Workshop 1: Step-by-Step Instructions

Task 1. Start the required services for the server hosting the content store, audit, and notification store databases, and the mail server.

1. On Machine D, from the **Start** menu, click **Control Panel**, double-click **Administrative Tools**, and then double-click **Services**.
2. Right-click **DB2-DB2COPY1 - DB2**, and then click **Start**.
3. Repeat step 2 to start the **DB2DAS - DB2DAS00** and **DB2 Remote Command Server (DB2COPY1)** services.
4. Close **Services**, **Administrative Tools**, and **Control Panel**, and then on the **Desktop**, double-click **Lotus Domino Server**. Note: the services are started when you see the **HTTP Server: Started** message appears.

Task 2. Create the databases for the content store and auditing.

1. On Machine D, in **Windows Explorer**, navigate to **C:\Edcognos\B5155_sa\03-Identify_IBM_Cognos_BI_Architecture**, and then open **DB2 Script - Create & Config C10 Content Store.txt** in **Notepad**.
2. Copy the contents to the clipboard, and then from the **Start** menu, point **All Programs > IBM DB2** > **DB2COPY1 (Default)** > **Command Line Tools**, and then click **Command Editor**.
3. In the top pane, paste the contents of the clipboard, and then click **Execute**.

   Running this script creates and configures the IBM Cognos BI content store, called CM.
4. From the **Start** menu, point **All Programs** > **IBM DB2** > **DB2COPY1 (Default)** > **General Administration Tools**, and then click **Control Center**.
5. Click **OK**, and then in the left pane, expand **All Databases**.

   The CM database is available.
6. Expand **CM**, click **Tables**, and then in the top right pane, scroll the list of tables.

At this point only system tables are available. The IBM Cognos BI content store will be populated with additional tables once IBM Cognos BI is installed and configured.

7. Repeat the process to create another database called **AUDIT**.

   For the **AUDIT** database, use the script called **DB2 Script - Create & Config C10 Audit.txt**.

8. Close **Notepad**, **DB2 Control Center**, and **DB2 Command Editor**.

Task 3. Install Content Manager.

1. On Machine D, in **Windows Explorer**, navigate to **C:\Edcognos\B5155_sa\03-Identify_IBM_Cognos_BI_Architecture\IBM Cognos BI Install Files\\bisrvr\win32**, and then double-click **issetup.exe**.
2. In the first window of the **IBM Cognos Business Intelligence Server** installation wizard, leave the default language selection, and then click **Next**.
3. In the **License Agreement** window, click **I Agree**, and then click **Next**.
4. In the **Installation Location** window, ensure that **D:\Program Files\ibm\cognos\c10** appears in the **Installation Directory** box, and then click **Next**.
5. Click **Yes** to create the directory.
6. In the **Component Selection** window, expand **IBM Cognos Business Intelligence Server (Partially selected)**, deselect **Application Tier Components** and **Gateway**, and then click **Next**.
7. In the **Shortcut Folder** window, leave the default, and then click **Next**.
8. In the **Installation Summary** window, click **Next**.
9. Click **OK** to the message regarding documentation, and then in the **Finish** window, click **Finish**.

If you are performing this workshop as part of an onsite teach, and you are not using the GES image, the customer will have to provide their own means of obtaining the IBM Cognos BI install files. To avoid issues with licensing, the files have not been included as student data. For the installation tasks described in this workshop, they will have to navigate to the appropriate directory to run the installation.

Task 4. Install the Application Tier Components.

1. On Machine B, repeat steps **1** to **9** from **Task 3** to install the **Application Tier Components**.

   Note: In step **6**, deselect **Gateway** and **Content Manager**.

2. On Machine C, repeat steps **1** to **9** from **Task 3** to install the **Application Tier Components**.

   Note: In step **6**, deselect **Gateway** and **Content Manager**.

Task 5. Install the gateway and IBM Cognos Samples.

IBM Cognos Samples must be installed on the machine hosting the gateway, because they include an images folder. The Web server needs access to this folder to properly display images on the Web pages of IBM Cognos BI.

1. On Machine A, repeat steps **1** to **9** from **Task 3** to install the **Gateway** component.

   Note: In step **6**, deselect **Content Manager** and **Application Tier Components**.

2. On Machine A, repeat steps **1** to **9** from **Task 3** to install **IBM Cognos Samples**.

   Note: In step **1** navigate to **C:\Edcognos\B5155_sa\03-Identify_IBM_Cognos_BI_Architecture\IBM Cognos BI Install Files\bisamples\win32**.

   Note: After step **5**, when prompted to create a backup, click **Yes**.

Task 5, step 2 - the repeat of step 9 does not include clicking OK to the message regarding documentation, because the samples installation does not include documentation.

Task 6. Configure Web server aliases in IIS.

1. On Machine A, from the **Start** menu, click **Control Panel**, double-click **Administrative Tools**, and then double-click **Internet Information Services**.
2. In the left pane, under **Internet Information Services**, expand **<server name>**, **Web Sites**, and **Default Web Site**.
3. Right-click **Default Web Site**, point to **New**, and then click **Virtual Directory**.
4. In the **Welcome** box of the **Virtual Directory Creation Wizard**, click **Next**, in the **Alias** box, type **ibmcognos**, and then click **Next**.
5. Next to the **Directory** box, click **Browse**, and then navigate to **D:\Program Files\IBM\cognos\c10\webcontent**, and then click **OK**.
6. Click **Next**, ensure that only the **Read** check box is selected, and then click **Next**.
7. Click **Finish**.
8. Repeat steps **4** to **7** to create the following alias under the **ibmcognos** alias:

   Alias

   Name: **cgi-bin**

   Directory: **D:\Program Files\IBM\cognos\c10\cgi-bin**

   Permissions: **Read, Run Scripts, Execute**
9. In the left pane, under the **ibmcognos**, expand the **samples** folder, right-click the **images** folder, and then click **Properties**.
10. Select the **Directory Browsing** check box, and then click **OK**.
11. If **Default Web Site** appears stopped, click **Default Web Site**, and then on the toolbar, click **Start item**.
12. Close the **Internet Information Services** and **Administrative Tools** windows.

