Lotus Notes R4 Certification Exam Guide

About this R4 Exam Guide

Certified Lotus Professional (CLP) Program Overview

CLP Notes Certification Designations

Preparing for the R4 Exams

Exam Competencies Measured - Summary

R4 Exam Sample Questions for Multiple Choice Exams

R4 Exam Descriptions and Competencies Measured

- System Administration 1
- Application Development 1
 - System Administration 2
- Application Development 2

Registering for the R4 Examinations

Professional Obligations

For More Information

Table of Contents

About this R4 Exam Guide	p. 2
Certified Lotus Professional (CLP) Program Overview	p. 2
CLP Notes Certification Designations	p. 3
Preparing for the R4 Exams	p. 4
R4 Exam Sample Questions for Multiple Choice Exams	p. 5-8
R4 Exam Descriptions and Competencies Measured	p. 5-19
Registering for the R4 Examinations	p. 20-2
Professional Obligations	p. 22
For More Information	p. 23

About This R4 Exam Guide

This guide is an exam guide for core Application Development and System Administration exams to achieve CLP status. An Exam Guide for elective exams to move to the principal level status is available separately.

The following is intended for individuals who are seeking Lotus® professional certification for Lotus Notes® R4 and are about to take a certification exam administered by Sylvan Prometric Testing Centers. The information provided here is your tool for preparing for Certified Lotus Professional (CLP) exams. It is intended to help you understand the content and structure of the exams, so that you may effectively study and achieve your certification goals. A description of each exam as well as the full list of competencies measured in each exam is included.

Certified Lotus Specialist (CLS) Program Overview

Responding to the growing demand among small and mid-size companies for skilled technical professionals with Internet-related product skills, Lotus Education developed the Certified Lotus Specialist (CLS) program. This program expands upon existing Lotus certification offerings by recognizing a new basic level of technical expertise, one that corresponds to the skills needed by professionals developing and administering Internet and intranet-based solutions around Lotus Domino, Lotus Notes, Lotus cc:Mail and Lotus SmartSuite for the small and mid-tier markets.

The CLS program requires individuals to pass a performance-based exam that measures expertise for a particular product including Domino, Notes, cc:Mail and SmartSuite. Five exam options are available, one of which is the cc:Mail R6 System Administration 1 exam. For more information on achieving CLS status, request your copy of the *Certified Lotus Specialist (CLS) Exam Guide*.

Certified Lotus Professional (CLP) Program Overview

The CLP Program was developed by Lotus Education to help provide a quantitative measure of product knowledge. Certification earns individuals industry recognition as technical professionals, and ensures that the people and organizations administering and developing Lotus products and applications have demonstrated a broad depth of product knowledge. Becoming a CLP requires you to have a balance of product knowledge and practical experience. The technical competency that is tested through the Sylvan Prometric exams is best achieved through a combination of training and real-life experience. Lotus Education offers a full range of classroom and self-paced, computer-based training courses as well as opportunities to utilize practice test and self-assessment tools to help achieve your certification goals. Lotus Education courses are not required as part of the certification program, though highly recommended, and you are free to choose any method available to achieve the requisite knowledge.

Certified Lotus Professional programs include designations in *Lotus ce:Mail®* and *Lotus Notes*. To receive complete program details, contact the Lotus Education Helpline at (800) 346-6409.

CLP Notes Certification Designations

As a Certified Lotus Professional for Lotus Notes, you will be recognized by your customers and your peers for knowledge as a Notes expert with application-specific skills. Two certification tracks exist for Notes R4 CLP designations.

CLP Application Developer

This program certifies developers responsible for building multiple database Notes applications that automate workflow between several departments. Specifically, accomplished individuals will have proven expertise in application architecture, application development, application security, and application documentation.

Certification as a **Principal Application Developer**, an advanced step beyond Application Developer, is directed toward individuals responsible for building enterprise-wide Notes applications that encompass multiple databases, departments, and tasks in and outside of Notes while using programming language functionality. These individuals have not only achieved the competencies required as an *Application Developer*, but also include application planning, complex application security issues, object-oriented programming expertise, and troubleshooting.

CLP System Administrator

For individuals experienced in Notes server install and configuration, server monitoring and statistics, server maintenance and operations, certification, managing multiple Notes domains and controlling Notes communications. The competencies measured include infrastructure, planning and design, server install and setup, system security, application security, and troubleshooting.

