit the http://apps.citrix.com/calclisting/calc.asp website.

For optimal performance on this exam, Citrix recommends that potential exam-takers:

- Attend or self-study the CTX-6101AI course, Citrix MetaFrame XP Presentation Server: Design and Integration
- Attend or self-study the CTX-6102AB course, Citrix Web Access: Design and Integration
- Attend or self-study the CTX-6103AB course, Citrix Methodology: Successful Implementation of Citrix Solutions
- Take the eLearning course, CTX-6105AW, Citrix Methodology: Conducting Infrastructure Assessments
- Obtain field experience

5.1 Exam Objectives and Resources

For each exam objective, the charts below list the corresponding Citrix course(s) and other recommended experience.

I. Application Compatibility Testing and Integration

Given scenarios regarding application integration in a MetaFrame XP Presentation Server environment:

- Integrate applications into the environment.
- Plan for and test application compatibility in the environment.
- Install and configure applications in the environment.
- Close down application compatibility and testing issues in the environment.

Citrix Courses	Experience
CTX-6101AI Citrix MetaFrame XP Presentation Server: Design and Integration	At least two years of experience working with Citrix implementations

II. Server Build, Security and Optimization

Given scenarios regarding MetaFrame XP Presentation Server build, security and optimization:

- Identify issues related to server build and server security in the environment.
- Plan for and create design for server build and security in the environment.
- Configure machine and user policies in the environment.
- Plan for and create designs for server build and optimization in the environment.

Citrix Courses	Experience
CTX-6101AI Citrix MetaFrame XP Presentation Server: Design and Integration	At least two years of experience documenting or suggesting processes or procedures for implementing of a design

III. Hardware Configuration, Sizing and Scalability

Given a MetaFrame XP Presentation Server deployment in an IT environment:

- Configure sizing for MetaFrame XP Presentation Servers in the environment.
- Perform scalability testing for MetaFrame XP Presentation Servers in the environment.
- Create a testing script for the MetaFrame XP Presentation Servers in the environment.
- Start a test and capture data for MetaFrame XP Presentation Servers in the environment.
- Analyze scalability testing data for the MetaFrame XP Presentation Servers in an environment.

Citrix Courses	Experience
CTX-6101AI Citrix MetaFrame XP Presentation Server: Design and Integration	At least two years of experience working with Citrix implementations

IV. Directory Services, User Design and Integration

Given an environment that contains MetaFrame XP Presentation Servers:

- Create local, roaming and customized user profiles in the environment.
- Configure user profiles in the environment.
- Configure home directory file shares in the environment.

Citrix Courses	Experience
CTX-6101AI Citrix MetaFrame XP Presentation Server: Design and Integration	At least two years of experience designing for and integrating MetaFrame XP Presentation Servers into an existing environment

V. Network Design and Integration

Given an existing network:

- Configure MetaFrame XP Presentation Server for deployment within the network.

Citrix Courses	Experience
CTX-6101AI Citrix MetaFrame XP Presentation Server: Design and Integration	At least two years of experience integrating MetaFrame XP Presentation Servers into an environment

VI. Systems Management Design and Integration

Given an environment that contains MetaFrame XP Presentation Servers:

- Design and implement systems management strategies for the MetaFrame XP Presentation Servers.
- Monitor systems management strategies for MetaFrame XP Presentation Servers.
- Integrate Enterprise Management Systems into a network.

Citrix Courses	Experience
CTX-6101AI Citrix MetaFrame XP Presentation Server: Design and Integration	At least two years of experience creating designs for and integrating MetaFrame XP Presentation Servers into an environment

VII. Disaster Recovery

Given an environment that contains MetaFrame XP Presentation Servers:

- Plan for disaster recovery, specifically for securing data in the environment.
- Use native MetaFrame XP Presentation Server recovery solutions

Citrix Courses	Experience
CTX-6101AI Citrix MetaFrame XP Presentation Server: Design and Integration	At least two years of experience working with Citrix implementations

VIII. Design and Integration for MetaFrame Secure Access Manager

Given an environment in which MetaFrame Secure Access Manager is required:

- Identify common design challenges for integrating MetaFrame Secure Access Manager into the environment.
- Provide certificate management in the environment.
- Configure local host and client side proxy in the environment.
- Perform Java client customization in the environment.
- Plan and implement a deployment strategy for MetaFrame Secure Access Manager into the environment.

