

## **Master Templates**

Design templates let you isolate the design and development of an application from the production environment. By managing application design modifications using a master design template, you avoid disruption to an application that has been deployed.

### **Creating a master design template**

Create the master design template in three steps:

| <b>Task</b> | <b>Procedure</b>   |
|-------------|--|
| 1           | Extract the design elements of your database to a new database.                        |
| 2           | Designate the new database as a template.  |
| 3           | Once the template is created, link your application database to the database template. |

### **Extracting the design from the database**

Follow these steps to extract the design elements to another database, which will become the master design template.

| <b>Task</b> | <b>Procedure</b>   |
|-------------|--|
| 1           | Select the database in either Lotus Notes or IBM® Lotus® Domino Designer®.   |
| 2           | Choose <b>File→Database→New Copy</b> .   |
| 3           | Select the location to store the new database.   |
| 4           | Enter a title.   |
| 5           | Enter a file name with the NTF extension.<br><b>Note:</b> The NTF file extension does not make the file a template. It simply causes it to appear as a choice in the list of templates when you create a new database. |
| 6           | Click <b>Specify What to Copy: Database design only</b> .  |
| 7           | If necessary, uncheck <b>Access Control List</b> . If you do not copy the ACL, any Roles that the application might depend on will be lost.  |

### **Turning a database into a template**

Follow these steps to turn a database into a template.

| Task | Procedure   |
|------|---|
| 1    | Select or open the database.  |
| 2    | Open the <b>Properties</b> box.   |
| 3    | Click the <b>Design</b> tab.  |
| 4    | Click the check box to enable the <b>Database file is a master template</b> property.   |
| 5    | Enter a name for the template.<br>This name is different from the name or title of a database. The template name is the link between the template and the database or databases, and it is a property of the template file. |

## Linking the application database to the master design template

Once you create the master design template, follow these steps to link it to your application database.

| Task | Procedure  |
|------|--|
| 1    | Select or open the database.   |
| 2    | Open the <b>Database Properties</b> box.   |
| 3    | Click the <b>Design</b> tab.   |
| 4    | Click to place a check mark next to <b>Inherit design from master template</b> . |
| 5    | Enter the name of the template.  |



## Practice Activity 15-1: Create a Design Template and a New Database



**Scenario:** Now that the Worldwide Policies and Procedures application has been designed, developed, and tested, it is time to make a design template from the database and prepare to deploy the application.



**Note:** The guided solution for this practice activity can be found in Appendix A, Solutions to Practice Activities.

1. Create a local template from the Policies and Procedures ABC database you created during the course. Name it Policies ABC Template, where **ABC** is your initials.
2. Create a new, local, Policies and Procedures database from the template.
3. Make sure that the database is set to inherit future design changes from the template.

### Replication Control

You were introduced to the replication process and its effects on applications earlier in the course. This section describes the following three ways of controlling the data that replicates:

- Controlling server access to the database
- Readers of a document
- Replication settings of the database

### Controlling server access to the database

The data that replicates is dependent on the rights of who is doing the replicating, not which server holds the database.

The following table describes the effects of ACL settings on replication.

| Server Access Level in the Replica Database<br>ACL | Effect on Replication  |
|--|--|
| No Access  | No replication occurs.   |
| Depositor  | No documents flow with depositor access. The server cannot send new documents because it cannot see which documents are new.   |
| Reader   | Server can receive changes, but cannot send changes.   |
| Author   | <p>Server can send the following changes:</p> <ul style="list-style-type: none"> <li>● New documents created since last replication.</li> <li>● Modifications to documents that list the replicating server (or user) in an Authors item. If the server is replicating changes, and it has Author access to the replica database, the server must be listed in the Authors item for replication to occur.</li> </ul> |
| Editor   | Server can send all new documents and changes to existing documents.   |
| Designer   | Server can send all new and modified documents and design elements.  |
| Manager  | Server can send all new and modified documents, design elements, and the ACL.  |

### Readers and replication

Documents that contain Readers items must list the replicating server as well as users. The server must be able to read the document to replicate it. If the server is not listed as a reader or as an author of the document, the document will not replicate.

## Replication Settings

Replication settings allow a further refinement of which documents are going to replicate between any two servers, and between client and server. The following table describes these settings.

| Group        | Settings   |
|--------------|--|
| Space Savers | <ul style="list-style-type: none"><li>● Remove documents not modified in the last <i>n</i> days</li><li>● Include specific Address Book fields</li><li>● Replicate a subset of Documents</li></ul>   |
| Send         | <ul style="list-style-type: none"><li>● Do not send deletions made in this replica to other replicas</li><li>● Do not send changes in database title and catalog info to other replicas</li><li>● Do not send changes in local security property to other replicas</li></ul> |
| Other        | <ul style="list-style-type: none"><li>● Temporarily disable replication</li><li>● Scheduled replication priority</li><li>● Only replicate incoming documents saved or modified after a particular date or a CD-ROM publishing date</li></ul>                                 |
| Advanced     | <ul style="list-style-type: none"><li>● Replicate a subset of Documents between specified servers or specified client and server</li><li>● Replicate specific types of design elements</li></ul>   |

## Creating replicas manually

Follow these steps to create a replica manually.

| Task | Procedure  |
|------|--|
| 1    | Open the database.   |
| 2    | Choose <b>File</b> → <b>Replication</b> → <b>New Replica</b> .   |
| 3    | Select the destination server (server on which to place the replica).  |
| 4    | Keep the default file name and title for the new replica.  |
| 5    | Select <b>Create: Immediately</b> .  |
| 6    | Select <b>Copy Access Control List</b> to copy the ACL from the original to the new replica. Click <b>OK</b> . |



## Practice Activity 15-2: Roll out the Policies and Procedures Application



**Scenario:** In this practice activity, you will make modifications to the Policies and Procedures application that will allow for proper replication of the application. You will also test the application.



**Note:** The guided solution for this practice activity can be found in Appendix A, Solutions to Practice Activities.

1. Modify the ACL of your Policies and Procedures database so that all documents and design changes will replicate.
2. Create a new replica of your Policies and Procedures database locally. Be sure to embed your initials in the file name.
3. Create some new documents in the server copy of the database. Replicate with the local copy to show that the documents replicate properly.
4. In the template, change the design of the Policy form. Perhaps modify the background or header.
5. Refresh the design of your local Policies and Procedures application. Open an existing Policy document to see the new change.
6. Lastly, replicate the Policies and Procedures application from local to server in order to see that the design change replicates.
7. Close all open windows.

## **Follow-up**

In this course, you were introduced to the fundamental concepts needed to perform basic application development in IBM Lotus Domino 7. In addition, that knowledge has prepared you to obtain the additional knowledge needed for building more complex applications in Lotus Domino 7.

### **What's Next?**

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This course is the first in a series of application development courses. The material in *Building Applications for the Web using IBM Lotus Domino Designer 7* provides the knowledge needed to develop Web applications in Lotus Domino Designer 7.

# Solutions

## Lesson 1

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### Activity 1-1

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1. Who last updated the document?

*Elmer Smith.*

2. When was the document created?

*12/05/2005.*

3. What is the data type for the CustomerID item?

*Number.*

# Lesson 7

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## Activity 7-1

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- 1. You are designing a form with a number of fields. Some fields on the form require an initial value that is changeable by the user. Other fields require a computed value. Some actions may need to be hidden from certain users.**
  - a) LotusScript
  - b) JavaScript
  - ✓ c) Formula language
  - d) Java
  
- 2. The application that you are designing requires that you get some of the input from dialog boxes.**
  - ✓ a) Formula language
  - ✓ b) JavaScript
  - ✓ c) LotusScript
  - d) Java
  
- 3. The application you are creating requires access to documents in databases other than the one in which it is saved.**
  - ✓ a) Formula language
  - ✓ b) LotusScript
  - c) JavaScript
  - ✓ d) Java
  
- 4. You are creating an application that requires some fairly complex interaction with the user. In the past, you have had moderate success at automating a series of tasks, but you do not have extensive experience in programming.**
  - ✓ a) Formula language
  - b) LotusScript
  - ✓ c) JavaScript
  - d) Java

5. The application that you are developing involves an extensive amount of interaction with the user. You will need to validate field contents, position the cursor, and perform other actions in the user interface.
  - ✓ a) Formula language
  - ✓ b) LotusScript
  - ✓ c) JavaScript
  - d) Java
6. You are working on a process that involves complex flow control, including loops and multiple conditional branches. You have no idea, as you are writing this process, how many times it will need to be executed.
  - ✓ a) Formula language
  - ✓ b) LotusScript
  - ✓ c) JavaScript
  - d) Java
7. An application is not performing as well as users would like. In analyzing the application, you find that while it is very user friendly, some of the formulas are performing very poorly. Which languages would you use to replace the formulas to improve the performance of the user interface?
  - a) Formula language
  - ✓ b) LotusScript
  - ✓ c) JavaScript
  - d) Java

## Activity 7-2

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FirstName: Susan  
"LastName": LastName  
FirstName + LastName: SusanSunshine  
LastName + ", " + FirstName: Sunshine, Susan  
FirstName = "Susan": True  
(FirstName != "Larry") & (LastName = "Sunshine"): True  
@Adjust (@Created; 0; 6; 0; -2; 0; 0): 6/9/2006 9:59:37 PM  
@If (@Created < @Today; "Old"; "New"): Old  
@Text (10.22): Text value, 10.22  
fullName := FirstName + " " + LastName; "Welcome back, " + fullName:  
Welcome back, Susan Sunshine

# Lesson 14

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## Activity 14-1

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For the Default user type, the Depositor access control level should be used.

For the Anonymous user type, the No Access access control level should be used.

For the Employees group, the Author access control level should be used.

For the Policy Makers group, the Editor access control level should be used.

For the Department Head, the Author access control level should be used.

For the Managers group, the Manager access control level should be used.

For the Designer, the Designer access control level should be used.

# Appendix A

## Solutions to Practice Activities

### About this Appendix

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This appendix provides detailed, step-by-step solutions to the hands-on steps included in the practice activities for this course. The solutions appear in the order in which they appear in the course materials.

For solutions to other portions of the practice activities, and for solutions to activities included elsewhere in the course content, please see the Solutions section of this manual.

### Lesson 4, Practice Activity 4-6: Create a page

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The following tables provide detailed solution steps for four parts of the practice activity:

- Build a new database.
- Create shared images.
- Create a page.
- Modify the Information page.

#### Build a new database

Follow these steps to create the Policies and Procedures database.

| Step | Action   |
|------|--|
| 1    | Open Lotus Domino Designer.  |
| 2    | Choose <b>File</b> → <b>Database</b> → <b>New</b> .<br><b>Result:</b> The New Database dialog box appears. |

## Appendix

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### Appendix A ■ Solutions to Practice Activities

| Step | Action   |
|------|--|
| 3    | Accept the default of <b>Local</b> to create the database on the local computer.   |
| 4    | Type the title <b>Policies and Procedures</b> for the database.<br><b>Result:</b> <b>Policies and Procedures</b> appears in the Title box.                   |
| 5    | Type the file name <b>Policies_ABC.nsf</b><br>Replace <i>ABC</i> with your initials.<br><b>Result:</b> <b>Policies_ABC.nsf</b> appears in the file Name box. |
| 6    | Select <b>-Blank-</b> from the template list.  |
| 7    | Click <b>OK</b> .<br><b>Result:</b> The new database is created.   |

### Create shared images

Follow these steps to create shared images for the Policies and Procedures database.

| Step | Action  |
|------|---|
| 1    | Click <b>Shared Resources</b> in the Design list.   |
| 2    | Click <b>Images..</b><br><b>Result:</b> A list of shared images appears in the Work pane.   |
| 3    | In the Work pane, click <b>New Image Resource</b><br><b>Result:</b> The New Image Resource dialog box opens.  |
| 4    | In the <b>New Image Resource</b> dialog box, browse for and select the following image files:<br>● LOGO_WW1.gif<br>● bluerule.gif<br>Click <b>Open</b> .<br><b>Result:</b> The images are added to the shared resources list. |

### Create an Information page

Follow these steps to create an Information page in the Policies and Procedures database.

| Step | Action  |
|------|---|
| 1    | Click <b>Pages</b> in the Design list.  |
| 2    | Click <b>New Page</b> .<br><b>Result:</b> A new, blank page opens in the Work pane.     |
| 3    | Choose <b>Design→Page Properties</b> .<br><b>Result:</b> The Page Properties box opens. |
| 4    | Name the page <b>Information</b> and close the Page Properties box.                     |
| 5    | Save the <b>Information</b> page.   |

## Modify the Information page

Follow these steps to modify the Information page.

| Step | Action   |
|------|--|
| 1    | With the cursor in the Information page, choose <b>Create→Table</b> .<br><b>Result:</b> The Create Table box opens.  |
| 2    | Create a fixed width table with two rows and one column. Click <b>OK</b> .<br><b>Result:</b> A table with two rows and one column is created.                              |
| 3    | Click in the top cell and choose <b>Create→Image Resource</b> .<br><b>Result:</b> The Image Resource dialog box opens.   |
| 4    | Select the <b>LOGO WW1.gif</b> file and click <b>OK</b> .<br><b>Result:</b> The Worldwide logo is added to the first cell.   |
| 5    | Click in the bottom cell and type the following text:<br>123 Worldwide Blvd.<br>Metropolis, PA 45555<br><b>Result:</b> Worldwide's address appears below the company logo. |
| 6    | Click below the table. Choose <b>Create→Image Resource</b> .<br><b>Result:</b> The Image Resource box opens.   |
| 7    | Select <b>bluerule.gif</b> . Click <b>OK</b> .<br><b>Result:</b> The bluerule.gif image is added below the table.  |

### Appendix A ■ Solutions to Practice Activities

| Step | Action   |
|------|--|
| 8    | <p>Click below the bluerule.gif image. Type the following text:</p> <p>About us:<br/>Worldwide is an international pottery manufacturer. The company sells ceramics worldwide. Products include tiles, china, and various kinds of pottery. The corporate office houses manufacturing, research and development, product management, quality control, human resources, and system administration. There are several smaller sales offices and resellers throughout each region, and some sales representatives who work from their homes.</p> <p><b>Result:</b> The text is added to the page.</p> |
| 9    | Save and preview the page.   |

### Lesson 5, Practice Activity 5-6: Create a form that contains a table and fields

The following tables provide detailed solution steps for two parts of the practice activity:

- Create a new form.
- Format the Policy form.