Task 7. Configure and test the connections from Content Manager to the content store and audit databases, and edit the global configuration.

IBM Cognos BI uses JDBC connectivity to access the database used for the content store and the audit database. By default, the installation of IBM Cognos BI does not include the required drivers to connect to DB2. You must copy these drivers from the DB2 installation directory to the IBM Cognos BI installation directory.

1. On Machine D, In **Windows Explorer**, navigate to **D:\Program Files\IBM\SQLLIB\java**, and then copy the **db2jcc.jar** and **db2jcc_license_cu.jar** files.
2. Navigate to **D:\Program Files\IBM\cognos\c10\webapps\p2pd\WEB-INF\lib**, and then paste the **db2jcc.jar** and **db2jcc_license_cu.jar** files.

   You will now configure the connection to the content store database.
3. From the **Start** menu, point to **All Programs** > **IBM Cognos 10**, and then click **IBM Cognos Configuration**.
4. In the **Explorer** pane, click **Content Store**.
5. In the **Properties** pane, set the following properties:

   Database server and port number: **<machine D_IP address>:50000**

   User ID and password:

   User ID: **C10User**

   Password: **Education1!**

   Database name: **cm**
6. In the **Explorer** pane, right-click **Content Store**, and then click **Test**.

Task 7, step 1 - this is where DB2 was installed as per the set up instructions. If you are doing an onsite and DB2 is not installed to this location, you must navigate to where DB2 is installed to locate the drivers.

7. After successful completion of the test, click **Close**.

   You will now configure the connection to the audit database.

8. In the **Explorer** pane, right-click the **Logging** component reference, point to **New resource**, and then click **Destination**.
9. In the **Name** box, type **Database**, leave the default selection in the **Type** list, and then click **OK**.
10. Right-click the **Database** resource, and point to **New resource**, and then click **Database**.
11. In the **Name** box, type **AUDIT**, leave the default selection in the **Type** list, and then click **OK**.
12. In the **Properties** pane, set the following properties:

    Database server and port number: **<machine D_IP address>:50000**

    User ID and password:

    User ID: **C10User**

    Password: **Education1!**

    Database name: **AUDIT**

13. Test the connection.

    You will now edit the global configuration properties.

14. In the **Explorer** pane, below **Data Access**, click **Content Manager**.
15. In the **Properties** pane, set the value of the **Save report outputs to a file system?** property to **True**.
16. From the **Actions** menu, click **Edit Global Configuration**, and then click the **General** tab.
17. In the **Value** column, beside **Archive Location File System Root**, type **file://C:/Edcognos**, and then press **Enter**.

    Note: The directory C:\Edcognos must already exist.

18. Click **Test**, click **Close**, and then click **OK**.

Task 8. Configure environment properties for Content Manager, examine available services, and then start the IBM Cognos service.

1. On Machine D, in the **Explorer** pane of **IBM Cognos Configuration**, click the **Environment** node.
2. In the **Properties** pane, set the following properties:

   Note: Press Enter after each setting each property.

   External dispatcher URI:
   http://<machine D_IP address>:9300/p2pd/servlet/dispatch

   On Machine D, this value serves to identify the content manager component in the content store.

   Internal dispatcher URI:
   http://<machine D_IP address>:9300/p2pd/servlet/dispatch

   This value identifies this dispatcher locally for the distribution of local requests, for example between the Content Manager service and Event Management service.

   Dispatcher URI for external applications:
   http://<machine B_IP address>:9300/p2pd/servlet/dispatch

   This value typically corresponds to the External dispatcher URI of one of the dispatchers in your environment and is used by IBM Cognos Framework Manager, Metric Designer, or SDK to connect to IBM Cognos BI. For example, this value is used by IBM Cognos Framework Manager when publishing packages to the IBM Cognos server. In this case you have specified the Machine B dispatcher. You are specifying it here because later you will be installing IBM Cognos Framework Manager.

Ask students why they are beginning with Machine D to configure and start services.

3. In the **Properties** pane, click in the box beside the **Content Manager URIs** property, click **Edit**, change the entry to **http://<machine D_IP address>:9300/p2pd/servlet**, and then click **OK**.

   This value is used by dispatchers and services in the environment to send requests to the Content Manager.

4. In the **Explorer** pane, under **Environment**, click the **IBM Cognos services** component reference, to identify that the **Dispatcher** service and the **Presentation** service are the only services disabled for this installation. Notice as well, that this installation includes the **Content Manager** service, but does not include the **Report** or **Batch Report** services.

5. Save the configuration, and then from the **Actions** menu, click **Start**.

6. When the warning message appears, click **OK**, and then click **Continue**.

   The message appears, because the mail server properties have yet to be configured. This will be done in a later task.

7. Click **Close**, and then leave **IBM Cognos Configuration** open.

At the end of this task, you can ask students to open DB2 Control Center to examine the new tables in the CM and AUDIT databases. For CM, identify table names prefixed with ANN, CM, HMON, HTS, NC, and R. For AUDIT, identify table names prefixed with COGIPF.

Task 9. Configure environment properties and connections for the servers hosting application tier components and examine the available services.

IBM Cognos BI uses JDBC connectivity to access the database used for the notification store and the audit database. By default, the installation of IBM Cognos BI does not include the required drivers to connect to DB2. To configure the connections to the notification store and audit database, you must copy these drivers to the IBM Cognos BI installation directory on Machine B. You must do this prior to opening IBM Cognos Configuration.