Certification as a **Principal System Administrator** is directed toward those who have achieved *System Administrator* status, while also proving expertise in the ability to integrate additional communication product technology. As an example, an accomplished individual could elect to specialize in cc:Mail as that additional product and demonstrate expertise in cc:Mail system administration fundamentals, such as post office installation, configuration, and daily user maintenance.

The following denotes the update exams required for each certification designation:

R4 Notes Certification:		R4 Exam Title:		Exam Code:	
₩	CLP Application Developer	Application Development 1 (AD1)	\rightarrow	190-171 <i>or</i> 190-271*	
		System Administration 1 (SA1) or	\rightarrow	190-174 <i>or</i> 190-274* or	
		Domino Messaging Administration 4.6 (DMA)	\rightarrow	190-311	
		Application Development 2 (AD2)	\rightarrow	190-272	
₩	CLP Principal Application Developer	Achievement of CLP Application Developer status plus Elective Exams: (take one)	\rightarrow	see above	
		LotusScript in Notes for Advanced Developers (LND)	\rightarrow	190-273	
		Developing Domino Applications for the Web (DDA)	\rightarrow	190-278	
		Domino Web Development and Administration (DWDA)	\rightarrow	190-281	
		Developing LotusScript for SmartSuite 1-2-3 Apps (DLAS)	\rightarrow	190-291	
₽	CLP System Administrator	Application Development 1 (AD1)	\rightarrow	190-171 <i>or</i> 190-271*	
		System Administration 1 (SA1)	\rightarrow	190-174 or 190-274*	
		System Administration 2 (SA2)	\rightarrow	190-275	
			\rightarrow	or see below	

₩	CLP Principal System Administrator	Achievement of CLP System Administrator status plus Elective Exam: (take one) Administrating Specialized Tasks for Domino 4.5 (AST) (Applies only if AD1, SA1, SA2 has been taken) cc:Mail R6 System Administration 1 (Applies to both SA pathes)	→→→	see above 190-276 190-251
₩	CLP System Administrator	Application Development 1 (AD1) Domino Messaging Administration 4.6 (DMA) Domino Applications Administration 4.6 (DAA)	$\begin{array}{c} \rightarrow \\ \rightarrow \\ \rightarrow \end{array}$	190-171 <i>or</i> 190-271* 190-311 191-312

^{*} Candidates have the option to complete these exams by passing either the Live Application (LA) exam or the Multiple Choice (MC) exam. Testing site may determine which testing option is available to you. Please see the Lotus Notes R4 Exam Guide for further details on the core exams.

Preparing for the R4 Exams

A Choice in Testing Methods - Live Application or Multiple Choice

Each of the exams affiliated with Lotus certification are designed not only to test your knowledge of the Lotus product, but your ability to perform tasks determined to be related to your job. This is known as a performance-based testing methodology which requires you to solve problems presented in a scenario. Lotus offers these exams in two forms: exams which require you to perform tasks in the Notes environment, and exams which require you to perform tasks in the form of multiple choice questions.

Recent technology advancements have only now made in-application testing a viable testing option. Lotus is committed to incorporating live application tests as the critical part of its certification strategy. While delivery vendors upgrade site equipment for live application testing, Lotus will continue to meet the needs of certification candidates by offering performance-based multiple choice exams to insure access in locales where concurrent application tests are not available.

If you choose to take a live application exam, please refer to the Lotus Education Web site for the appropriate live application exam guide.

To accomplish your certification goals, Lotus has developed a set of competencies associated with job tasks to be measured which are represented in either exam format. Exam questions are then structured to test your ability to perform these tasks. The competency areas provide you with direction on which topics you may need to study, or you may attempt to extrapolate how a specific competency is used to formulate a possible exam question.

Exam Competencies Measured - Summary

System Adminstration 1

There are five basic competency areas measured by the System Administration 1 certification exam. Details and full descriptions pertaining to these competencies follow in this exam guide.

☼ Infrastructure Planning and
 ☼ System Security
 Design

Maintenance and Operations

Application Development 1

There are seven basic competency areas measured by the Application Development 1 certification exam. Details and full descriptions pertaining to these competencies follow in this exam guide.

 Create Views
 Create Application Documentation
 Create Agents
 Troubleshoot Application Problems

♦ Creat Actions

System Administration 2

There are four basic competency areas measured by the System Administration 2 certification exam. Details and full descriptions pertaining to these competencies follow in this exam guide.