#### Create a new form

Follow these steps to create the Policy form.

| Step | Action   |
|------|--|
| 1    | Open your copy of the <b>Policies and Procedures</b> database in Lotus Domino Designer.  |
| 2    | In the <b>Design</b> pane, click <b>Forms</b> .<br><b>Result:</b> In the <b>Work</b> pane, the list of existing forms appears. The <b>New Form</b> button appears on the button bar. |
| 3    | In the <b>Work</b> pane, click <b>New Form</b> .   |
| 4    | Choose <b>Design→Form Properties</b> .<br>The Form Properties box opens.   |
| 5    | Type <b>Policy</b> in the <b>Name</b> field.<br><b>Result:</b> <b>Policy</b> appears in the Name box.  |

| Step | Action                                |
|------|---------------------------------------|
| 6    | Close the <b>Form Properties</b> box. |

## Format the Policy form

Follow these steps to format the Policy form.

| Step | Action   |
|------|--|
| 1    | Type Policies and Procedures at the top of the form.<br><b>Result:</b> The text appears on the form.   |
| 2    | Press Enter several times to move the cursor below the title text.<br><b>Result:</b> The cursor flashes to indicate its position.  |
| 3    | Click and drag to highlight the text. Choose <b>Text→Text Properties</b> .<br><b>Result:</b> The Text properties box opens.  |
| 4    | Change the font style and size. For example, <b>Arial Black, 14 pts. Navy Blue</b> .<br><b>Result:</b> The title text reflects the changes.  |
| 5    | Close the <b>Text Properties</b> box.  |
| 6    | Click below the title text to position the cursor where you would like the table to appear.  |
| 7    | Choose <b>Create→Table</b> .<br><b>Result:</b> The Create Table box opens.   |
| 8    | Create a <b>Basic</b> table with the following options:<br><ul style="list-style-type: none"> <li>● 5 rows</li> <li>● 2 columns</li> <li>● Fixed Width</li> </ul> Click <b>OK</b> .<br><b>Result:</b> The table appears on the form.   |
| 9    | Type the following field labels in the cells of the first column:<br><ul style="list-style-type: none"> <li>● Policy Number:</li> <li>● Policy Title:</li> <li>● Effective Date of the Policy:</li> <li>● Policy Description:</li> <li>● Category:</li> </ul> <b>Result:</b> The field labels appear in each cell in the first column. |

## Appendix

### Appendix A ■ Solutions to Practice Activities

| Step | Action  |
|------|---|
| 10   | Click in the cell to the right of the first field label, <b>Policy Number</b> .   |
| 11   | Choose <b>Create→Field</b> to create a field with the following characteristics: <ul style="list-style-type: none"><li>● <b>Field name:</b> PolicyNo</li><li>● <b>Field type:</b> Text, Editable</li></ul> <b>Result:</b> The PolicyNo field is created in the first cell of the right column.  |
| 12   | Click in the cell to the right of the <b>Policy Title</b> field label. Create a field with the following characteristics: <ul style="list-style-type: none"><li>● <b>Field name:</b> PolicyTitle</li><li>● <b>Field type:</b> Text, Editable</li></ul> <b>Result:</b> The PolicyTitle field is created in the right column.                                 |
| 13   | Click in the cell to the right of the <b>Effective Date</b> of the <b>Policy</b> field label. Create a field with the following characteristics: <ul style="list-style-type: none"><li>● <b>Field name:</b> EffectiveDate</li><li>● <b>Field type:</b> Date/Time, Editable</li></ul> <b>Result:</b> The EffectiveDate field is created in the right column. |
| 14   | Click in the cell to the right of the <b>Policy Description</b> field label. Create a field with the following characteristics: <ul style="list-style-type: none"><li>● <b>Field name:</b> PDescription</li><li>● <b>Field type:</b> Rich Text, Editable</li></ul> <b>Result:</b> The PDescription field is created in the right column.                    |
| 15   | Click in the cell to the right of the <b>Category</b> field label. Create a field with the following characteristics: <ul style="list-style-type: none"><li>● <b>Field name:</b> Category</li><li>● <b>Field type:</b> Dialog List, Editable</li></ul> <b>Result:</b> The Category field is created in the right column.                                    |
| 16   | On the line below the new <b>Category</b> field, in the same cell create a field with the following characteristics: <ul style="list-style-type: none"><li>● <b>Field name:</b> DCategories</li><li>● <b>Field type:</b> Text, Computed for display</li></ul> <b>Result:</b> The DCategories field is created in the right column.                          |

| Step | Action   |
|------|--|
| 17   | <p>Select the <b>Category</b> field and click the <b>Control</b> tab. Enter the following in the <b>Choices</b> box:</p> <ul style="list-style-type: none"> <li>● Office Guidelines</li> <li>● Benefits</li> <li>● Holidays</li> <li>● Grievance Procedures</li> </ul> <p><b>Result:</b> The category choices are created.</p>                           |
| 18   | <p>Select the <b>Category</b> field. Click the <b>Paragraph Hide/When</b> tab and select to Hide paragraph when document is:</p> <ul style="list-style-type: none"> <li>● Previewed for reading</li> <li>● Opened for reading</li> <li>● Printed</li> </ul> <p><b>Result:</b> The Category field will not be seen when the document is in Read mode.</p> |
| 19   | <p>Select the <b>DCategory</b> field. Click the <b>Paragraph Hide/When</b> tab and select to Hide paragraph when document is:</p> <ul style="list-style-type: none"> <li>● Previewed for editing</li> <li>● Opened for editing</li> </ul> <p><b>Result:</b> The Display Category field will not display when the document is being edited.</p>           |
| 20   | Close the <b>Field Properties</b> box.   |
| 21   | <p>Type the following formula in the Programmer's pane of the <b>DCategory</b> field: <b>Category</b></p> <p><b>Result:</b> The option selected in the Category field will display in the DCategories field when the document is in Read mode.</p>   |
| 22   | Save and test the form in the Lotus Notes client.  |

## Lesson 6, Practice Activity 6-4: Create a categorized view

The following tables provide detailed solution steps for two parts of the practice activity:

- Create a categorized view.
- Create a categorized column.

**Create a categorized view**

Follow these steps to create a view that displays documents created using the Policy form.

| Step | Action  |
|------|---|
| 1    | Open your copy of the <b>Policies and Procedures</b> database in Lotus Domino Designer.<br><b>Result:</b> The database opens in the Work pane.  |
| 2    | In the Design pane, click <b>Views</b> .  |
| 3    | In the Work pane, click <b>New View</b> .<br><b>Result:</b> The Create View dialog box opens.   |
| 4    | Name the view <b>Policies</b> and click <b>OK</b> .<br><b>Result:</b> The Policies view appears in the view list.   |
| 5    | Open the <b>Policies</b> view.<br><b>Result:</b> The Policies view opens in the Work pane.  |
| 6    | Click <b>Add Condition</b> in the View Programmer's pane.<br><b>Result:</b> The Add Condition dialog box opens.   |
| 7    | Select <b>By Form</b> from the <b>Condition</b> drop-down list.<br><b>Result:</b> A list of the forms in the Policies and Procedures database appears.  |
| 8    | Select the <b>Policy</b> form. Click <b>Add</b> .<br><b>Result:</b> The Policy form appears in the Programmer's pane.   |
| 9    | Double-click the first view column to open the <b>Column Properties</b> box. Set the following options on the <b>Column Info</b> tab: <ul style="list-style-type: none"><li>● <b>Title:</b> Policy</li><li>● <b>Width:</b> 25</li></ul> |
| 10   | In the Programmer's pane, select <b>Field</b> . Select the <b>PolicyTitle</b> field.<br><b>Result:</b> The first column displays the policy titles.   |

| Step | Action  |
|------|---|
| 11   | <p>Choose <b>Create→Append New Column</b> to add a column to the right with the following options:</p> <ul style="list-style-type: none"> <li>● <b>Title:</b> Effective Date</li> <li>● <b>Width:</b> 10</li> <li>● <b>Field:</b> EffectiveDate</li> <li>● <b>Style (Advanced Format tab):</b> Date/Time</li> </ul> <p><b>Clear Display Time.</b><br/> <b>Result:</b> A column displaying the policy effective date appears to the right of the Policy Name column.</p> |
| 12   | Save and preview the view.  |

### Create a categorized column

Follow these steps to add a categorized column to the Policies view.

| Step | Action  |
|------|---|
| 1    | Open the <b>Policies</b> view in Lotus Domino Designer. <b>Result:</b> The Policies view opens in the Work pane.  |
| 2    | <p>Choose <b>Create→Insert New Column</b> to add a column to the left with the following options:</p> <ul style="list-style-type: none"> <li>● <b>Title:</b></li> <li>● <b>Width:</b> 1</li> <li>● <b>Show twistie when row is expandable</b></li> </ul> <p><b>Result:</b> A new blank column is inserted to the left of the Policy column.</p> |
| 3    | Click the <b>Font</b> tab and select Blue (0,0,255) for the text color.   |
| 4    | <p>Click the <b>Sorting</b> tab and select the following options:</p> <ul style="list-style-type: none"> <li>● <b>Sort:</b> Ascending</li> <li>● <b>Type:</b> Categorized</li> </ul>  |
| 5    | In the Programmer's pane, select <b>Field</b> . Select the <b>Category</b> field.<br><b>Result:</b> The document categories are listed in the Work pane.  |
| 6    | Save and refresh the view.  |
| 7    | Create a few more documents for this view by choosing <b>Create→Document→Policy</b> .   |

**Lesson 8, Practice Activity 8-1: Create a dynamic title**

The following table provides detailed solution steps for the practice activity:

- Create a dynamic title for the Policy form.

**Create a dynamic title for the Policy form**

Follow these steps to complete the activity.

| Step | Action   |
|------|--|
| 1    | Open the <b>Policy</b> form in Lotus Domino Designer. <b>Result:</b> The form appears in the Work pane.  |
| 2    | On the <b>Objects</b> tab, select <b>Window Title</b> .<br><b>Result:</b> The Programmer's pane is empty.  |
| 3    | In the Script area, type the following formula:<br><code>@If(@IsNewDoc; "New Policy";<br/>PolicyTitle)</code><br><b>Result:</b> When users create a new policy, the title will display <b>New Policy</b> .<br>When users open or edit an existing document created with the Policy form, the title will display the content of the <b>PolicyTitle</b> field. |
| 4    | Save the form.<br><b>Result:</b> Designer stores the changes in the database.  |
| 5    | Preview the form.<br><b>Result:</b> The title should display as <b>New Policy</b> .  |
| 6    | Open an existing Policy in Lotus Notes.<br><b>Result:</b> The policy's name is displayed in the title.   |

## Lesson 8, Practice Activity 8-3: Automate data entry and formatting

The following tables provide detailed solution steps for four parts of the practice activity:

- The policy title should be formatted using proper case.
- Create a field to capture the date the policy is created. This date should be displayed without the time element. Name it `PolicyCreatedDate`.
- The effective date should calculate to one month from the date the policy is created in order to account for an internal review process. This date should also be displayed without the time.
- When a policy is created, the document should not be saved unless it contains a title and category.