Citrix Courses	Experience
CTX-6102AB Citrix Web Access: Design and Integration	At least two years of experience working with Citrix implementations

IX. Design and Integration of Web Interface with Secure Gateway

Given an environment in which web interface with secure gateway will be implemented:

- Design a single server implementation of web interface with secure gateway.
- Configure address translation.
- Configure scalability for the environment.
- Design a security policy for the environment.

Citrix Courses	Experience
CTX-6102AB Citrix Web Access: Design and Integration	At least two years of experience working with Citrix implementations

X. Infrastructure Assessment

Given a scenario in which an Infrastructure Assessment will be conducted:

- Define an Infrastructure Assessment and explain the process.
- Identify the deliverables associated with the Infrastructure Assessment.
- Identify the basic types of Infrastructure Assessments.
- Explain the purpose of criticality assessment and readiness.

Citrix Courses	Experience
CTX-6103AB Citrix Methodology: Successful Implementation of Citrix Solutions CTX-6105AW (eLearning) Citrix Methodology: Conducting Infrastructure Assessments	At least two years of experience using Citrix methodology

XI. Proof of Concept

Given an environment consisting of Citrix technologies in which a Proof of Concept will be conducted:

- Identify the considerations for planning a proof of concept.
- Define the major concepts of a proof of concept.
- Identify the areas of analysis when reviewing the proof of concept results.

Citrix Courses	Experience
CTX-6103AB Citrix Methodology: Successful Implementation of Citrix Solutions	At least two years of experience using Citrix methodology

XII. Implementations

Given an environment in which Citrix technology will be implemented:

- Identify the steps of the Build and Test phase.
- Identify guidelines for managing a build and test project.
- Outline tasks associated with aligning an infrastructure for the Build and Test phase.
- Explain the benefits of issues tracking and documenting uncovered issues.
- Identify the steps taken at the Build and Test phase checkpoint.
- Define the Rollout phase process.
- Identify the objectives of the pilot and of the production implementation.

Citrix Courses	Experience
CTX-6103AB Citrix Methodology: Successful Implementation of Citrix Solutions	At least two years of experience working with Citrix implementations and at least two years of experience using Citrix methodology

XIII. MetaFrame Access Suite Architecture Design

Given an environment that includes MetaFrame XP Presentation Server and MetaFrame Secure Access Manager:

- Define the Design phase process.
- Identify and design for the topics covered in MetaFrame Access Suite Architecture Design.
- Configure operation support and design for the implementation.

Citrix Courses	Experience
CTX-6103AB Citrix Methodology: Successful Implementation of Citrix Solutions	At least two years of experience working with Citrix implementations

XIV. Project Basics

Given a Citrix design and implementation plan:

- Identify project basics associated with the design and implementation.

Citrix Courses	Experience
CTX-6103AB Citrix Methodology: Successful Implementation of Citrix Solutions	At least two years of experience working with Citrix implementations

Appendix: Practice Items

1. You are troubleshooting an application and are receiving the error message, "File access denied in c:\winnt\system32" when running the application as a "domain user." When running as a "domain administrator" or "local administrator," this error does not occur.

   How can this be resolved?

   A. Allow "Full control" for domain users in c:\winnt\system32.
   B. Add the "domain users" group to the "local administrators" group.
   C. Add the "domain users" group to the "domain administrators" group.
   D. Install and run FILEMON during program execution as a domain user.
   E. Install and run FILEMON during program execution as a domain administrator.

Correct Answer: D

2. You are implementing a new application into an existing MetaFrame XP Presentation Server farm in which all users have mandatory profiles. All users and servers are part of an Active Directory domain. You have configured group policies so that profiles are deleted upon logoff, and so that the profile folders, Desktop; Personal (My Documents); and Favorites, are redirected.

   You have a new application that you will be deploying in the farm that writes per-user INI files to the Application Data subfolder of the user profile.

   Design Goals:
   1. Provide the ability to maintain the per-user settings in the INI files across sessions.
   2. Require the least amount of administrative effort.

   How can both of these design goals be achieved?

   A. Implement roaming profiles.
   B. Implement folder redirection on the Application Data folder.
   C. Implement an application compatibility script to run at login time.
   D. Implement an application compatibility script to run at install time.

Correct Answer: B

3. Within the Directory Services section of the architecture design, which three topics are addressed? (Choose three.)

   A. Logon scripts
   B. Terminal Services profiles
   C. Routing and remote access
   D. Policies for Terminal Servers

Correct Answers: A, B and D

4. You implement folder redirection for “My Documents” folders and loop back policies for a “MetaFrame Servers” Organizational Unit (OU) containing MetaFrame XP Presentation Servers in an Active Directory domain. After applying the policies and logging in as a user, you notice that “My Documents” is maintained locally on the server and is not being redirected.