1. On Machine B, in **Windows Explorer**, navigate to **C:\Edcognos\B5155_sa\03_Identify_IBM_Cognos_BI_Architecture**, and then copy the **db2jcc.jar** and **db2jcc_license_cu.jar** files.
2. Navigate to **D:\Program Files\IBM\cognos\c10\webapps\p2pd\WEB-INF\lib**, and then paste the **db2jcc.jar** and **db2jcc_license_cu.jar** files.
3. On Machine B, open **IBM Cognos Configuration**, and then configure the following **Environment** properties:

   Gateway URI:
   http://<machine A_IP address>:88/ibmcognos/cgi-bin/cognos.cgi

   External dispatcher URI:
   http://<machine B_IP address>:9300/p2pd/servlet/dispatch

   Internal dispatcher URI:
   http://<machine B_IP address>:9300/p2pd/servlet/dispatch

   Dispatcher URI for external applications:
   http://<machine B_IP address>:9300/p2pd/servlet/dispatch

   Content Manager URIs:
   http://<machine D_IP address>:9300/p2pd/servlet

Task 9, step 1 - The DB2 drivers are provided at this location to maintain the real-world scenario described on the installation map at the beginning of the workshop. In that scenario DB2 is installed on Machine D. Therefore, there would be no navigation to a directory on Machine B to copy these drivers. As such they have been provided as student data in the image only. If you are performing an onsite the appropriate drivers would have to be provided by the customer.

4. In **IBM Cognos Configuration**, in the **Explorer** pane, under **Data Access\Notification**, click **Notification Store**.
5. In the **Properties** pane, set the following properties:

   Database server and port number: **<machine D_IP address>:50000**

   User ID and password:

   User ID: **C10User**

   Password: **Education1!**

   Database name: **cm**
6. Test the connection.
7. In the **Explorer** pane, right-click the **Logging** component reference, point to **New resource**, and then click **Destination**.
8. In the **Name** box, type **Database**, in the **Type** list, click **Database**, and then click **OK**.
9. Right-click the **Database** resource, and point to **New resource**, and then click **Database**.
10. In the **Name** box, type **AUDIT**, leave the default in the **Type** list, and then click **OK**.
11. In the **Properties** pane, set the following properties:

    Database server and port number: **<machine D_IP address>:50000**

    User ID and password:

    User ID: **C10User**

    Password: **Education1!**

    Database name: **AUDIT**
12. Test the connection.

13. In the **Explorer** pane, under **Environment**, click the **IBM Cognos services** component reference, to identify that all services are enabled for this installation. Notice as well, that this installation includes the **Report** and **Batch Report** services, but does not include the **Content Manger** service.

    You are not starting services yet, as there is additional configuration required for Machine B. For now, you will move to Machine C and configure properties. Because you will be configuring properties to connect to the notification store and audit database, you must again copy the required drivers to the IBM Cognos BI installation directory. You must do this prior to opening IBM Cognos Configuration

14. On Machine C, in **Windows Explorer**, navigate to **C:\Edcognos\B5155_sa\03_Identify_IBM_Cognos_BI_Architecture**, and then copy the **db2jcc.jar** and **db2jcc_license_cu.jar** files.
15. Navigate to **D:\Program Files\IBM\cognos\c10\webapps\p2pd\WEB-INF\lib**, and then paste the **db2jcc.jar** and **db2jcc_license_cu.jar** files.
16. On Machine C, open **IBM Cognos Configuration**, and then configure the following **Environment** properties:

    Gateway URI:
    http://<machine A_IP address>:88/ibmcognos/cgi-bin/cognos.cgi

    External dispatcher URI:
    http://<machine C_IP address>:9300/p2pd/servlet/dispatch

    Internal dispatcher URI:
    http://<machine C_IP address>:9300/p2pd/servlet/dispatch

    Dispatcher URI for external applications:
    http://<machine B_IP address>:9300/p2pd/servlet/dispatch

    Content Manager URIs:
    http://<machine D_IP address>:9300/p2pd/servlet

17. In the **Explorer** pane, under **Data Access\Notification**, click **Notification Store**.

18. In the **Properties** pane, set the following properties:

    Database server and port number: **<machine D_IP address>:50000**

    User ID and password:

        User ID: **C10User**

        Password: **Education1!**

    Database name: **cm**

19. Test the connection.
20. In the **Explorer** pane, right-click the **Logging** component reference, point to **New resource**, and then click **Destination**.
21. In the **Name** box, type **Database**, in the **Type** list, click **Database**, and then click **OK**.
22. Right-click the **Database** resource, and point to **New resource**, and then click **Database**.
23. In the **Name** box, type **AUDIT**, leave the default in the **Type** list, and then click **OK**.
24. In the **Properties** pane, set the following properties:

    Database server and port number: **<machine D_IP address>:50000**

    User ID and password:

        User ID: **C10User**

        Password: **Education1!**

    Database name: **AUDIT**

25. Test the connection.

26. In the **Explorer** pane, under **Environment**, click **IBM Cognos services** component reference, to identify that all services are enabled for this installation. Notice as well, that this installation includes the same services as those listed for Machine B.

    For the next task, you will move to Machines D, then B, then back to C, to configure the mail server properties and start the services.

27. Save the configuration

Task 10. Configure properties for the mail server and start services.

1. In **IBM Cognos Configuration** on Machine D, in the **Explorer** pane, click the **Notification** component reference, and then in the **Properties** pane, set the following properties:

   SMTP mail server: **<machine D_IP address>:25**

   Account and Password:

   User ID: **Admin Person**

   Password: **Education1!**

   Default sender: **admin@grtd123.com**

2. Test the connection.
3. Save the configuration.
4. From the **Actions** menu, click **Restart**, click **Close**, and then close **IBM Cognos Configuration**.
5. In **IBM Cognos Configuration** on Machine B, repeat steps **1** to **3** to configure the mail server.