### Make sure PolicyTitle is entered in proper case

Follow these steps to make sure the policy's title is always entered in proper case.

| Step | Action  |
|------|---|
| 1    | Open the <b>Policy</b> form in Lotus Domino Designer.   |
| 2    | Click the <b>PolicyTitle</b> field.<br><b>Result:</b> The <b>PolicyTitle</b> field and its objects appear in the Objects list.  |
| 3    | In the Script area, type the following formula in the <b>Input Translation</b> object for the field:<br><code>@ProperCase(PolicyTitle)</code><br><b>Result:</b> The formula appears in the Script area. |
| 4    | Save and test the form.   |

### Have Lotus Domino enter the entry date

Follow these steps to have Lotus Domino automatically enter the document's entry date and display the date only.

| Step | Action   |
|------|--|
| 1    | Place the cursor in the third row of the table on the Policy form.                                       |
| 2    | Choose <b>Table→Insert Row</b> .<br><b>Result:</b> A blank row is inserted above the Effective Date row. |

### Appendix A ■ Solutions to Practice Activities

| Step | Action   |
|------|--|
| 3    | In the left cell, type the field label: <b>Created Date</b> :<br><b>Result:</b> The text appears in the left cell.   |
| 4    | Move the cursor into the right cell. Choose <b>Create→Field</b> .<br><b>Result:</b> The Create Field box opens.  |
| 5    | Name the field <b>PolicyCreatedDate</b> with the following options:<br>● <b>Field type:</b> Date/Time, Computed when composed<br><b>Result:</b> The <b>PolicyCreatedDate</b> is added to the right cell.   |
| 6    | Select the <b>Value object</b> for the <b>PolicyCreatedDate</b> field.   |
| 7    | In the Script area, type: <code>@Created</code><br><b>Result:</b> The formula appears in the Script window.  |
| 8    | Open the <b>Field Properties</b> box and click the <b>Control</b> tab. Ensure that <b>Display Time</b> is not checked. In the <b>Show</b> drop-down list, verify that <b>Only month, day and year</b> is selected.<br><b>Result:</b> The <b>Control</b> tab of the <b>Field Properties</b> box is displayed. |
| 9    | Save and test the form.  |

### Calculate the **EffectiveDate** of the policy

Follow these steps to calculate the **EffectiveDate** of the policy based on the **PolicyCreatedDate**.

| Step | Action   |
|------|--|
| 1    | Open the <b>Policy</b> form in Lotus Domino Designer.  |
| 2    | Click the <b>EffectiveDate</b> field.<br><b>Result:</b> The <b>EffectiveDate</b> field and its objects appear in the <b>Objects</b> list.  |
| 3    | Open the <b>Field Properties</b> box. Change the field from <b>Editable</b> to <b>Computed</b> .<br><b>Result:</b> The field type is changed to indicate that the field is going to be computed.                   |
| 4    | In the Script area, enter the following formula in the <b>Value</b> object for the field:<br><code>@Adjust(PolicyCreatedDate; 0; 1; 0; 0; 0; 0)</code><br><b>Result:</b> The formula appears in the Script window. |
| 5    | Save and test the form.  |

### Verify fields before saving

Follow these steps to verify that certain fields contain a value before allowing a document to be saved.

| Step | Action  |
|------|---|
| 1    | In Lotus Domino Designer, click the <b>PolicyTitle</b> field. <b>Result:</b> The <b>PolicyTitle</b> field and its objects appear in the <b>Objects</b> list.  |
| 2    | In the Script area, type the following formula in the <b>Input Validation</b> object of the field:<br><code>@If (PolicyTitle =NULL; @Failure("Please enter a Policy Title.");@Success)</code><br><b>Result:</b> The formula appears in the Script area. |
| 3    | Implement input validation for the <b>Category</b> field. Use the following formula:<br><code>@If (Category =NULL; @Failure("Please select a Category.");@Success)</code><br><b>Result:</b> The formula appears in the Script area.                     |
| 4    | Preview the form to test the formulas.  |

### Lesson 8, Practice Activity 8-5: Compute a list of choices for a field

The following tables provide detailed solution steps for four parts of the practice activity:

- Create a Category form with a Category field.
- Use the Category form to create several documents.
- Create a view to display only Category documents.
- Modify the Policy form so the Category field gets its value from the Categories view.

#### Create a Category form

Follow these steps to create the Category form.

### Appendix A ■ Solutions to Practice Activities

| Step | Action   |
|------|--|
| 1    | Open your copy of the <b>Policies and Procedures</b> database in Lotus Domino Designer.  |
| 2    | In the <b>Design</b> pane, click <b>Forms</b> .<br><b>Result:</b> In the <b>Work</b> pane, the list of existing forms appears. The <b>New Form</b> button appears on the button bar.   |
| 3    | In the <b>Work</b> pane, click <b>New Form</b> .   |
| 4    | Choose <b>Design</b> → <b>Form Properties</b> .<br><b>Result:</b> The <b>Form Properties</b> box opens.  |
| 5    | Type <b>Category</b> in the <b>Name</b> field.<br><b>Result:</b> <b>Category</b> appears in the <b>Name</b> field.<br><b>Note:</b> It is a good idea to give the form an alias.  |
| 6    | Close the <b>Form Properties</b> box.  |
| 7    | Enter the field label <b>Category</b> at the top of the page.  |
| 8    | Choose <b>Create</b> → <b>Field</b> to create a field with the following characteristics: <ul style="list-style-type: none"><li>● <b>Field name:</b> Category</li><li>● <b>Field type:</b> Text, Editable</li></ul> <b>Result:</b> A field named <b>Category</b> is created. |
| 9    | Save the form and test in the Lotus Notes client.  |

### Use the Category form

Follow these steps to create documents using the Category form.

| Step | Action   |
|------|--|
| 1    | Open the Lotus Notes client.   |
| 2    | Choose <b>File</b> → <b>Database</b> → <b>Open</b> . Browse for and open your copy of the <b>Policies and Procedures</b> ( <b>Policies_ABC.nsf</b> ) database.<br><b>Result:</b> The database opens. |
| 3    | Choose <b>Create</b> → <b>Category</b> to create a document using the <b>Category</b> form.<br><b>Result:</b> The <b>Category</b> form opens.  |

| Step | Action  |
|------|---|
| 4    | Type <b>Office Guidelines</b> in the <b>Category</b> field.<br>Save and close the document.<br><b>Result:</b> The document closes.  |
| 5    | Add the following categories:<br><ul style="list-style-type: none"> <li>● Benefits</li> <li>● Holidays</li> <li>● Grievance Procedures</li> <li>● Security</li> <li>● E-mail Etiquette</li> <li>● Diversity</li> </ul> <b>Result:</b> Six additional documents are created using the Category form. |

### Create the Category view

Follow these steps to create a view to display documents using the Category form.

| Step | Action   |
|------|--|
| 1    | Open your copy of the <b>Policies and Procedures</b> database in Lotus Domino Designer.<br><b>Result:</b> The database opens in the Work pane.         |
| 2    | In the Design pane, click <b>Views</b> .   |
| 3    | In the Work pane, click <b>New View</b> .<br><b>Result:</b> The Create View box opens.   |
| 4    | Name the view <b>Categories</b> . Click <b>OK</b> .<br><b>Result:</b> The Categories view appears in the view list.                                    |
| 5    | Open the <b>Categories</b> view.<br><b>Result:</b> The Categories view opens in the Work pane.   |
| 6    | Click <b>View Selection</b> in the <b>Objects</b> tab.<br><b>Result:</b> The View Selection object opens.  |
| 7    | Click <b>Add Condition</b> in the View Programmer's pane.<br><b>Result:</b> The Add Condition dialog box opens.  |
| 8    | Select <b>By Form</b> from the <b>Condition</b> drop-down list.<br><b>Result:</b> A list of the forms in the Policies and Procedures database appears. |

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| Step | Action  |
|------|---|
| 9    | Select the <b>Category</b> form. Click <b>Add</b> .<br><b>Result:</b> Uses 'Category' form appears in the Programmer's pane.  |
| 10   | Double-click the first view column to open the <b>Column Properties</b> box. Modify the column as follows: <ul style="list-style-type: none"><li>● <b>Name:</b> Category</li><li>● <b>Width:</b> 25</li></ul> <b>Result:</b> The default column displays <b>Category</b> in its header and is 25 characters wide. |
| 11   | In the Programmer's pane, select <b>Field</b> . Select <b>Category</b> from the list of fields in the database.<br><b>Result:</b> The Category column displays the content of the Category field.   |
| 12   | Save and preview the view.  |

### Modify the Policy form

Follow these steps to build a list of keyword choices from the Category view.

| Step | Action  |
|------|---|
| 1    | Open the <b>Policy</b> form in Lotus Domino Designer.<br><b>Result:</b> The form appears in the Work pane.  |
| 2    | Click the <b>Category</b> field and open the <b>Field Properties</b> box.<br><b>Result:</b> The <b>Field Properties</b> box opens.  |
| 3    | Click the <b>Control</b> tab.   |
| 4    | In the <b>Choices</b> drop-down list, select <b>Use formula for choices</b> .   |
| 5    | In the <b>Choices</b> text box, delete the existing choices and type the following formula in the formula window:<br><pre>lutype := "Notes": "NoCache"; db := @DbName; View := "Categories"; col := 1; keylist := @DbColumn(lutype; db; view; col); @If(@IsError(keylist); "No Entries in view"; keylist)</pre> |
| 6    | Save and test the form.   |

## Lesson 8, Practice Activity 8-6: Create reusable code

The following table provides detailed solution steps for the practice activity:

- Create reusable code.

| Step | Action  |
|------|---|
| 1    | In your copy of the <b>Policies and Procedures</b> database, open the <b>Policy</b> form in Lotus Domino Designer.<br><b>Result:</b> The Policy form opens in the Work pane.  |
| 2    | Select the <b>PolicyNo</b> field. In the Programmer's pane, on the <b>Object</b> tab, select <b>Input Validation</b> .  |
| 3    | In the Programmer's pane, enter the following formula:<br><code>@If(@ThisValue="" ;@Failure("Please enter a "+@Replace Substring(@ThisName;"Policy";"Policy")+".") ;@Success)</code><br><b>Result:</b> The formula returns the message, "Please enter a Policy No." if the field is left empty. |
| 4    | Reuse this formula by copying it and pasting it as an Input Validation formula for the <b>PolityTitle</b> field.<br><b>Result:</b> The formula returns the message, "Please enter your Policy Title" if the field is left empty.  |
| 5    | Save and preview the form in Lotus Notes.   |

## Lesson 8, Practice Activity 8-7: Implement error interception

The following table provides detailed solution steps for the practice activity:

- Implement error interception.

| Step | Action   |
|------|--|
| 1    | In your copy of the <b>Policies and Procedures</b> database, open the <b>Policy</b> form in Lotus Domino Designer. |
| 2    | Insert another row in the table between <b>Created Date</b> and <b>Effective Date of Policy</b> .                  |
| 3    | Label the new row <b>Modifications to the Policy</b> .   |
| 4    | Create a Computed Date/Time field called <b>L_ModifiedDates</b> .  |

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| Step | Action   |
|------|--|
| 5    | <p>Specify the following items:</p> <ul style="list-style-type: none"><li>● Allow multiple values</li><li>● Display date only</li><li>● Advanced: Display separate values with new line</li><li>● Hide paragraph if L_ModifiedDates=NULL</li><li>● Formula:<br/><pre>@If(@IsNewDoc;@Return(NULL);NULL);<br/>@If(@IsDocBeingSaved;NULL;@Return(@ThisValue));<br/>@If(@ThisValue=NULL;@Today;@ThisValue:@Today);</pre></li></ul> |
| 6    | On the line below the new field, but in the same table cell, type the following text: N/A and hide it when L_ModifiedDates!=NULL.  |
| 7    | Revise the formula for the Effective Date field to look like this:<br><pre>@If((L_ModifiedDates=<br/>NULL;@Return(@Adjust(PolicyCreatedDate;0;1;0;0;0;0))<br/>;NULL);<br/>NumberofModifications:=@Count(L_ModifiedDates);<br/>@Return(@Adjust(L_ModifiedDates[NumberofModifications]<br/>;0;1;0;0;0;0))</pre>  |
| 8    | Test your form.  |

**Lesson 10, Practice Activity 10-4: Create question and answer forms in the Policies and Procedures database**

The following tables provide detailed solution steps for four parts of the practice activity:

- Create the header subform.
- Create a shared image. Use a layer and the mod\_menu\_background.gif file to enhance the look of the forms.
- Design and create the Question form.
- Design and create the Answer form.