 □ Install/Setup Competencies
 □ System Security
 □ Maintenance and Operations
 □ Troubleshooting
 □ Troubleshooting

Application Development 2

There are seven basic competency areas measured by the Application Development 2 certification exam. Details and full descriptions pertaining to these competencies follow in this exam guide.

Architect Applications

Architect Applications

Maintain Application Designs

Create Forms Secure Applications

Create Views Troubleshoot Application Problems

♥ Creat Agents/Actions

R4 Exam Sample Questions

The competency areas outlined for each exam question provide you with direction on which topics you may need to study, or you may attempt to extrapolate how a specific competency is used to formulate a possible exam question.

Multiple Choice - System Administration 1 (#190-274) Exam Sample Questions

In addition to concurrent application-based testing in the Notes environment, Lotus is offering each exam in performance-based, multiple choice format. Following are sample questions and answers from each exam in both application based format and multiple choice format.

1. Competency Area: Infrastructure Planning and Design

Specific Objective: Design a communications schedule/configuration

Question: In planning for a new Notes system, Konstanze's company made the decision to use shared

mail on each of the company's mail servers. Which of the following was a reason for

making the shared mail decision?

A. To save processor timeB. To save hard disk spaceC. To have faster mail delivery

D. To have more reliable mail delivery.

Correct answer: B

2. Competency Area: Install/Setup

Specific Objective: Install/Setup/Enable shared mail

Question: Gert is setting up a new server. She would like to use shared mail. What does she do to

enable shared mail?

A. She sets all user preferences to use shared mail.

B. She issues the console command: LOAD OBJECT ON.

C. She sets a Shared_Mail parameter in the server's INI file.

D. She does nothing. Shared mail is the default configuration.

Correct answer: C

3. Competency Area: Maintenance and Operations

Specific Objective: Monitor maintain replication

Question: Dalton issued a server console command to force a two way exchange of database changes

between ServerA/DChem and ServerB/DChem. Which command did he issue?

A. Pull ServerA/DChem
B. Push ServerA/DChem
C. Route ServerA/DChem
D. Replicate ServerA/DChem

Correct answer: D

4. Competency Area: System Security

Specific Objective: Control access to databases using ACLs

Question: Michel is verifying LocalDomainServer access to the server's Mail.Box. What access level

should it be?

A. EditorB. AuthorC. ManagerD. Depositor

Correct answer: D

5. Competency Area: Troubleshooting

Specific Objective: Troubleshoot shared mail problems.

Question: Kristi is trying to troubleshoot a mail delivery problem. All servers in her company are

using SHARED_MAIL=1. She tests mail delivery by using her own server based mail file. She creates, sends, and saves a memo. The memo is address to more than one person on the same mail server. Which part of the memo should she find in her server-based mail

file?

A. No part of it

B. The entire message

C. Only the summary part (header)D. Only the non-summary part (body)

Correct Answer: B

Multiple Choice - Application Development 1 (#190-271) Exam Sample Questions

1. Competency Area: Create Forms

Specific Objective: Create forms which use objects to control sections for viewing

Question: Ludmilla created a database in which editors who open a certain document in

read mode see information in an expanded section. However, readers who open the same document see only the section title. How did she control these display

modes?

A. She used section edit access lists.B. She used section read access lists.C. She used section hide-when properties.

D. She used section expand/collapse rules.

Correct Answer: D

2. Competency Area: Create Views

Specific Objective: Create views which use alternate row colors

Question: Sylvie's manager does not like a view she created because the view background

color is uniform. Sylvie is given the task to redesign the view to better distinguish between documents in the view. What option does she have?

A. She can specify a view property for alternating row coloring.

B. She can specify a form property to display a document in a specific color.

C. She can specify a form property to display different form types in different fonts.

TOIRIS.

D. She can specify a view property to display different form types in different

colors.

Correct Answer: A

3. Competency Area: Create Agents

Specific Objective: Write macros/agents that run manually

Question: Kouji is creating a new server based application. As he creates this application

what must be remember about the difference between private and shared agents?

A. Both can be created by editors

B. Both can be used by many users.

C. Neither can use @Function formulas.

D. Neither can be changed to the other type, once created.

Correct Answer: D

4. Competency Area: Create Actions

Specific Objective: Create Views which use manual actions

Question: Helmut is creating an action for use on unopened documents. Which type of

action does he create?