   Which course of action should be taken to rectify the problem?

   A. Delete the user’s profile on the server.
   B. Reboot the server to apply the new machine policies.
   C. Delete the user’s “My Documents” folder on the server.
   D. Move the MetaFrame XP Presentation Servers from the “MetaFrame Servers” OU to a new OU.

Correct Answer: B

5. You are testing an application for a MetaFrame XP Presentation Server deployment and find that the following registry key is used by the application to locate application settings:

   HKLM\Software\Application\SettingsPath
   Value: c:\Program Files\Application\Settings.INI

   Which two problems might these settings cause? (Choose two.)

   A. File locking and contention
   B. Loss of user-specified settings
   C. Registry corruption if roaming profiles are used
   D. Registry corruption if mandatory profiles are used

Correct Answers: A and B

6. A company has several mission critical applications hosted on a MetaFrame XP Presentation Server. The company has a single farm spread across two sites. The second site is to act as a hot backup site in case the main data center goes down. For fault tolerance, the entire environment is replicated in the backup site. Users access the farm remotely through web interface for MetaFrame XP Presentation Server. One morning, the administrators find that the main data center is totally unavailable.

   The quickest way to switch users over to the backup data center is to _____. (Fill in the blank with the correct option.)

   A. elect a new data collector at the backup site
   B. migrate all licenses over to the backup servers
   C. edit the client’s server location list to point to the other site
   D. edit the DNS record for the old web interface server to point to the backup site’s web interface server

Correct Answer: D

7. You are testing an environment with two Load Managed Groups: the ERP Group and the Microsoft Office group. All users are configured with a mandatory profile specified as \\FileServer\Profiles and GPOs are configured so that roaming profiles are not cached.

Given the following Testing Procedure:
1. User A launches an application in the ERP Group LMG.
2. User A launches an application in the Office Group LMG.
3. User A makes a change to a setting in the ERP Group application, which updates an HKCU\Software\ERP\Setting registry key to a value of "1." (Initially, this key had a value of "0.")
4. User A closes the ERP Group application.
5. User A makes a change to a setting in the Office Group application, which updates an HKCU\Software\Office\Setting registry key to a value of "1." (Initially, this key had a value of "0.")
6. User A closes the Office Group application.

What are the values of the registry keys the next time User A logs into an application in the Office Group LMG?

A. HKCU\Software\Office\Setting = 0, HKCU\Software\ERP\Setting = 0
B. HKCU\Software\Office\Setting = 0, HKCU\Software\ERP\Setting = 1
C. HKCU\Software\Office\Setting = 1, HKCU\Software\ERP\Setting = 0
D. HKCU\Software\Office\Setting = 1, HKCU\Software\ERP\Setting = 1

Correct Answer: A

8. You have implemented a MetaFrame Secure Access Manager solution in your enterprise. One use of the access center is to access a CRM web application. Since the implementation of MetaFrame Secure Access Manager, some users are complaining that they are receiving session timeout messages when they click on a link in the access center after using the CRM web application.

What will correct this issue?

A. Increase the IIS disconnect time on the CRM web application.
B. Increase the MetaFrame Secure Access Manager session timeout.
C. Increase the IIS disconnect time on the MetaFrame Secure Access Manager web server.
D. Synchronize the system clocks on the servers in the MetaFrame Secure Access Manager farm.

Correct Answer: B

9. What is a required characteristic of a Proof of Concept?

A. Limited to one application
B. Limited scope and duration
C. Involvement of expert users only
D. Limited to one Presentation Server

Correct Answer: B

10. You recently completed a complex MetaFrame Access Suite architecture design that includes the deployment of 100 MetaFrame Presentation Servers across six data centers. The deployment will consist primarily of Microsoft Office Suite, including Microsoft Outlook.

The customer has an existing Active Directory structure, which includes domain accounts for all users and resources for the deployment. As such, a user profile and policy strategy has already been developed and tested.

Your next task is to create a project plan for the Build and Test phase of the deployment.

Given the requirements listed above, which step of the Build and Test phase has the highest priority in your project plan?

A. Environment Build
B. Application Integration
C. Profile and Policies Implementation
D. All steps should be given equal priority

Correct Answer: A