**Create the header subform**

Follow these steps to create the header subform.

| Step | Action   |
|------|--|
| 1    | Open your copy of the <b>Policies and Procedures</b> database in Lotus Domino Designer.  |
| 2    | In the Design pane, select <b>Shared Code</b> → <b>Subforms</b> .<br><b>Result:</b> A list of current subforms appears in the Work pane.   |
| 3    | Click <b>New Subform</b> .<br><b>Result:</b> A blank subform opens in the Work pane.   |
| 4    | With the cursor on the Info page, choose <b>Create</b> → <b>Table</b> .<br><b>Result:</b> The Create Table box opens.  |
| 5    | Create a <b>Fit with margins</b> table with one row and two columns. Click <b>OK</b> .<br><b>Result:</b> A table with one row and two columns is created.  |
| 6    | Select the entire table. On the <b>Cell Borders</b> tab of the <b>Table Properties</b> box, set all borders to 0.  |
| 7    | Click in the left cell, and choose <b>Create</b> → <b>Image Resource</b> .<br><b>Result:</b> The Insert Image Resource box opens.  |
| 8    | Select the <b>LOGO WW1.gif</b> file and click <b>OK</b> .<br><b>Result:</b> The Worldwide logo is added to the first cell.   |
| 9    | Click in the right cell and enter the following text:<br>123 Worldwide Blvd.<br>Metropolis, PA 45555<br><b>Result:</b> Worldwide's address appears to the right of the company logo.                       |
| 10   | Click below the table and choose <b>Create</b> → <b>Image Resource</b> . If necessary, select <b>bluerule.gif</b> and click <b>OK</b> .<br><b>Result:</b> The bluerule.gif image is added below the table. |
| 11   | Close and save the subform as <b>Worldwide Header</b><br><b>Result:</b> The subform closes and Worldwide Header appears as an available subform in the subforms list.                                      |

### Create a shared image

Follow these steps to add a shared image.

| Step | Action  |
|------|---|
| 1    | Click <b>Shared Resources</b> in the Design list. |

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| Step | Action  |
|------|---|
| 2    | <b>Click Images.</b><br><b>Result:</b> A list of shared images appears in the Work pane.  |
| 3    | In the Work pane, click <b>New Image Resource</b> .<br><b>Result:</b> The New Image Resource dialog box opens.  |
| 4    | In the <b>New Image Resource</b> dialog box, browse for and select the following image file:<br>● mod_menu_background.gif<br>Click <b>Open</b> .<br><b>Result:</b> The image is added to the shared resources list. |

### Create the Question form

Follow these steps to create the Question form.

| Step | Action  |
|------|---|
| 1    | In the <b>Design</b> pane, click <b>Forms</b> .<br><b>Result:</b> In the Work pane, the list of existing forms appears. The <b>New Form</b> button appears on the button bar. |
| 2    | In the <b>Work</b> pane, click <b>New Form</b> .  |
| 3    | Choose <b>Design</b> → <b>Form Properties</b> .<br><b>Result:</b> The Form Properties box opens.  |
| 4    | Type <b>Question</b> in the <b>Name</b> field.<br><b>Result:</b> <b>Question</b> appears in the Name box.   |
| 5    | Close the <b>Form Properties</b> box.   |
| 6    | Choose <b>Create</b> → <b>Resource</b> → <b>Insert Subform</b> .<br><b>Result:</b> The Insert Subform box opens.  |
| 7    | Select <b>Worldwide Header</b> . Click <b>OK</b> .<br><b>Result:</b> The subform is inserted at the top of the Question form.   |
| 8    | Click below the subform, and type the following text: <b>Question</b>   |
| 9    | Select the text and set the font size to 24.  |
| 10   | Position the cursor several spaces below the text and choose <b>Create</b> → <b>Table</b> .<br><b>Result:</b> The Create Table box opens.                                     |

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| Step | Action   |
|------|--|
| 11   | Create a fixed width table with six rows and two columns. Click <b>OK</b> .<br><b>Result:</b> A table is inserted on the Question form.  |
| 12   | Select the entire table. On the <b>Cell Borders</b> tab of the <b>Table Properties</b> box, set all borders to 0. Close the <b>Table Properties</b> box.   |
| 13   | Select the left column, and right-justify the text.  |
| 14   | In the first row, add the following field label into the left cell and field into the right cell: <ul style="list-style-type: none"> <li>● <b>Field label:</b> First Name:</li> <li>● <b>Field name:</b> FName</li> <li>● <b>Field type:</b> Text, Editable</li> </ul> <b>Result:</b> The first row is populated with a field label and field.                               |
| 15   | In the second row, add the following field label into the left cell and field into the right cell: <ul style="list-style-type: none"> <li>● <b>Field label:</b> Last Name:</li> <li>● <b>Field name:</b> LName</li> <li>● <b>Field type:</b> Text, Editable</li> </ul> <b>Result:</b> The second row is populated with a field label and field.                              |
| 16   | Complete the next row with the following information: <ul style="list-style-type: none"> <li>● <b>Field label:</b> Date of Question</li> <li>● <b>Field name:</b> QuestionDate</li> <li>● <b>Field type:</b> Date/Time, Computed when composed</li> </ul> <b>Result:</b> The row is populated with a field label and field.  |
| 17   | In the Programmer's pane, type the following formula:@Today  |
| 18   | Complete the next row with the following information: <ul style="list-style-type: none"> <li>● <b>Field label:</b> Category</li> </ul> <b>Result:</b> The row is populated with a field label.   |
| 19   | In the right cell, create the following field: <ul style="list-style-type: none"> <li>● <b>Name:</b> Category</li> <li>● <b>Type:</b> Dialog List, Editable</li> </ul> On the <b>Control</b> tab, enter the following choices: <ul style="list-style-type: none"> <li>● Office Guidelines</li> <li>● Benefits</li> <li>● Holidays</li> <li>● Grievance Procedures</li> </ul> |

## Appendix

### Appendix A ■ Solutions to Practice Activities

| Step | Action   |
|------|--|
| 20   | Complete the next row with the following information:<br>● <b>Field label:</b> Subject<br>● <b>Field name:</b> Subject<br>● <b>Field type:</b> Text, Editable<br><b>Result:</b> The row is populated with a field label and field.       |
| 21   | Complete the next row with the following information:<br>● <b>Field label:</b> Details<br>● <b>Field name:</b> Question<br>● <b>Field type:</b> Rich Text, Editable<br><b>Result:</b> The row is populated with a field label and field. |
| 22   | Click outside the table. Choose <b>Create</b> → <b>Layer</b> .<br><b>Result:</b> A blank layer is inserted on the form.  |
| 23   | Choose <b>Layer</b> → <b>Layer Properties</b> . Set the Z-Index to -1.<br><b>Result:</b> The layer is positioned behind the table.   |
| 24   | Click the <b>Background</b> tab. Click the <b>Browse images</b> button and select the <b>mod_menu_background.gif</b> image. Click <b>OK</b> .<br><b>Result:</b> The <b>mod_menu_background.gif</b> image is added to the layer.          |
| 25   | Set the image to <b>Repeat horizontally</b> .  |
| 26   | Resize the layer by clicking and dragging one of the layer corners. Position it behind the table of field labels and fields.<br><b>Result:</b> The layer serves as a background to the table.  |
| 27   | Click the <b>Window Title</b> object in the Programmer's pane, and type the following formula:<br><code>@If(@IsNewDoc; "New Question";<br/>"Question: " + Subject);</code><br><b>Result:</b> The form has a window title                 |
| 28   | Save and close the Question form.  |

### Create the Answer form

Follow these steps to create the Answer form. This form will inherit information from the Question form.

| Step | Action  |
|------|---|
| 1    | Open your copy of the <b>Policies and Procedures</b> database in Lotus Domino Designer. |

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| Step | Action  |
|------|---|
| 2    | In the <b>Design</b> pane, click <b>Forms</b> .<br><b>Result:</b> In the <b>Work</b> pane, the list of existing forms appears. The <b>New Form</b> button appears on the button bar.  |
| 3    | In the <b>Work</b> pane, click <b>New Form</b> .  |
| 4    | Choose <b>Design</b> → <b>Form Properties</b> .<br><b>Result:</b> The <b>Form Properties</b> box opens.   |
| 5    | Type <b>Answer</b> in the <b>Name</b> field. Select <b>Response</b> as the form <b>Type</b> .<br><b>Result:</b> <b>Answer</b> appears in the <b>Name</b> box.   |
| 6    | Click the <b>Defaults</b> tab and select <b>On Create: Formulas inherit values from selected document</b> . Close the <b>Form Properties</b> box.<br><b>Result:</b> When a document is created using the form, it will inherit values from another document.  |
| 7    | Choose <b>Create</b> → <b>Resource</b> → <b>Insert Subform</b> .<br><b>Result:</b> The <b>Insert Subform</b> box opens.   |
| 8    | Select <b>Worldwide Header</b> . Click <b>OK</b> .<br><b>Result:</b> The subform is inserted at the top of the Question form.   |
| 9    | Click below the subform and type the following text: <b>Answer</b><br>Press Enter several times.<br>Highlight the text and set the font size to 24.   |
| 10   | Position the cursor several spaces below the text and choose <b>Create</b> → <b>Table</b> .<br><b>Result:</b> The <b>Create Table</b> box opens.  |
| 11   | Create a fixed width table with seven rows and two columns. Click <b>OK</b> .<br><b>Result:</b> A table is inserted on the <b>Answer</b> form.  |
| 12   | Select the entire table and on the <b>Cell orders</b> tab of <b>Table Properties</b> , set all to 0. Close the <b>Table Properties</b> box.   |
| 13   | Select the left hand column and right justify the text.   |
| 14   | In the first row, add the following field label into the left cell and field into the right cell:<br><ul style="list-style-type: none"> <li>● <b>Field label:</b> <b>Answered by</b></li> <li>● <b>Field name:</b> <b>AnsweredBy</b></li> <li>● <b>Field type:</b> Names, Computed when composed</li> </ul> <b>Result:</b> The first row is populated with a field label and field. |

## Appendix

### Appendix A ■ Solutions to Practice Activities

| Step | Action   |
|------|--|
| 15   | <p>In the Programmer's pane, type the following formula: @UserName</p> <p><b>Result:</b> The field derives its value from the user name of the person answering the question.</p>  |
| 16   | <p>Complete the next row with the following information:</p> <ul style="list-style-type: none"><li>● <b>Field label:</b> Question Subject</li><li>● <b>Field name:</b> QuestionSubject</li><li>● <b>Field type:</b> Text, Computed when composed</li></ul> <p><b>Result:</b> The row is populated with a field label and field.</p>  |
| 17   | <p>In the Programmer's pane, type the following formula: Subject</p> <p><b>Result:</b> The field derives its value from the Subject field.</p>   |
| 18   | <p>Complete the next row with the following information:</p> <ul style="list-style-type: none"><li>● <b>Field label:</b> Date of Question</li><li>● <b>Field name:</b> QuestionDate</li><li>● <b>Field type:</b> Date/Time, Computed when composed</li></ul> <p><b>Result:</b> The row is populated with a field label and field.</p>  |
| 19   | <p>In the Programmer's pane, type the following formula:</p> <p>QuestionDate</p>   |
| 20   | <p>Complete the next row with the following information:</p> <ul style="list-style-type: none"><li>● <b>Field label:</b> Link to Question</li><li>● <b>Field name:</b> QuestionLink</li><li>● <b>Field type:</b> Rich Text, Computed</li></ul> <p>Open the <b>Form Properties</b> box, and click the <b>Defaults</b> tab. Check <b>Inherit entire selected document into rich text field</b>. Specify QuestionLink as <b>Link</b>, if needed.</p> <p>Close the <b>Form Properties</b> box.</p> <p><b>Result:</b> A link to the main question document will automatically appear in the QuestionLink field.</p> |
| 21   | <p>Complete the next row with the following information:</p> <ul style="list-style-type: none"><li>● <b>Field label:</b> Answer Subject</li><li>● <b>Field name:</b> AnswerSubject</li><li>● <b>Field type:</b> Text, Editable</li></ul> <p><b>Result:</b> The row is populated with a field label and field.</p>  |

| Step | Action  |
|------|---|
| 22   | <p>Complete the next row with the following information:</p> <ul style="list-style-type: none"> <li>● <b>Field label:</b> Answer Date</li> <li>● <b>Field name:</b> AnswerDate</li> <li>● <b>Field type:</b> Date/Time, Computed when composed</li> <li>● <b>Formula:</b> @Today</li> </ul>                 |
| 23   | <p>Complete the next row with the following information:</p> <ul style="list-style-type: none"> <li>● <b>Field label:</b> Answer</li> <li>● <b>Field name:</b> Answer</li> <li>● <b>Field type:</b> Rich Text, Editable</li> </ul> <p><b>Result:</b> The row is populated with a field label and field.</p> |
| 24   | <p>Click outside the table. Choose <b>Create→Layer</b>.</p> <p><b>Result:</b> A blank layer is inserted on the form.</p>  |
| 25   | <p>Choose <b>Layer→Layer Properties</b>. Set the Z-Index to -1.</p> <p><b>Result:</b> The layer is positioned behind the table.</p>   |
| 26   | <p>Click the <b>Background</b> tab. Click the <b>Browse images</b> button and select the <b>mod_menu_background.gif</b> image. Click <b>OK</b>.</p> <p><b>Result:</b> The <b>mod_menu_background.gif</b> image is added to the layer.</p>   |
| 27   | <p>Set the image to <b>Repeat horizontally</b>.</p>   |
| 28   | <p>Resize the layer by clicking and dragging one of the layer corners. Position it behind the table of field labels and fields.</p> <p><b>Result:</b> The layer serves as a background to the table.</p>  |
| 29   | <p>Click the <b>Window Title</b> object in the Programmer's pane, and type the following formula:</p> <pre><code>@If(@IsNewDoc; "New Answer"; "Answer for " + QuestionSubject);</code></pre> <p><b>Result:</b> The form has a window title.</p>   |
| 30   | <p>Save and close the Answer form.</p>  |
| 31   | <p>Create several Question and Answer documents.</p>  |

## **Lesson 10, Optional Practice Activity 10-6, Enable instant messaging in a field**

The following tables provide detailed solution steps for two parts of the practice activity:

- Add a Names field that can be used for instant messaging.
- Enable online awareness for the Names field.