A. From action

B. View action

C. Hotspot action

D. Database action

Correct Answer: B

5. Competency Area: Create Hotspots

Specific Objective: Write applications which use manual hotspots

Question: Claudio created a new form that uses a hotspot to access another document.

Which kind of hotspot did he use?

A. Link hotspotB. Text hotspotC. Popup hotspotD. Action hotspot

Correct Answer: A

6. Competency Area: Create Application Documentation

Specific Objective: Create About Documents which use optional launching parameters

Question: Deirdre created an application with an automatic launch on first open feature.

Which of the following did she launch?

A. A Button in the About documentB. A Navigator in the About documentC. An Attachment in the About document

Correct Answer: C

7. Competency Area: Troubleshoot Application Problems

Specific Objective: Diagnose and fix form problems

Question: Yuki and Koki modify the same document on replica databases. Yuki changes

the Category field while Koki changes the Comments field. When the databases are replicated two different documents, Yuki's and Koki's (one is marked as a

replication conflict), appear in the databases.

The designer intended that there should be only one document after replication. That single document should contain Koki's changes to the Comment field and

Yuki's changes to the Category field. Which of the following will make

replication work as intended?

A. Set the form to allow merging

B. Set the view to allow merging

C. Set the database to allow merging

D. Set the document to allow merging

Correct Answer: A

Multiple Choice - System Administration 2 (#190-275) Exam Sample Questions

1. Competency Area: Install/Setup

Specific Objective: Set up Events

Question: Darryl set up successful event notification in which of the following ways?

A. By mailing events to a mail-in database

B. By relaying events to the Event process of a server on another network.C. By logging events to the Event process of a server on the same network

Correct Answer = A

2. Competency Area: Maintenance and Operations

Specific Objective: Merge Domains

Question: Domain YYY is being merged with Domain ZZZ to form Domain YZ. What

must the systems administrator do to Server1 in Domain YYY to move it to

Domain YZ?

A. Change the DOMAIN= line in Server1's INI file

B. Place Server1 in Domain YZ's named network

C. Recreate Server1 so the new domain can be specified

D. Create new O and OU certifiers for Domain YZ and recertify Server1 with the

new OU certifier.

Correct Answer: A

3. Competency Area: System Security

Specific Objective: Control among domain access using cross certificates

Question: What can the XYZ company do when they receive the ABC company's OU cross

certificate?

A. Create new ABC users and servers.

B. Override the ABC company's server access statements.

C. Authenticate with ABC servers certified with the same OU.

D. Recertify XYZ servers in order to authenticate with the ABC servers.

Correct Answer = C

4. Competency Area: Troubleshooting

Specific Objective: Troubleshoot using the Statistics and Event Monitor database

Question: Martina started the troubleshooting process by using an Event trouble ticket.

What did she do?.

A. She defined a reporting interval in the Event database.

B. She defined a reporting interval in the server document.

C. She manually composed a trouble ticket in the Event database.

D. She manually composed a trouble ticket based on an event occurrence.

Correct Answer: D

Multiple Choice - Application Development 2 (#190-272) Exam Sample Questions

1. Competency Area: Architect Applications

Specific Objective: Minimize impact of Notes architectural limitations

Question: Arturo is deciding whether to use a subform or a section in his form. Which of

the following distinguishes a subform from a section?

A. Sections can be hidden; subforms cannot.B. Subforms can use rich text; sections cannot.

C. Sections can contain a layout region; subforms cannot.D. Subforms can be displayed by a formula; sections cannot

Correct Answer = D

2. Competency Area: Create Forms

Specific Objective: Create forms which use objects to control sections for viewing

Question: Wanda is developing an application for employees to create professional

development plans. A number of the forms have a subform with a controlled access section for their managers to indicate approval. How can Wanda grant

exclusive section access to an employee's manager?

A. She can grant manager access to each manager in the ACL.

B. She can use the value in a formula-computed employee manager field.

C. She can use an ACL-defined manager's role in the controlled access section

list.

Correct Answer = B

3. Competency Area: Create Views

Specific Objective: Create views which use form formulas

Question: This is a form formula:

@If(Corn="White"; "SteamForm"; "BoilForm")

What determines which form is used for document display?

A. A form nameB. A field valueC. A form attribute

Correct Answer = B

4. Competency Area: Create Agents/Actions

Specific Objective: Write applications which use automatic/scheduled agents

Question: Meiling would like to create an agent the automatically sends a message which

links to a group of documents in a reference database whenever new documents

are added. Which action is available to Meiling for doing this?