6. From the **Actions** menu, click **Start**, click **Close**, and then close **IBM Cognos Configuration**.
7. In **IBM Cognos Configuration** on Machine C, repeat steps **1** to **3** to configure the mail server.
8. From the **Actions** menu, click **Start**, click **Close**, and then close **IBM Cognos Configuration**.

Task 11. Configure environment properties for the gateway.

1. On Machine A, open **IBM Cognos Configuration**.
2. In the **Explorer** pane, click the **Environment** node, in the **Properties** pane, click the box next to **Dispatcher URIs for gateway**, and then click **Edit**.
3. Click in the box under **Current values**, and then ensure that this value is as follows:

   http://<machine B_IP address>:9300/p2pd/servlet/dispatch/ext
4. Click **Add**, and then repeat step **3** to add the following value:

   http://<machine C_IP address>:9300/p2pd/servlet/dispatch/ext
5. Click **OK**.
6. Save the configuration, and then close **IBM Cognos Configuration**.

Task 12. Install IBM Cognos Framework Manager and IBM Cognos Samples.

You are installing the samples on Machine D because they include the sample IBM Cognos content (reports) that will be deployed in a later task. In this scenario the content must be deployed from the local machine, thus you are installing them on Machine D.

1. On Machine D, in **Windows Explorer**, navigate to **C:\Edcognos\B5155_sa\03-Identify_IBM_Cognos_BI_ Architecture\IBM Cognos BI Install Files\bimodel\win32**, and then double-click **issetup.exe**.
2. In the first window of the **IBM Cognos Framework Manager** installation wizard, leave the default language selection, and then click **Next**.
3. In the **License Agreement** window, click **I Agree**, and then click **Next**.
4. In the **Installation Location** window, ensure that **D:\Program Files\ibm\cognos\c10** appears in the **Installation Directory** box, and then click **Next**.
5. Click **Yes** to continue, and then click **Yes** to create backup files.
6. When prompted to stop the **IBM Cognos** service, click **Next**.
7. In the **Component Selection** window, click **Next**.
8. Click **Next**, and then click **Next** again.
9. Click **OK** to the message regarding documentation, and then click **Finish**.

10. Repeat steps **1** to **5** and **7** to **9** to install **IBM Cognos Business Intelligence Samples**.

    In step 1 navigate to **C:\Edcognos\B5155_sa\03-Identify_IBM_Cognos_BI_Architecture\IBM Cognos BI Install Files\bisamples\win32**.

    At step 9, you do not have to click **OK**, only **Finish**.

Task 13. Configure environment properties for Framework Manager.

1. On Machine D, open **IBM Cognos Configuration**, click the **Environment** node, and then confirm or set the following properties:

   Gateway URI:
   http://<machine A_IP address>:88/ibmcognos/cgi-bin/cognos.cgi

   Dispatcher URI for external applications:
   http://<machine B_IP address>:9300/p2pd/servlet/dispatch

2. Save the configuration, and then start the services.
3. Close **IBM Cognos Configuration**.

Task 14. Test the installation.

Prior to performing this task, ensure that all services are running on Machines B and C.

1. On any machine, open **Internet Explorer**, in the **Address** box, type **http://<machine A_IP address>:88/ibmcognos**, and then press **Enter** to verify that the **IBM Cognos software** page can be accessed.
2. Click **Administer IBM Cognos content**, click the **Configuration** tab, and then click **Dispatchers and Services** to verify that there are three entries, indicating that the dispatchers and Content Manager have been registered appropriately.
3. On Machine D, open **IBM Cognos Framework Manager**.
4. Open the **great_outdoors_warehouse.cpf** project located at **D:\Program Files\IBM\cognos\c10\webcontent\samples\models\great_outdoors_warehouse**.
5. In the **Project Viewer** pane, expand the **Packages** folder, right-click **GO Data Warehouse (query)**, and then click **Publish Packages**.
6. Click **Next**, click **Next** again, and then deselect the **Verify the Package before publishing** check box.
7. Click **Publish**, and then click **Finish**, indicating that the publish was successful, and that IBM Cognos Framework Manager is communicating with the Application Tier Components.
8. Close **Framework Manager** without saving, and then in **IBM Cognos Administration**, from the **Launch** menu, click **IBM Cognos Connection**, to verify that the **GO Data Warehouse (query)** package is now available in the **Public Folders** area of **IBM Cognos Connection**.

Task 15. Deploy content.

1. On Machine D, in **Windows Explorer**, copy the **IBM_Cognos_Samples.zip** and **IBM_Cognos_Audit.zip** files from **D:\Program Files\IBM\cognos\c10\webcontent\samples\content**, and paste to **D:\Program Files\IBM\cognos\c10\deployment**.
2. In **IBM Cognos Connection**, from the **Launch** menu, click **IBM Cognos Administration**.
3. Click the **Configuration** tab, and then click **Content Administration**.
4. On the toolbar, click **New Import**  .
5. Select **IBM_Cognos_Samples**, and then click **Next**.
6. Ensure that **IBM_Cognos_Samples** appears in the **Name** box, and then click **Next**.
7. Under **Public folders content**, select the **Samples** check box, and then click **Next**.
8. Accept the default selections, and then click **Next**.
9. Click **Next**, and then click **Finish**.
10. Click **Run**, and then click **OK**.
11. Repeat steps **4** to **10** to import the **IBM_Cognos_Audit** archive.
12. From the **Launch** menu, click **IBM Cognos Connection** to confirm that the content has been imported.

Task 16. Create and test data source connections.

Before you can create a data source connection to the DB2 query database (GS_DB), you must specify connection information on Machines B and C so that the dispatchers on these machines can communicate with the DB2 instance on Machine D. To do this, you will use DB2 Configuration Assistant.