### **Add a Names field that can be used for instant messaging**

Follow these steps to add a Names field to the Question form.

| <b>Step</b> | <b>Action</b>  |
|-------------|--|
| 1           | Click the layer, and move it out of the way, so that you can click the table.  |
| 2           | Click the third row of the table, and choose <b>Table→Insert Row</b> .   |
| 3           | In the new left cell, type the following text and right-justify it: <b>Contact Person</b>  |
| 4           | In the new right cell, create the following new field: <ul style="list-style-type: none"><li>● <b>Name:</b> ContactPerson</li><li>● <b>Type:</b> Names, Editable</li><li>● <b>Input Validation Formula:</b><br/><code>@If(@ThisValue=NULL;@Failure("Please select a contact person");@Success);</code></li></ul> |
| 5           | Click the <b>Control</b> tab in the <b>Field Properties</b> box, and select the following: <ul style="list-style-type: none"><li>● <b>Show online status</b></li><li>● <b>Use address dialog for choices</b></li></ul>   |
| 6           | Close the <b>Field Properties</b> box.   |
| 7           | Move the layer back over the table and re-size as needed.  |
| 8           | Save the <b>Question</b> form.   |
| 9           | If you have not yet done so, log in to instant messaging.  |
| 10          | Either create a new Question document, or edit an existing one.  |
| 11          | Select one of your logged-in classmates as the contact person.   |
| 12          | Save and re-open the document.   |

| Step | Action  |
|------|---|
| 13   | Right-click the active indicator to display the Chat menu. Choose <b>Chat With</b> to chat with the contact person. |

## Lesson 10, Optional Practice Activity 10-7, Embed an instant messaging contact list on a form

The following tables provide detailed solution steps for two parts of the practice activity:

- Create a table to hold the embedded contact list.
- Embed the contact list on the Answer form.

### Create a table to hold the embedded contact list

Follow these steps to create a table to hold the embedded contact list.

| Step | Action  |
|------|---|
| 1    | Open the <b>Answer</b> form in Lotus Domino Designer.   |
| 2    | Click the layer, and move it out of the way.  |
| 3    | Click after the <b>Answered by</b> text in the first cell of the table. Press Enter.  |
| 4    | Choose <b>Create→Table</b> .  |
| 5    | Create a one row, one column, fixed-width table.  |
| 6    | Open the <b>Table Properties</b> box. Set the following: <ul style="list-style-type: none"> <li>● On the <b>Table Layout</b> tab, set the <b>Cell Width</b> to <b>3 inches</b>.</li> <li>● On the <b>Cell Borders</b> tab, set <b>All</b> to <b>0</b>.</li> </ul> |
| 7    | Close the <b>Table Properties</b> box.  |

### Embed the contact list on the Answer form

Follow these steps to embed the contact list on the Answer form.

| Step | Action   |
|------|--|
| 1    | Place the cursor in the new table, and choose <b>Create</b> → <b>Embedded Element</b> → <b>Instant Messaging Contact List</b> .  |
| 2    | Right-click the embedded contact list and choose <b>Instant Contact List Properties</b> .  |
| 3    | In the <b>Embedded Contact List Properties</b> box, on the <b>Info</b> tab, set the width and height each at <b>Fit to window</b> , and select <b>yellow</b> for the background color. |
| 4    | In the <b>Embedded Contact List Properties</b> box, on the <b>Border</b> tab, select <b>Ridge</b> for the border style, and <b>Drop shadow</b> for a border effect.                    |
| 5    | Close the <b>Embedded Contact List Properties</b> box.   |
| 6    | Move the layer back to where it was and resize it as necessary.  |
| 7    | Save the form and exit Lotus Domino Designer.  |
| 8    | Test the form.   |

## **Lesson 11, Practice Activity 11-1: Display response data in views**

The following tables provide detailed solution steps for two parts of the practice activity:

- Create a hierarchical view.
- Create a responses-only column.

### **Create a hierarchical view**

Follow these steps to create a hierarchical view that displays the questions with the answer below.

| Step | Action   |
|------|--|
| 1    | Open your copy of the <b>Policies and Procedures</b> database in Lotus Domino Designer.<br><b>Result:</b> The database opens in the Work pane. |
| 2    | In the Design pane, click <b>Views</b> .   |

## Appendix A ■ Solutions to Practice Activities

| Step | Action   |
|------|--|
| 3    | In the Work pane, click <b>New View</b> .<br><b>Result:</b> The Create View box opens.   |
| 4    | Name the view <b>Q &amp; A</b><br>Copy the style from the view: <b>–Blank–</b> . Click <b>OK</b> twice.<br><b>Result:</b> The <b>Q &amp; A</b> view appears in the view list.  |
| 5    | Open the <b>Q &amp; A</b> view.<br><b>Result:</b> The <b>Q &amp; A</b> view opens in the Work pane.  |
| 6    | Select <b>View Selection</b> in the Objects pane.<br><b>Result:</b> The Add Condition dialog box opens.  |
| 7    | In the Programmer's pane, select <b>Formula</b> in the <b>Run</b> drop-down list.<br><b>Result:</b> <b>SELECT @All</b> appears in the Programmer's pane.   |
| 8    | Delete <b>SELECT @All</b> .<br>Type the following formula:<br><b>SELECT Form="Question"   @AllDescendants</b><br><b>Result:</b> The new formula is created.  |
| 9    | Double-click the first view column to open the <b>Column Properties</b> box.<br>Modify the column as follows: <ul style="list-style-type: none"><li>● <b>Title:</b> (blank)</li><li>● <b>Width:</b> 1</li><li>● Show twistie when row is expandable.</li></ul> Sorting: <ul style="list-style-type: none"><li>● <b>Sort:</b> Ascending</li><li>● <b>Type:</b> Categorized</li></ul> Font: <ul style="list-style-type: none"><li>● <b>Text Color:</b> Blue</li></ul> In the Programmer's pane, select <b>Field</b> and then <b>Category</b> . |
| 10   | Choose <b>Create</b> → <b>Append New Column</b> to add the next column.<br>Double-click its header and modify it as follows: <ul style="list-style-type: none"><li>● <b>Title:</b> Question</li><li>● <b>Width:</b> 25</li><li>● Show twistie when row is expandable.</li></ul>  |
| 11   | In the Programmer's pane, select <b>Formula</b> and add the following formula:<br><b>Subject + " - " + @Text(QuestionDate)</b><br><b>Result:</b> The Question column displays the content of the Subject and QuestionDate fields.  |

**Create a responses-only column**

Follow these steps to create a responses-only column in the Q & A view.

| Step | Action  |
|------|---|
| 1    | Open the Q & A view in Lotus Domino Designer.   |
| 2    | Choose <b>Create</b> → <b>Insert New Column</b> to create a column to the left of the Question column.<br><b>Result:</b> A new blank column is inserted in front of the Question column.  |
| 3    | On the <b>Column Info</b> tab of the <b>Column Properties</b> box: <ul style="list-style-type: none"><li>Leave the column title blank.</li><li>Set the width to 1.</li><li>Select <b>Show responses only</b>.</li></ul> On the <b>Font</b> tab, change the text color to red. |
| 4    | In the Programmer's pane, select <b>Formula</b> and add the following formula:<br><code>AnswerSubject + " - " + @Text(AnswerDate)</code>  |
| 5    | Save and preview the view.  |

**Lesson 11, Optional Practice Activity 11-5: Enable a column for instant messaging**

The following table provides detailed solution steps for the practice activity:

- Enable a column for instant messaging.

| Step | Action   |
|------|--|
| 1    | Open your copy of the <b>Policies and Procedures</b> database in Lotus Domino Designer, and click the <b>Q&amp;A</b> view.         |
| 2    | Append a new column to the right of the <b>Question</b> column.  |
| 3    | In the <b>Column Properties</b> box, name the column <b>Who's Online?</b> and increase the column width to at least 18 characters. |

| Step | Action  |
|------|---|
| 4    | <p>In the Programmer's pane, enter the following column formula that evaluates to the abbreviated form of a full hierarchical name:</p> <code>@Name( [Abbreviate]; ContactPerson)</code> <p><b>Note:</b> Online status displays for only a single name displayed in a column. You can allow a field to accept multiple values, but status icons do not display if more than one name appears in a column.</p> |
| 5    | In the <b>Style</b> section on the <b>Advanced Format</b> tab in the <b>Column Properties</b> box, select <b>Names</b> from the drop-down list.   |
| 6    | In the <b>Names</b> section, select <b>Column contains a name</b> and <b>Show online status</b> .   |
| 7    | To test your work, ensure that instant messaging connectivity is active. Close the <b>Policies and Procedures</b> database if it is open in the Lotus Notes client. Open the <b>Policies and Procedures</b> database in the Lotus Notes client and create and save a few documents. You should see the online status icons beside the names of users who are online.  |

## Lesson 12, Optional Practice Activity 12-2: Create instant messaging action buttons in a view

The following table provides detailed solution steps for the practice activity:

- Create instant messaging action buttons in a view

| Step | Action  |
|------|---|
| 1    | Open your copy of the <b>Policies and Procedures</b> database in Lotus Domino Designer, and open the <b>Q &amp; A</b> view.                             |
| 2    | To create the first instant messaging chat action button, choose <b>Create</b> → <b>Action</b> → <b>Action</b> .  |
| 3    | In the <b>Action</b> Properties box, on the <b>Action Info</b> tab, in the <b>Name</b> field, type <b>Chat</b> . Accept all other defaults on this tab. |
| 4    | Type the following formula in the Programmer's pane:  |
|      | <code>@Command( [SendInstantMessage]; ContactPerson)</code>   |

### Appendix A ■ Solutions to Practice Activities

| Step | Action   |
|------|--|
| 5    | To create the second instant messaging chat action button, choose <b>Create→Action→Action</b> .<br>In the <b>Action Properties</b> box, on the <b>Action Info</b> tab, in the <b>Name</b> field, type <b>Show / Hide Contacts</b> . Accept all other defaults on this tab.<br>Type the following formula in the Programmer's pane:<br><code>@Command( [ShowHideIMContactList] )</code> |
| 6    | Save and close the <b>Q &amp; A</b> view, and exit Lotus Domino Designer.  |
| 7    | Log on to Sametime and open the <b>Policies and Procedures</b> database in the Lotus Notes client, and open the <b>Q&amp;A</b> view. Your Chat and Show / Hide Contacts action buttons should be visible on the action bar.  |
| 8    | Select a document and click <b>Chat</b> .<br><b>Result:</b> An instant messaging chat dialog box opens to initiate a chat with the author of the document. If the author is offline, a message box displays indicating this.   |
| 9    | Click <b>Show / Hide Contacts</b> to display your instant messaging contact list. Click the button again and the instant messaging contact list is hidden.   |

## Lesson 12, Practice Activity 12-3: Add automation to the Policies application

The following tables provide detailed solution steps for seven parts of the practice activity, including:

- Create a list of actions. Determine where they need to be executed and if they are shared.
- Create the actions.
- Add the actions to the appropriate views and forms.
- Hide the actions when appropriate.
- Save any of the documents by clicking a button instead of using menu commands.