A. Publish a document action

B. Send a mail message action

C. Send a document summary action

D. Send a newsletter summary action.

Correct Answer = D

5. Competency Area: Maintain Application Design

Specific Objective: Use design templates

Question: Which design elements can be refreshed through design refresh?

A. Macros

B. Help documentsC. Replication settingsD. Full text index settings

Correct Answer = A

6. Competency Area: Secure Applications

Specific Objective: Control field access through signatures

Question: Hilda used a signed field in a form. Which of the following describes how it

worked?

A. Signatures are not enforced locally.

B. Signatures recalculate each time a document is saved.C. Unique signatures are allowed for multiple signed sections.

D. Unique signatures are not allowed for multiple signed sections.

Correct Answer = C

7. Competency Area: Troubleshoot Applications

Specific Objective: Diagnose and fix agent problems

Question: Inge created a scheduled agent to send notices when new documents are mailed

into a database. She sent four new documents to that database, but notices that the notifications were never received by the intended recipient. Where can she

look to see if the documents were processed and sent?

A. Agent log

B. Server log

C. Database log

D. Personal log

Correct Answer = A

Description:

Covers Release 4 material as it relates to these competency areas:

- ♦ Infrastructure Planning and Design
- ♦ Install/Setup
- **♦** Maintenance and Operations
- **♦** System Security
- **♦** Troubleshooting

Competencies Measured:

Infrastructure Planning and Design

- ➤ Design a communications schedule/configuration
- ➤ Design a Notes server replication/routing schedule...
 - Susing a single replicator
 - Susing multiple replicators
- ➤ Design Notes server replication/routing schedule
 - Susing replication types
- ≥ Design workstation replicator workspace configurations
- > Design a hierarchical organizational certification structure

Setup

- ≥ Install/Setup Notes server software
- ≥ Install/Setup Notes workstation software
- ≥ Install/Setup/Enable message based mail
- ≥ Install/Setup/Enable shared mail
- ➤ Setup routing schedules
- Setup replication schedules
- Setup server documents
- Setup Ports
- Setup remote pass-through
- Setup Pass Thru definitions for remote users
- Setup Pass Thru Connection documents for remote users
- Setup Database Libraries
- ➤ Setup using the Server Administration panel
- ➤ Convert from message based to pointer based mail
 - Convert user mail files
- Reconfigure setups
- ➤ Configure remote communications on servers and workstations
- Register users, servers
 - Susing licensing options
- Register new users from a batch file
- Register certificates
- - **⊃**for Internet Mail
- ☼ Create location documents
- ☼ Create profile documents

- ☼ Create pass-through server location documents
- ☼ Create server/user passthru server connection documents
- ➣ Designate Admin server
- ≥ Enable network connection tracing
- Assign databases to an admin proxy server

Maintenanceand Operations

- Monitor/Maintain replication
 - Create a new replica of a database
 - Create a replication formula
 - Trom console Force two way replication to a specific database
 - From console Force a one way replication to a specific database
 - ⇒From console Force a one way replication from a specific database
- > Monitor/Maintain routing
 - Maintain message based mail
 - Maintain shared mail
 - ⇒by preventing space and corruption problems
 - ⇒by using cleanup routines
 - ⇒through linking
- Monitor/Maintain servers
 - Control the Notes server from the server console
 - Control the Notes server from a client workstation
- ➤ Monitor/Maintain multiple servers
- Monitor/Maintain multiple protocols
- Monitor/Maintain databases sizes through Quotas and Thresholds
- Rename/recertify existing users/servers
- ≥ Use the Administration Process to make Public Address Book changes
- ➤ Backup and verify Notes systems files and databases

System Security

- Control access to servers
 ∴
 - Susing Anonymous access
 - **D**using Certificates
 - **D**using Groups
- ➣ Control access to databases
 - **⊃**using ACLs
 - Susing directory links
- ➤ Secure pass-through connections using ACLs

Troubleshooting

- ➤ Troubleshoot user problems
 - Server access problems
 - Server document problem
 - **⊃**Database access problems
 - **⊃**Database ACL problems
 - **⊃**ID problems
 - Password problems
 - **⊃**Mail problems