1. On Machine B, from the **Start** menu, point to **All Programs** > **IBM DB2** > **DB2COPY1 (Default)** > **Set-up Tools**, and then click **Configuration Assistant**.
2. Click **Yes** to open the **Add Database Wizard**.
3. Select **Manually configure a connection to a database**, and then click **Next**.
4. Select **TCP/IP**, and then click **Next**.
5. In the **Host Name** box, type **<machine D_IP address>**, in the **Port number** box, type **50000**, and then click **Next**.
6. In the **Database name** box, type **GS_DB**, and then click **Next**.
7. On the **Register this database as a data source** screen, leave the defaults, and then click **Next**.
8. In the **Operating system** list, click **Windows**, and then click **Next**.
9. Click **Finish**, and then click **Test Connection**.
10. In the **User ID** box, type **GOSALES**, in the **Password** box, type **Education1!**, and then click **Test Connection**.
11. Click **Cancel**, click **Close**.

DB2 Configuration Assistant is installed as part of the installation of IBM DB2 Express 9.7. This was done as part of the course set up.

12. From the **Selected** menu, click **Add Database Using Wizard**, and then repeat steps **3** to **11** to specify connection information for the **AUDIT** database**.** Note: at step **10** specify a **User ID** of **C10User**.
13. Close **Configuration Assistant**.
14. Repeat steps **1** to **13** on Machine C.
15. Return to **IBM Cognos Connection**, and then from the **Launch** menu, click **IBM Cognos Administration**.

    You can now create the data source connections to the query databases.
16. Click the **Configuration** tab, **Data Source Connections**, then on the toolbar, click **New Data Source**  .
17. In the **Name** box, type **great_outdoors_sales**, and then click **Next**.
18. In the **Type** list, click **IBM DB2**, and then click **Next**.
19. In the **DB2 database name** box, type **GS_DB**.
20. Under **Signons**, select the **Password** check box, in the **User ID** box type **GOSALES**, and then in the **Password** and **Confirm password** boxes, type **Education1!**.
21. Under **Testing**, click **Test the connection**.
22. On the **Test the connection** page, under **Dispatcher**, click **Select all**, and then click **Test**.

    IBM Cognos BI sends test connection requests to all selected dispatchers to determine whether the data source connections are properly configured. Because the data source connection exists only once in Content Manager, this is really testing the database client to database server connection as much as the data source connection definition.

23. On the **View the results** page, click **Close**, click **Close**, and then click **Finish**.

    Note: this connection will be used by both the GO Sales (query) and GO Sales (analysis) packages.

24. Repeat steps **16** to **23** to create and test additional data source connections:

    - Name: **great_outdoors_warehouse**

      Database Type: **IBM DB2**

      Database name: **GS_DB**

      Signon:

      User ID: **GOSALESDW**

      Password: **Education1!**

      This connection will be used by the GO Data Warehouse (analysis) and GO Data Warehouse (query) packages.

    - Name: **Audit**

      Database Type: **IBM DB2**

      Database name: **AUDIT**

      Signon:

      User ID: **C10User**

      Password: **Education1!**

      This connection will be used by the Audit package.

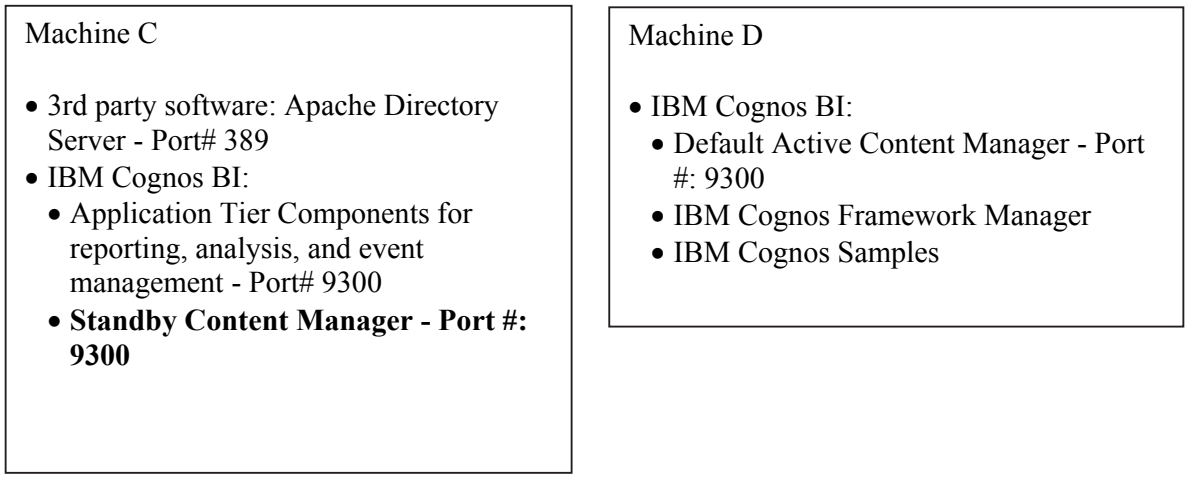
Task 17. Test the connection for the GO Sales (query) package.

1. At the top of the page, click **Return**  , and then navigate to **Samples** > **Models** > **GO Sales (query)** > **Report Studio Report Samples**.
2. Click the **Order Invoices - Donald Chow, Sales Person** report to verify that the report runs successfully.
3. Close **Internet Explorer**.

Workshop 2: Add a Standby Content Manager to a Distributed IBM Cognos BI Environment

After installing and configuring IBM Cognos BI in a distributed environment, you are ready to integrate failover protection. To ensure the reliability of the environment, you are required to configure a standby Content Manager in case the active Content Manager computer is not available due to software or hardware failure.

The following installation map was updated to indicate where the additional IBM Cognos BI component is to be installed.



Note: The default active Content Manager has already been installed.

To install and configure the components, perform the following tasks:

- Configure additional environment properties on the machine hosting the default active Content Manager.
- Install the standby Content Manager.