### Create a list of actions

The following table lists the actions that need to be added to the Policies database.

| Action                      | Where Used   |
|-----------------------------|--|
| Create Policy               | Policies View  |
| Edit Policy                 | Policies View<br>When Policy document is open in Read mode                   |
| Create Question             | Q & A View<br>Policies View  |
| Edit Question               | Q & A View<br>When Question document is open in Read mode                    |
| Create Answer               | Q & A View<br>When Question document is open in Read mode                    |
| Edit Answer                 | Q & A View<br>When Answer document is open in Read mode                      |
| Save and close the document | Q & A View<br>When Policy, Question, or Answer document is open in Edit mode |

### Create the Create Policy button

Follow these steps to create the Create Policy button.

| Step | Action  |
|------|---|
| 1    | Open the <b>Policies</b> view, from your copy of the <b>Policies and Procedures</b> database, in Lotus Domino Designer.<br><b>Result:</b> The view appears in the Programmer's pane.                            |
| 2    | Choose <b>Create→Action→Action</b> from the menu.<br><b>Result:</b> The <b>Action</b> Properties box opens.   |
| 3    | In the <b>Name</b> text box, type <b>Create Policy</b><br><b>Result:</b> The action is named <b>Create Policy</b> .   |
| 4    | Type the following formula in the <b>Script</b> area for the <b>Click object of the action</b> :<br><code>@Command([Compose]; "Policy")</code><br><b>Result:</b> The formula appears in the <b>Script</b> area. |
| 5    | Save and close the view.  |

**Create shared actions**

Follow these steps to create the shared actions.

| Step | Action  |
|------|---|
| 1    | With your copy of the <b>Policies and Procedures</b> database open in Lotus Domino Designer, choose <b>Shared Code→Actions</b> .<br><b>Result:</b> The Work pane opens to the shared actions list.  |
| 2    | Click <b>New Shared Action</b> .<br><b>Result:</b> The Shared Action Properties box opens.  |
| 3    | In the <b>Name</b> text box, type <b>Edit Document</b><br><b>Result:</b> The shared action is named <b>Edit Document</b> .  |
| 4    | Select the <b>Action Hide When</b> tab.<br><b>Result:</b> The <b>Action Hide When</b> tab appears.  |
| 5    | Select: <ul style="list-style-type: none"><li>● <b>Previewed for editing</b></li><li>● <b>Opened for editing</b></li></ul> <b>Result:</b> The properties are set that will hide the button if the document is in Edit mode.   |
| 6    | Close the <b>Action Properties</b> box.   |
| 7    | Type the following formula in the Script area for the <b>Click object of the action</b> :<br><code>@Command([EditDocument])</code><br><b>Result:</b> The formula appears in the Script area.  |
| 8    | Save the shared action.   |
| 9    | Create a shared action with the following information: <ul style="list-style-type: none"><li>● <b>Name:</b> Create Answer</li></ul> <b>Result:</b> The Create Answer action is created.   |
| 10   | Type the following formula in the Script area for the <b>Click object of the action</b> :<br><code>@Command ( [Compose] ; "Answer" )</code><br><b>Note:</b> Use the form alias if you created one, in place of the form name.<br><b>Result:</b> The formula appears in the Script area. |
| 11   | Save the shared action.   |

| Step | Action   |
|------|--|
| 12   | Create a shared action with the following information:<br>● <b>Name:</b> Create Question<br><b>Result:</b> The Create Question action is created.  |
| 13   | Type the following formula in the Script area for the <b>Click object of the action:</b><br>@Command( [Compose] ; "Question" )<br><b>Result:</b> The formula appears in the Script area. |
| 14   | Save the shared action.  |

### Insert the shared action onto the forms

Follow these steps to insert the shared actions in the appropriate forms.

| Step | Action   |
|------|--|
| 1    | Open the <b>Answer</b> form in Lotus Domino Designer.<br><b>Result:</b> The form appears in the Programmer's pane.   |
| 2    | Choose <b>Create→Action→Insert Shared Action</b> from the menu.<br><b>Result:</b> The <b>Insert Shared Action</b> dialog box appears.  |
| 3    | Select the <b>Edit Document</b> shared action, and click <b>Insert</b> .<br><b>Result:</b> Designer adds the shared action to the form.  |
| 4    | Click <b>Done</b> .<br><b>Result:</b> The <b>Insert Shared Action</b> dialog box closes.   |
| 5    | Save and close the <b>Answer</b> form.   |
| 6    | Insert the <b>Edit Document</b> shared action onto the <b>Policy</b> form.<br><b>Result:</b> The <b>Edit Document</b> action appears on the <b>Policy</b> form.  |
| 7    | Insert the <b>Edit Document</b> and <b>Create Answer</b> shared actions onto the <b>Question</b> form.<br><b>Result:</b> The <b>Edit Document</b> and <b>Create Answer</b> actions appear on the <b>Question</b> form. |

### Insert the shared actions onto the views

Follow these steps to insert the shared actions in the appropriate views.

### Appendix A ■ Solutions to Practice Activities

| Step | Action  |
|------|---|
| 1    | Open the <b>Policies</b> view in Lotus Domino Designer.<br><b>Result:</b> The view appears in the Programmer's pane.  |
| 2    | Choose <b>Create→Insert Shared Action</b> from the menu.<br><b>Result:</b> The <b>Insert Shared Action</b> dialog box appears.  |
| 3    | Insert the <b>Edit Document</b> and <b>Create Question</b> shared actions.<br><b>Result:</b> Designer adds the shared actions to the view.  |
| 4    | Click <b>Done</b> .<br><b>Result:</b> The <b>Insert Shared Action</b> dialog box closes.  |
| 5    | Save and close the Policies view.   |
| 6    | Insert the following shared actions onto the Q & A view: <ul style="list-style-type: none"><li>● <b>Edit Document</b></li><li>● <b>Create Question</b></li><li>● <b>Create Answer</b></li></ul> <b>Result:</b> The shared actions appear on the Q & A view. |

### Create the Save and Close button

Follow these steps to create the Save and Close button.

| Step | Action   |
|------|--|
| 1    | With your copy of the <b>Policies and Procedures</b> database open in Lotus Domino Designer, choose <b>Shared Code→Actions</b> .<br><b>Result:</b> The Work pane opens to the shared actions list. |
| 2    | Click <b>New Shared Action</b> .<br><b>Result:</b> The Shared Action Properties box opens.   |
| 3    | In the <b>Name</b> text box, type <b>Save and Close</b> .<br><b>Result:</b> The shared action is named <b>Save and Close</b> .   |
| 4    | Click the <b>Action Hide When</b> tab.<br><b>Result:</b> The <b>Action Hide When</b> tab appears.  |
| 5    | Select <b>Previewed for reading</b> and <b>Opened for reading</b> .<br><b>Result:</b> The properties are set that will hide the button if the document is in Read mode.                            |
| 6    | Close the <b>Shared Action Properties</b> box.   |

| Step | Action   |
|------|--|
| 7    | Enter the following formula in the Script area for the <b>Click object of the action</b> :<br><code>@Command([FileSave]); @Command([FileCloseWindow])</code><br><b>Result:</b> The formula appears in the Script area. |
| 8    | Save the shared action.  |

### Add the Save and Close shared action to the forms

Follow these steps to add the Save and Close shared actions to the forms in the Policies and Procedures application.

| Step | Action  |
|------|---|
| 1    | Open the <b>Answer</b> form in Lotus Domino Designer.<br><b>Result:</b> The form appears in the Programmer's pane.  |
| 2    | Choose <b>Create→Action→Insert Shared Action</b> from the menu.<br><b>Result:</b> The <b>Insert Shared Action</b> dialog box appears.   |
| 3    | Insert the <b>Save and Close</b> shared action.<br><b>Result:</b> Designer adds the shared action to the form.  |
| 4    | Click <b>Done</b> .<br><b>Result:</b> The <b>Insert Shared Action</b> dialog box closes.  |
| 5    | Save and close the <b>Answer</b> form.  |
| 6    | Insert the <b>Save and Close</b> shared action onto the <b>Policy</b> and <b>Question</b> forms.<br><b>Result:</b> The Save and Close action appears on the two additional forms. |

### Lesson 13, Practice Activity 13-1: Update existing documents

The following table provides detailed solution steps for the practice activity:

- Update existing documents.

#### Update existing documents

Follow these steps to create an agent that reassigns the policy numbers.

## Appendix

### Appendix A ■ Solutions to Practice Activities

| Step | Action  |
|------|---|
| 1    | With your copy of the <b>Policies and Procedures</b> database open in Lotus Domino Designer, choose <b>Shared Code→Agents</b> .<br><b>Result:</b> The Work pane opens to the agents.  |
| 2    | Click <b>New Agent</b> .<br><b>Result:</b> The <b>Agent Properties</b> box opens in the Work pane.  |
| 3    | In the <b>Name</b> text box, type <b>Reassign Policy Numbers</b><br><b>Result:</b> The agent is given a name.   |
| 4    | Check that <b>Shared</b> is selected and change Target to <b>All documents in database</b> .<br><b>Result:</b> The agent is designated as a shared agent.   |
| 5    | In the Programmer's pane, select <b>Formula</b> from the <b>Run</b> list.<br><b>Result:</b> The Programmer's pane is split into the <b>InfoList</b> and the <b>Script</b> area.   |
| 6    | In the <b>Script</b> area, type the following formula:<br><pre>SELECT Form="Policy"       REM {Convert the hexadecimal number to text.};       REM {Select the last 6 characters.};       Temp:= @Right(@Text(@DocumentUniqueID);6);       REM {Set the PolicyNo field to "PN" plus Temp};       FIELD PolicyNo := "PN" + Temp       </pre> <b>Result:</b> The formula is entered in the Script area. |
| 7    | Save the agent.<br><b>Result:</b> The new agent is saved.   |
| 8    | Open the database in the Lotus Notes client, run the agent by choosing <b>Actions→Reassign Policy Numbers</b> , and check the results.<br><b>Result:</b> The <b>PolicyNo</b> field in all Policy documents contains the reassigned policy numbers.  |

Follow these steps to modify the policy form so that it computes a new policy number when a new Policy document is created.

| Step | Action  |
|------|---|
| 1    | Open the <b>Policy</b> form in Lotus Domino Designer.                                     |
| 2    | Click on the <b>PolicyNo</b> field.   |
| 3    | In the <b>Field Properties</b> , change the type to <b>Text, Computed when composed</b> . |

| Step | Action  |
|------|---|
| 4    | Type the following formula into the Script pane:<br>"PN" + @Right(@Text(@DocumentUniqueID) ; 6) |
| 5    | Save and test the form.   |

## Lesson 14, Practice Activity 14-1: Set access restrictions to the database

The following tables provide detailed solution steps for two parts of the practice activity:

- Copy the updated Policies and Procedures database to Hub/WWCorp.
- Set your access control level to Manager.

### Copy the updated Policies and Procedures database to Hub/WWCorp

Follow these steps to copy the database.

| Step | Action  |
|------|---|
| 1    | If necessary, in the Lotus Notes client, switch to the Notes workspace.   |
| 2    | Choose <b>File</b> → <b>Database</b> → <b>Open</b> . On Hub/WWCorp, double-click the <b>Fundamentals</b> folder, and then double-click <b>PoliciesACL.nsf</b> . |
| 3    | Bookmark this database.   |
| 4    | Right-click the <b>PoliciesACL</b> icon and choose <b>Database</b> → <b>New Copy</b> .  |
| 5    | Set Server to <b>Hub/WWCorp</b> .   |
| 6    | Click the folder icon, select <b>Fundamentals</b> , and then click <b>Select</b> .  |
| 7    | Change the title to <b>Policies and Procedures ABC</b>  |
| 8    | Change the file name to <b>PoliciesABC.nsf</b>  |
| 9    | Verify that <b>Database design and documents</b> and <b>Access Control List</b> are selected to be copied.  |
| 10   | Click <b>OK</b> .   |

**Set your access control level to Manager**

Follow these steps to set your access control level to Manager.

| Step | Action  |
|------|---|
| 1    | Choose <b>File</b> → <b>Database</b> → <b>Access Control</b> .                            |
| 2    | Click <b>Add</b> , and then click the person icon.  |
| 3    | In the <b>Select Names</b> dialog box, verify that <b>WWCorp's Directory</b> is selected. |
| 4    | In the list of names, double-click your student account name, and then click <b>OK</b> .  |
| 5    | In the <b>User type</b> drop-down list, select <b>Person</b> .                            |
| 6    | In the <b>Access</b> drop-down list, select <b>Manager</b> .                              |
| 7    | Check <b>Delete documents</b> .   |
| 8    | Select the <b>Students</b> group, click <b>Remove</b> , and then click <b>OK</b> .        |

**Lesson 14, Practice Activity 14-2: Create roles**

The following tables provide detailed solution steps for two parts of the practice activity:

- Determine the roles for the Policies and Procedures application.
- Create the roles.