Domain document problems ⇒Pass-thru server access problems ⇒Person not listed in Public Address Book ⇒Person document problems ⇒Person record removed from Public Address Book. ⇒Can't send to/receive from a particular person. Remote access file problems ⇒Can't access own mail file Troubleshoot database integrity problems **⊃**Database corruption problems Database consistency problems (Copies vs. Replica Copies) Reappearing deleted document problems > Troubleshoot communications/remote communications problems Quise network trace to troubleshoot connection problems > Troubleshoot application problems **○**Administration Process problems **⊃**Document replication problems Access problems (ACLs) ➤ Troubleshoot mail routing problems **⊃**Dead/Pending mail • Use mail trace to troubleshoot routing problems **⊃**Shared/Message based Mail problems ⇒Addressing problems Connection or connection document problems person document problems ⇒group document problems ⇒Server doc problems ⇒ Server doc INI incompatibility problems > Troubleshoot replication problems **⊃**Field replication Connection document problems Replica ID problems ⇒ACL problems ⇒Purge interval problems ⇒Replication and Merge conflict problems > Troubleshoot workstation problems Setup problems > Troubleshoot server problems Troubleshoot pass-through server problems **○**Improper connection documents problems →Improper pass-thru server settings problems > Troubleshoot compatibility problems

⇒Can't send mail to a particular domain.

R4 Application Development 1 (#190-271) Competencies Measured

Description:

Covers Release 4 material as it relates to these competency areas:

- **♦** Create Forms
- **♦** Create Views
- **♦** Create Agents
- Create Actions
- **♦** Create Hotspots
- **♦** Create Application Documentation
- **♦** Troubleshoot Application Problems

General Competencies Measured:

General: Write Notes Applications...

- which are appropriate
- which limit database sizes
- which control database access
- which allow for full text indexing
- which allow for anonymity
- which merge replication conflicts
- which inherit documents
- which automatically enable edit mode
- which show context panes
- which allow for version control
- which use database, form, view, and field attributes

Specific Competencies Measured:

♦ Create Forms

- ➤ Create forms which use keyword lists
- ☼ Create forms which use objects
- ™ Create forms which use objects with hide-when settings for previewing documents
- Ereate forms which use objects with hide-when formulas to control object display
- № Create forms which use objects to control sections for viewing
- ☼ Create forms which use buttons
- № Create forms which get information from Notes databases (Inheritance)
- Create forms which use field formulas
- ≥ Create forms which share design attributes
- № Create forms which share design attributes using subforms
- ➤ Create forms which use window titles
- ☼ Create forms which use categories
- ≥ Create forms which use selection formulas
- ≥ Create forms which use new @Functions
- ≥ Use synonyms for Notes design elements
- > Write Notes applications that contain multi-value fields
- > Write Notes applications that use @Commands

- ➤ Control database access through access control lists

Create Views

- ☼ Create views which use column formulas
- ™ Create views which use selection formulas
- ≥ Create views which use column sorting option(s)
- ➤ Create views which use form formulas
- ☼ Create views which use shared or private attributes
- ≥ Create views which use resizable columns
- ➤ Create views which use multiple-line column headings
- ≥ Create views which use alternate row colors
- Create views which use adjustable title widths
- Create views which use preset expandable row symbols
- ™ Create views which use multiple lines per row
- ™ Create views which shrink rows to content
- Create views which use adjustable row spacing
- ≥ Create views which use refresh options
- ➤ Create views which use @Functions
- ☼ Create private/shared folders

Create Agents

- ➤ Write macros/agents that run manually
- > Write applications which use manual agents
- ➤ Create agents to change field values.

Create Actions

- Create Forms which use manual action
- Create Views which use manual actions

Create Hotspots

> Write applications which use manual hotspots

Create Application Documentation

- > Write About and Using documents
- № Create About Documents which use optional launching parameters

Troubleshooting

- ➤ Diagnose and fix form problems
- ➤ Diagnose and fix view problems
- ≥ Diagnose and fix agent problems
- Diagnose and fix database security problems
- ≥ Diagnose and fix action problems
- **➣** Diagnose and fix navigator problems

R4 System Administration 2 (#190-275) Competencies Measured

Description:

Covers Release 4 material as it relates to these competency areas:

- ♦ Install/Setup
- ♦ Maintenance and Operations
- **♦** System Security
- **◆** Troubleshooting

Competencies Measured:

Install and Setup

- Setup Database Analysis
- Setup Log Analysis
- Setup Statistics
- Setup Events
- Setup Monitoring
- Setup Monitoring Documents
- ➤ Setup among domain routing/replication

Maintenance and Operations

- Monitor the Notes system using Statistics
- ➤ Monitor the Notes system using Events
- > Monitor the Notes system using the Results database
- Monitor databases using the DB Analysis database
- > Monitor among domain routing
- Monitor among domain replication
- Merge Domains

System Security

- ➣ Control among domain access
- ☼ Control among domain access using cross certificates
- ≥ Control among domain access using trusted non-hierarchical certificates
- Control among domain routing

Troubleshooting

- Troubleshoot using the Statistics and Event Monitor database
- > Troubleshoot among domain routing mail delivery problems
- ➤ Identify and Fix Mail file access problems.
- > Identify and fix between domain mail delivery problems.
- > Identify and fix an incomplete firewall problem between two domains.
- ➤ Identify and Fix a cascading Address Book Problem.
- ≥ Identify and Fix Mail-in Database problems
- Troubleshoot replication problems among domains using Log Analysis
- Troubleshoot database problems using Database Analysis
- > Troubleshoot network connection problems using Network tracing
- > Troubleshoot authentication problems

R4 Application Development 2 (#190-272) Competencies Measured

Description:

Covers Release 4 material as it relates to these competency areas:

- **♦** Architecting Applications
- **♦** Creating Forms
- **♦** Creating Views
- **♦** Creating Agents/Actions
- ♦ Maintaining Application Designs
- Securing Applications
- **♦** Troubleshooting Application Problems

Competencies Measured:

Architect Application

- Minimize impact of Notes architectural limitations
- > Plan Notes standards

Create Forms

- ➤ Create forms which use required fields

- ☼ Create forms which use objects
- Create forms which use objects with hide-when settings for
 - previewing documents
- Create forms which use objects with hide-when formulas to
 - **Occurrol** object display
- № Create forms which use objects to control sections for viewing
- ☼ Create forms which interact with other Notes applications
- № Create Notes applications that incorporate environment variables
- ☼ Create forms which get information from Notes databases

- ➤ Create forms which share design attributes
- Create forms which share design attributes using Subforms
- ™ Create forms which use selection formulas
- ≥ Create forms which use @Functions
- ➤ Create Notes applications that use @Commands

Create Views

- ➤ Create views which use column formulas
- Create views which use hidden columns

- Create views which use form formulas
- ➤ Create views which use @Functions

Create Agents/Actions

- > Write agents that run automatically/on schedule
 - Ocreate Forms which use automatic/scheduled actions
 - Ocreate Views which use automatic/scheduled actions
 - Owrite applications which use automatic/scheduled agents
- > Write agents that run manually
 - write applications which use manual agents
 - write applications which use manual hotspots
 - Ocreate Forms which use manual actions
 - Ocreate Views which use manual actions

Maintain Application Designs

- ∆ Use design templates
- ≥ Use design templates to create applications

Secure Applications

- Control document through Reader fields
- ☼ Control document access through Author fields
- ➤ Control database access through access control lists
- ➤ Control form printing/forwarding/copying
- ≥ Control database/document access through form/view access lists
- ≥ Control field access through signatures
- ≥ Control field access through encryption

Troubleshooting

- ➤ Diagnose and fix form problems
- ≥ Diagnose and fix view problems
- ➤ Diagnose and fix agent problems
- ➤ Diagnose and fix database security problems
- ➤ Diagnose and fix action problems
- ➤ Diagnose and fix database integrity problems
- Diagnose and fix data access problems
- ➤ Diagnose and fix application problems

Registering for the R4 Examinations

Lotus certification exams are administered by two independent testing vendors for your convenience.

- Sylvan Prometric Testing Centers, located worldwide, allow flexibility in scheduling needed exams.
 For more information about Sylvan Prometric Testing Centers, please call 800-74-LOTUS
 (800-745-6887) Outside North America contact your local Lotus Education office for the location of the nearest Sylvan Prometric Regional Service Center.
- Newly signed to deliver the Lotus exams, CATGlobal is currently rolling out select centers worldwide. Look for full worldwide coverage in early 1998. For more information on the center nearest you, visit the CATGlobal website at www.catglobal.com.