- Configure the machine hosting Application Tier Components to know the location of the standby Content Manager.
- Configure the connection from the standby Content Manager to the content store.
- Configure the other machine hosting Application Tier Components to know the location of the standby Content Manager.
- Test the installation and configuration.
- Test the failover.

For more detailed information outlined as tasks, see the Task Table on the next page.

For the final results, see the Workshop Results section that follows the Task Table.

Workshop 2: Task Table

Task 1. Configure additional environment properties on the machine hosting the default active Content Manager.	
Where to Work	**Hints**
Machine D/IBM Cognos Configuration/ Environment node	• Configure the following property: • Content Manager URIs: http://<machine C_IP address> :9300/p2pd/servlet • Start the services. • Will this become the default active Content Manager Computer?
Task 2. Install the standby Content Manager.	
Where to Work	**Hints**
Machine C/Windows Explorer	• Run issetup.exe from C:\Edcognos\B5155_sa\03-Identify_IBM_Cognos_BI_Architecture\ IBM Cognos BI Install Files\bisrvr\win32\.
IBM Cognos Business Intelligence Server installation wizard	• Install Content Manager only. • Accept defaults.

Task 3. Configure the machine hosting Application Tier Components to know the location of the standby Content Manager.	
Where to Work	**Hints**
Machine C/IBM Cognos Configuration/ Environment node	• Configure the following properties: • Content Manager URIs: http://<machine C_IP address>:9300/ p2pd/servlet
Task 4. Configure the connection from the standby Content Manager to the content store.	
Where to Work	**Hints**

Machine C/IBM Cognos Configuration/Data Access node/Content Manager/Content Store	• Configure the following properties:
	  • Database server and port number: <machine D_IP address>:5000
	  • User ID: C10User
	  • Password: Education1!
	  • Database name: cm
	• Test the connection, save the configuration, and then start services.

Task 5. Configure the other machine hosting Application Tier Components to know the location of the standby Content Manager.	
Where to Work	**Hints**

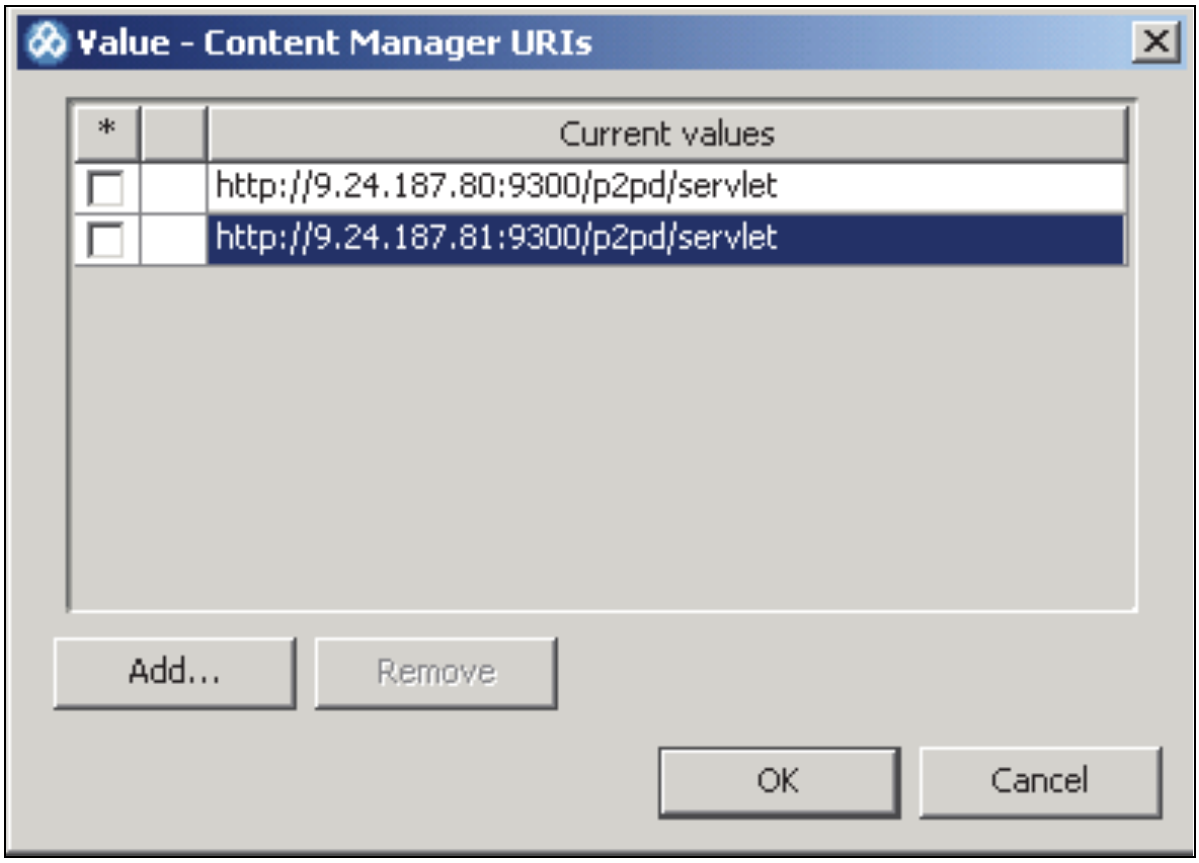
Machine B/
IBM Cognos Configuration/
Environment node
	• Configure the following property:
	  • Content Manager URIs: http://<machine C_IP address>:9300/
	  p2pd/ servlet
	• Why must you add a Content Manager URI on the computer hosting the Application Tier Components?

Task 6. Test the installation and configuration.	
Where to Work	**Hints**
IBM Cognos Administration/ Configuration tab/ Dispatchers and Services/Content Manager services	• View Content Manager services. • Which machine has the default active Content Manager service?
Task 7. Test the failover.	
Where to Work	**Hints**
IBM Cognos Configuration	• Stop the services on Machine D.
Machine C Content Manager Service	• What is the status of ContentManagerService once failover has occurred?
IBM Cognos Configuration	• Restart services on Machine D.