**Determine the roles**

The following table lists the roles for the Policies and Procedures application.

| Role      | Description                 |
|-----------|-----------------------------|
| Employees | Employee                    |
| PWriters  | Policy and Procedure Writer |
| Designers | Database Designer           |
| Managers  | Manager                     |

## Create the roles

Follow these steps to create the roles from the preceding table.

| Step | Action  |
|------|---|
| 1    | Open your copy of the <b>Policies and Procedures</b> application in Lotus Domino Designer. Be sure to use the database from the classroom server (Hub/WWCorp).                          |
| 2    | Choose <b>File→Database→Access Control</b> .<br><b>Result:</b> The Access Control List to the Policies and Procedures box opens.  |
| 3    | Click the <b>Roles</b> tab located on the left side of the <b>Access Control List</b> dialog box.<br><b>Result:</b> The Roles field opens in the Access Control box.                    |
| 4    | Click <b>Add</b> to add a user Role.<br><b>Result:</b> The Add Role box opens.  |
| 5    | Type <b>Employees</b> in the <b>Add Role</b> dialog box.<br>Click <b>OK</b> .<br><b>Result:</b> Employees appears, in brackets, in the Roles list.                                      |
| 6    | Add the following roles: <ul style="list-style-type: none"> <li>● PWrters</li> <li>● Designers</li> <li>● Managers</li> </ul> <b>Result:</b> The new roles are added to the Roles list. |
| 7    | Click the <b>Basics</b> tab located on the left side of the <b>Access Control List</b> dialog box to return to the list of access controls.   |
| 8    | Look in the <b>Roles</b> field to verify that the roles you added are listed there.   |
| 9    | Click <b>OK</b> to close the <b>Access Control List</b> dialog box.   |

## **Lesson 14, Practice Activity 14-3: Control access to documents in the Policies and Procedures application**

The following tables provide detailed solution steps for five parts of the practice activity:

- Change the ACL to modify the access rights of different groups of users.
- Change the Policy form to allow only users assigned the PWriters role to create or edit documents created with this form.
- Change the Question form so only the author can edit the question.
- Change the Answer form to allow only users assigned the PWriters role to create or edit documents created with this form.
- Set the hide/when formula for actions.

This solution assumes the database has the roles from the previous practice activities.

### **Modify the Access Control List**

Follow these steps to modify your copy of the Policies and Procedures database ACL to set the access levels of the Employee group and the [PWriters] role.

| <b>Step</b> | <b>Action</b>   |
|-------------|---|
| 1           | Open your copy of the <b>Policies and Procedures</b> database in Lotus Domino Designer.   |
| 2           | Choose <b>File</b> → <b>Database</b> → <b>Access Control</b> .<br><b>Result:</b> The Access Control List to the Policies and Procedures box opens.  |
| 3           | Select the <b>Employee</b> group, and set the <b>[Employees]</b> role.<br><b>Result:</b> Users in the Employee group have the Create Document privilege, Author privileges, and are assigned the Employees role.  |
| 4           | Select the <b>Policy Makers</b> group from the list of users.<br><b>Result:</b> The Policy Makers group is highlighted.   |
| 5           | Select User type as Person group.<br>Select <b>Author</b> as the Access.<br>Select the Create documents privilege.<br>Select the <b>[PWriters]</b> role.<br><b>Result:</b> Users in the Policy Makers group have Author privileges and are assigned the <b>[PWriters]</b> role. |

| Step | Action  |
|------|---|
| 6    | Select the <b>Managers</b> group from the list of users.<br>Select a User type of Person group and an Access of Manager.<br>Assign the <b>[P Writers]</b> and <b>[Managers]</b> roles to the group.<br><b>Result:</b> Users in the Managers group are assigned the <b>[P Writers]</b> and <b>[Managers]</b> role and can manage the database. |
| 7    | Click <b>OK</b> to close the Access Control List box and save the database.   |

### Set the default access

Follow these steps to remove anonymous access and change the access rights of default users to no access.

| Step | Action   |
|------|--|
| 1    | Open your copy of the <b>Policies and Procedures</b> database in Lotus Domino Designer.  |
| 2    | Choose <b>File</b> → <b>Database</b> → <b>Access Control</b> .<br><b>Result:</b> The Access Control box opens.   |
| 3    | Click <b>Anonymous</b> in the list of users.   |
| 4    | Click the <b>Remove</b> button.  |
| 5    | Click <b>-Default-</b> in the list of users.   |
| 6    | Select <b>Reader</b> as the Access level. Deselect <b>Write public documents</b> .<br>Click <b>OK</b> .<br><b>Result:</b> Anyone with default access to the database can read documents. |

### Place restrictions in the Policy form

Follow these steps to restrict who can create and edit documents created with the Policy form.

| Step | Action   |
|------|--|
| 1    | Open your copy of the <b>Policies and Procedures</b> database in Lotus Domino Designer.  |
| 2    | In the Design pane, expand the list of <b>Forms</b> . Open the <b>Policy</b> form.<br><b>Result:</b> The Policy form opens in the Work pane. |

## Appendix

### Appendix A ■ Solutions to Practice Activities

| Step | Action   |
|------|--|
| 3    | Open the <b>Form Properties</b> box.   |
| 4    | Click the <b>Security</b> tab.   |
| 5    | Deselect <b>All authors and above</b> for Who can create documents with this form. Select the <b>[P Writers]</b> role.<br>Close the <b>Form Properties</b> box.<br><b>Result:</b> Only users assigned the <b>[P Writers]</b> role can create Policies.   |
| 6    | Create an <b>Authors</b> field at the top of the Policy Form with the following properties: <ul style="list-style-type: none"><li>● <b>Name:</b> Editors</li><li>● <b>Data type:</b> Authors</li><li>● <b>Type:</b> Computed when composed</li><li>● Allow multiple values</li><li>● <b>Value formula:</b> "[P Writers]"<br/>On the <b>Paragraph Hide/When</b> tab, click <b>Hide paragraph if the formula is true</b> and type a formula of <code>@True</code>.<br/><b>Result:</b> Only users assigned to the <b>[P Writers]</b> role can create a Policy document.</li></ul> |
| 7    | Save the form.   |

### Modify the Question form

Follow these steps to set the read and edit restrictions for the Question form.

| Step | Action  |
|------|---|
| 1    | Open your copy of the <b>Policies and Procedures</b> database in Lotus Domino Designer. |
| 2    | Open the <b>Question</b> form.  |

| Step | Action   |
|------|--|
| 3    | <p>Create an <b>Authors</b> field at the top of the form with the following properties:</p> <ul style="list-style-type: none"> <li>● <b>Name:</b> Authors</li> <li>● <b>Data type:</b> Authors</li> <li>● <b>Type:</b> Computed when composed</li> <li>● <b>Hide when formula:</b> @True</li> <li>● <b>Value formula:</b> @UserName</li> </ul> <p><b>Result:</b> Only the document's creator can make changes to the document.</p> |
| 4    | Save and close the form.   |

## Modify the Answer form

Follow these steps to modify the Answer form so only users assigned the [P Writers] role can create and edit documents created with the form.

| Step | Action   |
|------|--|
| 1    | Open your copy of the <b>Policies and Procedures</b> database in Lotus Domino Designer.  |
| 2    | Open the <b>Answer</b> form.<br><b>Result:</b> The Answer form opens in the Work pane.   |
| 3    | Choose <b>Design→Form Properties</b> . Select the <b>Security</b> tab.<br><b>Result:</b> The Form Properties box opens.  |
| 4    | Deselect <b>All authors and above</b> for Who can create documents with this form. Select the <b>[P Writers]</b> role.<br>Close the <b>Form Properties</b> box.<br><b>Result:</b> Only users assigned the [P Writers] role can create Answers.     |
| 5    | Place your cursor at the top of the form and choose <b>Create→Field</b> .<br><b>Result:</b> Only the document's creator can make changes to the document.  |
| 6    | Create an <b>Authors</b> field with the following properties:  |
|      | <ul style="list-style-type: none"> <li>● <b>Name:</b> Authors</li> <li>● <b>Data type:</b> Authors</li> <li>● <b>Type:</b> Computed when composed</li> <li>● <b>Hide when formula:</b> @True</li> <li>● <b>Value formula:</b> @UserName</li> </ul> |

### Appendix A ■ Solutions to Practice Activities

| Step | Action                   |
|------|--------------------------|
| 7    | Save and close the form. |

#### Set hide/when formula for shared actions

Follow these steps to set the hide/when function for the Create Policy and Create Answer actions.

| Step | Action  |
|------|---|
| 1    | With your copy of the <b>Policies and Procedures</b> database open in Lotus Domino Designer, choose <b>Shared Code→Actions</b> .<br><b>Result:</b> The Work pane opens to the shared actions list.  |
| 2    | Open the <b>Create Answer</b> action.   |
| 3    | Choose <b>Design→Shared Action Properties</b> . Click the <b>Action Hide When</b> tab.<br><b>Result:</b> The Shared Action Properties box opens.  |
| 4    | Select <b>Hide action if formula is true</b> and type the following formula:<br><code>@IsNotMember("[PWRITERS]"; @UserRoles)</code><br><b>Result:</b> The Create Answer action is hidden from anyone who is not assigned the [PWRITERS] role. |
| 5    | Save the shared action.   |
| 6    | Modify the Hide/When properties for the <b>Create Policy</b> action on the Policies view in the same way.   |

#### Lesson 15, Practice Activity 15-1: Create a design template and a new database

The following tables provide detailed solution steps for three parts of the practice activity:

- Extract the design elements to create a master design template.
- Create a master design template.
- Create a new database that will update whenever the template changes.

#### Extract design elements

Follow these steps to extract the design elements to another database that will become the master design template.

| Step | Action   |
|------|--|
| 1    | Select your copy of the <b>Policies and Procedures</b> database in either Lotus Notes or Lotus Domino Designer.  |
| 2    | Choose <b>File→Database→New Copy</b> .<br><b>Result:</b> The Copy Database box opens.  |
| 3    | Make sure that the server is set to <b>Local</b> .   |
| 4    | Type the title <b>Policies_Template</b>  |
| 5    | Type the file name <b>Policies_Template</b><br><b>Note:</b> The NTF file extension does not make the file a template. It simply causes it to appear as a choice in the list of templates when you create a new database. |
| 6    | Click <b>Specify What to Copy: Database design only</b> .<br><b>Result:</b> Only the database design elements will be copied, not the documents.   |
| 7    | Click <b>OK</b> .<br><b>Result:</b> The database design is copied locally.   |

### Turn a database into a template

Follow these steps to turn the Policies\_Template database into a template.

| Step | Action   |
|------|--|
| 1    | Open your copy of the <b>Policies_Template</b> database in Lotus Domino Designer.  |
| 2    | Choose <b>File→Database→Properties</b> to open the <b>Database Properties</b> box.<br><b>Result:</b> The Database Properties box opens.  |
| 3    | Click the <b>Design</b> tab.   |
| 4    | Select <b>Database file is a master template</b> .   |
| 5    | Type the template name <b>Policies_Template.ntf</b><br>The template name is the link between the template and the database or databases.<br>Click the small check mark.<br><b>Result:</b> The template name is listed in the Name box. |
| 6    | Close the <b>Database Properties</b> box.  |

#### **Link the application database to the master design template**

Once you create the master design template, follow these steps to link it to your application database.

| Step | Action  |
|------|---|
| 1    | Open your copy of the <b>Policies and Procedures</b> database in Lotus Domino Designer.   |
| 2    | Choose <b>File→Database→Properties</b> .<br><b>Result:</b> The Policies Properties box opens.   |
| 3    | Click the <b>Design</b> tab.  |
| 4    | Select <b>Inherit design from master template</b> . Click in the <b>Template Name</b> box and type <b>Policies_Template</b><br><b>Result:</b> The Policies and Procedures database will inherit design changes from the Policies_Template database. |

#### **Lesson 15, Practice Activity 15-2 Roll out the Policies and Procedures application**

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The following tables provide detailed solution steps for seven parts of the practice activity:

- Modify the ACL of the Policies and Procedures database.
- Create a new replica of the Policies and Procedures database locally or on the classroom server.
- Create some new documents in the server copy of the database.
- Replicate with the local copy.
- Modify the template.
- Refresh the design of the local copy of the Policies and Procedures application.
- Replicate the Policies and Procedures application from local to server.

##### **Modify the access control list**

Follow these steps to modify the ACL for the Policies and Procedures database.

| Step | Action   |
|------|--|
| 1    | Open your copy of the <b>Policies and Procedures</b> database in Lotus Domino Designer.  |
| 2    | Choose <b>File→Database→Access Control</b> from the menu.<br><b>Result:</b> The <b>Access Control List</b> dialog box appears.     |
| 3    | Ensure that <b>LocalDomainServers</b> is a User type of <b>Server group</b> , has <b>Manager</b> access, and can delete documents. |
| 4    | Select all roles for this group.   |
| 5    | If necessary, assign the <b>[PWriters]</b> role to your user account.  |
| 6    | Click <b>OK</b> to close the Access Control List.  |

### Create a replica of the Policies and Procedures database

Follow these steps to create a local replica of the Policies and Procedures database.

| Step | Action  |
|------|---|
| 1    | Open your copy of the <b>Policies and Procedures</b> database in Lotus Domino Designer.   |
| 2    | Choose <b>File→Replication→New Replica</b> .  |
| 3    | Select <b>Local</b> .   |
| 4    | Keep the default file name and title for the new replica.   |
| 5    | Select <b>Create Immediately</b> .<br><b>Note:</b> Click <b>Replica Settings</b> if you do not see this option.                                 |
| 6    | Select <b>Copy Access Control List</b> to copy the ACL from the original to the new replica. This option may already be checked and greyed out. |
| 7    | Click <b>OK</b> .   |

### Create new documents

Follow these steps to create new documents on your server copy of the Policies and Procedures database.