To register for an exam you will need the following information:

- Name
- Personal Identification number (You may choose to use your social security number or to have a testing number assigned to you.)
- Mailing address and phone number
- · Company name
- Name and code number of exam you wish to take
- Date you wish to take the exam
- Method of payment to Testing Vendor (credit card, money order, or check)

The testing vendor will provide you with instructions concerning the cancellation policy and testing requirements. Upon confirmation of payment, you will receive a confirmation that includes the test time, test location, directions to the testing center, and exam procedures. Plan on arriving 15 minutes before the exam in order to sign in. Two forms of identification are required at check-in.

Exam Content

All exams are closed book and you may not have any printed material, computers, or calculators with you during the exam. The exams are administered on a computer and are made up of multiple choice performance based items. Note: Beta exams are longer in duration.

Cheating Policy

Lotus recognizes the seriousness of cheating. As such, Lotus will utilize effective and equitable measures for preventing the occurrence of cheating during examinations. Guidelines and regulations for appropriate test-taking are listed in exam guides and should be outlined by the examination proctor and understood by the candidate prior to taking the exam.

Examples of violations include, but are not limited to:

- Bringing unauthorized materials into the testing area (purses and notebooks must be stored out of reach during closed-book tests).
- Talking to other candidates or referring to their computer screens, testing materials, or written notes during an examination.
- Using written notes, published materials, or other testing aids except those allowed by your testing program (laptop computers, palmtop computers, and programmable calculators are not allowed).
- Copying questions and/or answers, attempting to take them out of the testing area, or sharing them with other candidates.

If a score is obtained through questionable means, the examination proctor will submit an incident report to Lotus. Lotus will then conduct, in conjunction with Lotus' contracted testing vendor, an investigation of the incident, preserving every effort to resolve the matter objectively. If the investigation confirms that the candidate has violated standard conduct and regulations, the candidate's exam will be invalidated, and the candidate will not be eligible to take a Lotus Certification exam for six months, effective the day the candidate is notified. The candidate has within 30 days of notification to appeal the decision in writing to the proper contact at Lotus Education. During the appeal process, the candidate is not authorized to take a Lotus Certification exam. Lotus reserves the right to modify this policy without notice.

Exam Scoring

You will be given an instant, on-screen report and printout showing your overall pass/fail as well as section results as soon as you complete the exam. Your test results will be automatically forwarded to Lotus Education within 5 business days after you have taken the exam. You do not need to forward your results to Lotus Education, although you should keep a copy of all test verification results for your records. You must answer a set percentage of the questions correctly to pass the exam. The percentage required for a specified exam is provided at the start of each exam. If you do not pass the exam, you must re-register for the exam through Sylvan Prometric and pay the exam fee again.

Exam Completion

Lotus Education will send you a certificate of completion, along with a welcome kit, once you have successfully passed all the necessary certification exams to earn Principal status.

Professional Obligations

Certification

Your certification as a CLP is based on completion of the required exams. You acknowledge that Lotus has the right to change the requirements for becoming a CLP, or maintaining certification at any time. You are responsible for maintaining your certification.

Leaving an Organization

You retain your Lotus certification if you move to a new organization; however, you are responsible for informing Lotus of your address changes at all times.

Grant and Consideration

Lotus grants you a non-exclusive and non-transferable license to use the name CLP and any collective marks and logos solely in connection with providing any pre- and post-sales service and support of Lotus Notes and cc:Mail. You may use the name CLP and any collective marks and logos for promotional display and advertising materials as may, in your judgment, promote the licensed services. You may not use the name CLP and any collective marks and logos for any purposes that are not directly related to the provision of licensed services.

Conduct of Business

You agree to conduct business in a manner which reflects favorably at all times on the products, goodwill, and reputation of Lotus; avoid deceptive, misleading or unethical practices which are or might be detrimental to Lotus or it's products; and refrain from making any representations, warranties, or guarantees to customers that are inconsistent with the policies established by Lotus.

Quality of Service

You agree that it is of fundamental importance to Lotus that provision of any pre- and post-sales service and support of Lotus Notes and cc:Mail be of the highest quality and integrity. Accordingly, you agree that Lotus will have the right to determine in discretion whether the licensed services meet Lotus' high standards of merchantability.

For More Information . . .

about our education services and programs, contact your local Lotus Education office, or explore the World Wide Web and visit Lotus' home page for a closer look at Lotus Education(http://www.lotus.com).

North America

Lotus Education Helpline (US) 800-346-6409 or 617-693-4436 (Monday - Friday, 8:30am - 5:30pm EST)

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