### Appendix A ■ Solutions to Practice Activities

| Step | Action   |
|------|--|
| 1    | Open the Lotus Notes client.   |
| 2    | Choose <b>File→Database→Open</b> .   |
| 3    | Select the classroom server from the drop-down server list.  |
| 4    | Select the <b>Policies and Procedures</b> database. Click <b>Open</b> .<br><b>Result:</b> The server copy replica of the Policies and Procedures database opens. |
| 5    | Create several new policies.   |

### Replicate the local and server databases

Follow these steps to update the local copy of the Policies and Procedures database with the server copy of the Policies and Procedures database.

| Step | Action   |
|------|--|
| 1    | Open the <b>Replication</b> page in the Lotus Notes client.  |
| 2    | Make sure the <b>Policies and Procedures</b> database is checked.  |
| 3    | Click <b>Start Now</b> .<br><b>Result:</b> The local and server copies of the Policies and Procedures databases are replicated to one another. |
| 4    | Open the local replica and verify that the new document has arrived.   |

### Modify the Policies and Procedures database template

Follow these steps to make changes to the Policies and Procedures template.

| Step | Action  |
|------|---|
| 1    | Open the Policies and Procedures template, <b>Policies_Template.ntf</b> , in Lotus Domino Designer. |
| 2    | Open the <b>Policy</b> form.  |
| 3    | Modify the form. For example, change the background color of the form.                              |

| Step | Action  |
|------|---|
| 4    | Save the form.  |
| 5    | Refresh the design of the local replica of the Policies and Procedures database.                    |
| 6    | Open the local replica of the Policies and Procedures database in the Lotus Notes client.           |
| 7    | Open any existing document using the <b>Policy</b> form to see if the background color has changed. |

### Replicate the local and server databases

Follow these steps to update the server copy of the Policies and Procedures database with the server copy of the Policies and Procedures database.

| Step | Action  |
|------|---|
| 1    | Open the <b>Replication</b> page in the Lotus Notes client.   |
| 2    | Make sure that the <b>Policies and Procedures</b> database is checked.  |
| 3    | Click <b>Start Now</b> .<br><b>Result:</b> The local and server copies of the Policies databases are replicated to one another. |
| 4    | Open the server copy of the <b>Policies and Procedures</b> database.  |
| 5    | Open any existing document using the <b>Policy</b> form to see if the background color has changed.                             |

# Appendix

## Certification and Exam Competencies

### **IBM Software Services for Lotus Training and Certification**

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IBM Software Services for Lotus offers training and certification programs designed to help customers take full advantage of technology investments to improve business processes.

Lotus software training ensures that individuals get up to speed quickly and effectively whether delivered in the classroom, on the desktop, or via distributed learning. For more information on Lotus software training, please visit <http://www.ibm.com/lotus/training>.

The IBM Certified Professional for Lotus Software program provides individuals with a means to benchmark their technical knowledge and achieve industry recognition, which results in increased business value to both the individual and their organization. As a member of a highly regarded certified community, individuals enjoy benefits commensurate to their certification level. For more information on certification, please visit <http://www.ibm.com/lotus/certification>.

Skills Roadmaps are available to guide you on your path to knowledge. Roadmaps identify courses in their logical sequence to complete a specific curriculum or certification program. To view Skills Roadmaps for Lotus, please visit <http://www.ibm.com/lotus/trainingroadmaps>.

### **Lotus Professional Certification**

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Lotus software has robust certification programs in support of IBM Lotus software and technical skills. For complete information on the Lotus professional certification program, visit the IBM Software Services for Lotus Certification Web page at <http://www.ibm.com/lotus/certification>.

### Appendix B ■ Certification and Exam Competencies

#### Place in certification

*Fundamentals of IBM Lotus Domino 7 Application Development* is listed as one of the preparation resources for the following exam:

#### **Exam 710: IBM Lotus Notes Domino 7 Application Development Foundation Skills**

This exam is part of the path for IBM Certified Application Developer - Lotus Notes and Domino 7 certification. The complete path is described here:

#### **IBM Certified Associate Developer - Lotus Notes and Domino 7**

Exam 710: IBM Lotus Notes Domino 7 Application Development Foundation Skills

#### **IBM Certified Application Developer - Lotus Notes and Domino 7**

Successfully pass the following three exams:

- Exam 710: IBM Lotus Notes Domino 7 Application Development Foundation Skills
- Exam 711: IBM Lotus Notes Domino 7 Application Development Intermediate Skills
- Exam 712: IBM Lotus Notes Domino 7 Developing Web Applications

#### **IBM Certified Advanced Application Developer - Lotus Notes and Domino 7**

Exam information not yet available.

#### Preparing for a Lotus certification exam

Attending this course and using this Student Guide will help you prepare for certification. Some topics covered on the exam are not covered in this course and some of the objectives covered in this course are not tested on the exam. Be sure to follow all the steps listed in order to prepare fully for the exam.

| Step | Action                         |
|------|--------------------------------|
| 1    | Review the exam competencies.  |
| 2    | Get hands-on experience.       |
| 3    | Use the exam preparation page. |
| 4    | Use all available resources.   |

## **Step 1: Review the exam competencies**

Review the exam competencies to see the complete listing of possible topics for the exam. Use the competency listing as your checklist to determine your weaknesses and the areas on which you will want to focus more attention in your studies and preparation.

You will find the competencies listed in:

- The Exam Competencies Appendix included in this course.
- The Exam Guides located on the IBM Software Services for Lotus Certification Web page at <http://www.ibm.com/lotus/certification>.

## **Step 2: Get hands-on experience**

Actual hands-on experience is a critical component in preparing for the exam. The exam is looking to measure how well you perform tasks, not how well you memorize features and functions:

- Spend time using the product and applying the skills learned.
- Direct application of the skills learned in this class cannot be replaced by any other single resource listed here.

## **Step 3: Use the exam preparation page**

The exam preparation page lists resources available for each individual exam. To find the exam preparation page for this exam, go to <http://www.ibm.com/lotus/certification> and use the Select an exam drop-down menu. Select the exam name and link to the exam preparation page.

## **Step 4: Use all available resources**

We recommend using a range of resources when preparing to take an exam. The following table describes the types of resources available to prepare for certification exams. For a listing of resources specific to each exam, use the individual exam preparation page located at <http://www.ibm.com/lotus/certification>.

| <b>Resource</b> | <b>Brief description</b>  | <b>Where to find resource</b>  |
|-----------------|---|--|
| Exam guides     | Complete version includes certification titles and paths, sample questions, and registration information. | Abbreviated version is available in the Exam Competencies Appendix included in this course. Complete version is available on the IBM Software Services for Lotus Certification Web page at <a href="http://www.ibm.com/lotus/certification">http://www.ibm.com/lotus/certification</a> . |

### Appendix B ■ Certification and Exam Competencies

| Resource                 | Brief description   | Where to find resource  |
|--------------------------|---|---|
| Lotus authorized courses | Offered at Education Centers for IBM Software (ECIS) and Lotus education locations worldwide.   | A complete list of courses and education centers are on the IBM Software Services for Lotus Education Web page at <a href="http://www.ibm.com/lotus/education">http://www.ibm.com/lotus/education</a> .       |
| CBT programs             | Used as an alternate learning tool or supplement to courses or both.  | Additional information is available at The Education Store on the IBM Software Services for Lotus Education Web page at <a href="http://www.ibm.com/lotus/education">http://www.ibm.com/lotus/education</a> . |
| Practice tests           | Available from a variety of vendors. Visit the individual exam preparation page to determine what practice tests are available for a specific exam. | Available from the IBM Software Services for Lotus Certification Web page at <a href="http://www.ibm.com/lotus/certification">http://www.ibm.com/lotus/certification</a> .                                    |
| Online learning          | This includes online tutorials and other learning resources.  | See the individual exam preparation page for recommended online learning resources.   |
| Product Documentation    | Official Lotus product documentation.   | Additional information available at <a href="http://www-10.lotus.com/ldd/doc">http://www-10.lotus.com/ldd/doc</a> .   |
| IBM Redbooks             | Technical cookbooks that address topics that the reference manuals may not cover.   | Ordering information is available at <a href="http://www.redbooks.ibm.com">http://www.redbooks.ibm.com</a> .  |

### Preparing for the IBM Lotus Notes Domino 7 Application Development Foundation Skills exam

The following materials are available for the *IBM Lotus Notes Domino 7 Application Development Foundation Skills* exam:

- *Fundamentals of IBM Lotus Domino 7 Application Development Course*
- *CertFX Practice Test*
- *Notes, Domino, and Domino Designer 7 Release Notes*
- *Lotus Domino 7 Administrator Help*

For the most up-to-date resource listing for this exam, visit the individual exam preparation page. Go to <http://www.ibm.com/lotus/certification> and select the exam name from the **Select an exam** drop-down menu. These individual pages will give you the most up to date list of resources available.

## **IBM Lotus Notes Domino 7 Application Development Foundation Skills Exam Competencies**

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This section contains the exam competencies for the **IBM Lotus Notes Domino 7 Application Development Foundation Skills** exam. The exam competencies are one tool for preparing for IBM Certified for Lotus software exams. For more a complete listing of learning resources, refer to the Lotus Certification Web site available at [www.lotus.com/certification](http://www.lotus.com/certification).

### **Application Architecture**

The following competencies relate to application architecture.

- Create, Modify, Troubleshoot for Notes Clients
- Domino Application Architecture
- Execute requests from the Notes Client
- Use images in applications
- Use links to make application elements available to users
- Use tables to manage page layout
- Use the Designer Bookmarks to organize projects
- What is a replica database
- Work with local applications

## **Database Management**

The following competencies relate to database management.

- Control what gets replicated
- Copy a Database
- Create a blank database
- Create a database from a template
- Create & Modify Groups in the Domino Directory
- Create a Design Template
- Create database help documents
- Create database icon
- Monitor/Maintain Replication
- Preventing Design inheritance
- Print from the designer
- Set Database Properties
- Set up Design inheritance
- Set up Document Locking
- Troubleshoot Database Access
- Use Design Synopsis to analyze application elements
- Use Design Templates to Refresh an application design
- What is a Notes database

## **Design Elements**

The following competencies relate to design elements.

- Create field help and hints
- Create shared image resources
- Create sorted and categorized views
- Create, Modify & Troubleshoot Embedded Elements: Navigator
- Create, Modify & Troubleshoot Embedded Elements: Views
- Create, Modify, Troubleshoot Actions
- Create, Modify, Troubleshoot Agents
- Create, Modify, Troubleshoot Columns
- Create, Modify, Troubleshoot Fields
- Create, Modify, Troubleshoot Folders
- Create, Modify, Troubleshoot for Dual Clients
- Create, Modify, Troubleshoot Forms
- Create, Modify, Troubleshoot Hotspots
- Create, Modify, Troubleshoot Layers
- Create, Modify, Troubleshoot Links
- Create, Modify, Troubleshoot Navigators
- Creating, Modifying, Troubleshooting Pages
- Create, Modify, Troubleshoot Sections
- Create, Modify, Troubleshoot Views
- Display document hierarchy in views
- Display icons in columns
- Display numbers in columns
- Hide Agents
- Scheduled Agents
- Set Agent Properties
- Work with Autosave
- Work with Data Types: Color
- Work with Data Types: Formula
- Work with Data Types: Keywords
- Work with Data Types: Names
- Work with Data Types: Number

### Appendix B ■ Certification and Exam Competencies

- Work with Data Types: Password
- Work with Data Types: Rich Text Lite
- Work with Data Types: Rich Text
- Work with Data Types: Text
- Work with Data Types: Time Zone
- Work with Data Types: Time/Date
- Work with Shared Resources

### Programming

The following competencies relate to programming.

- Create field validation and translation formulas
- Create formulas with @Commands
- Create formulas with @Functions
- Create Right-Click Action menus
- Display or hide information on forms using hide/when options
- Domino Designer application and design environment
- Make preferred tools readily available to the IDE
- Program window titles
- Set default field values
- Set programmer pane properties
- Use Designer Reference Panel
- Use Programmer's Pane Auto-Complete
- Use the Designer objects pane
- Work with Basic Formula Language

### Security

The following competencies relate to security.

- Add security to an application
- Define security levels for application users
- Determine Databases Group Access
- Secure applications: Authors fields
- Secure applications: Readers fields
- Set Database Access: Default Access
- Set and Read ACLs