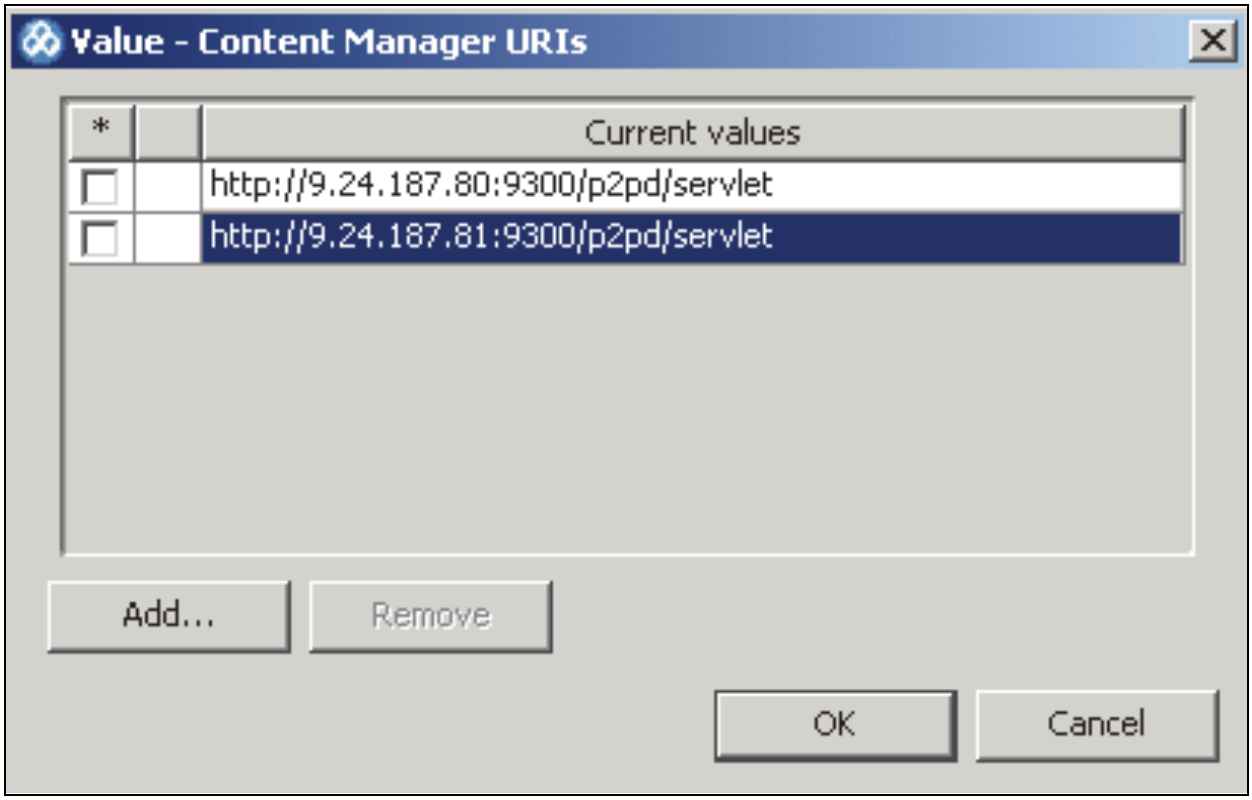
If you need more information to complete a task, see the Step-by-Step instructions at the end of the Workshop.

Workshop 2: Workshop Results

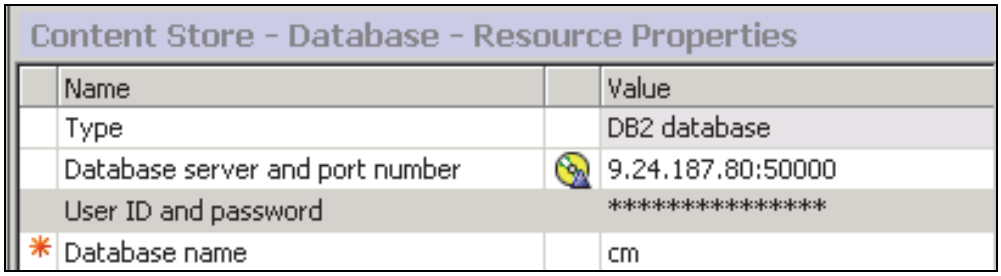
On Machine D, after configuring the Content Manager URIs property for the standby Content Manager component, the Value - Content Manager URIs dialog box appears as shown below:



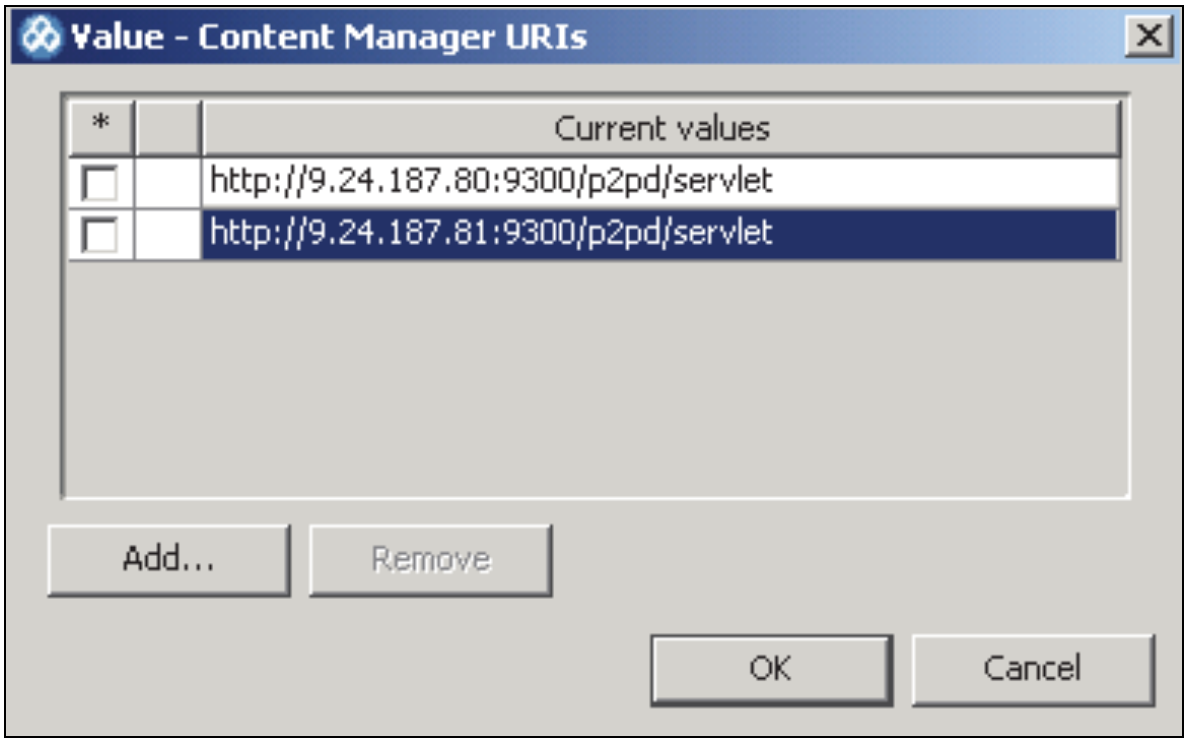
On Machine C, after configuring the Content Manager URIs property for the standby Content Manager component, the Value - Content Manager URIs dialog box appears as shown below:



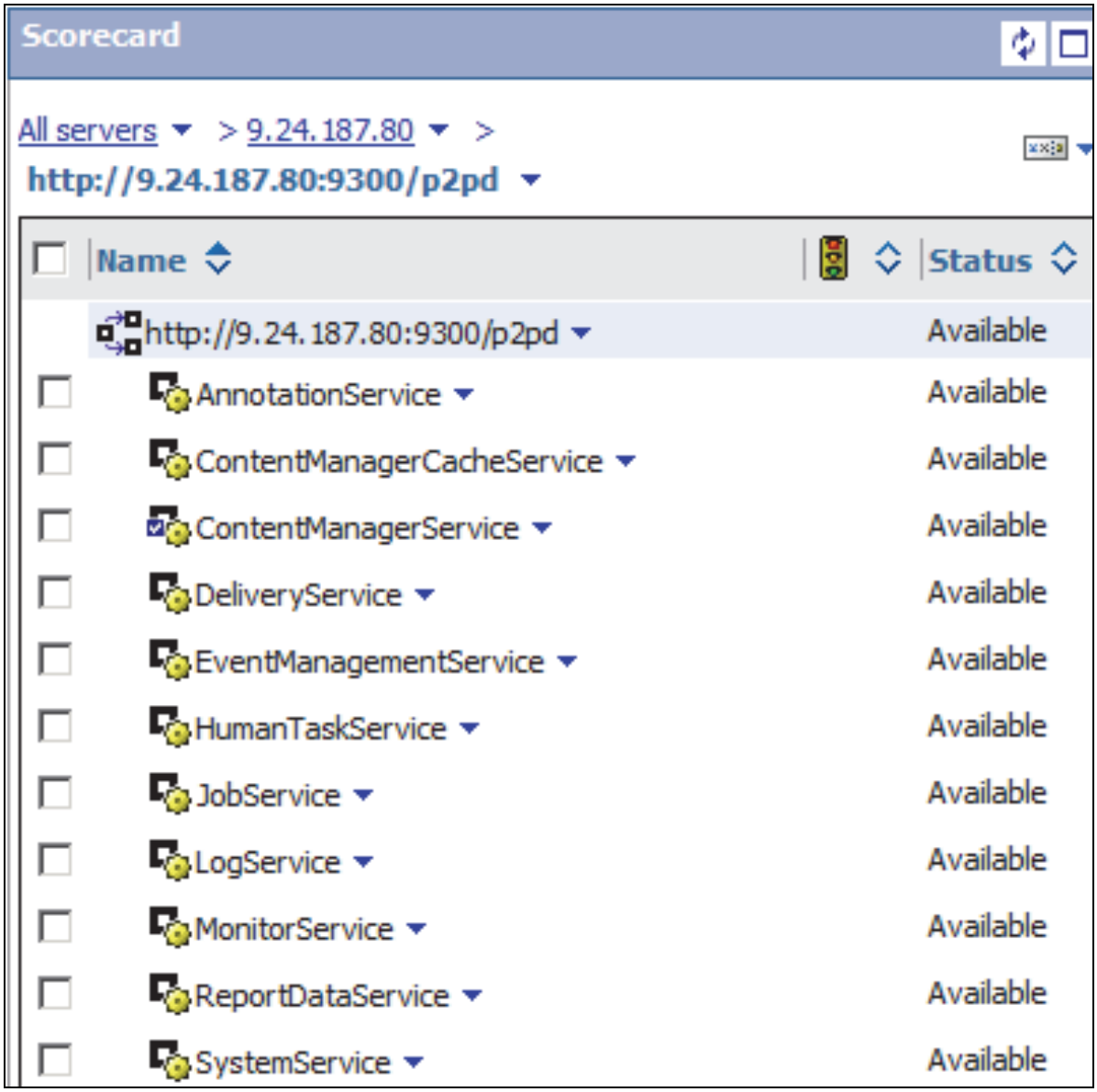
After configuring the connection from the standby Content Manager, on Machine C, to the content store, the properties to locate the database should appear as shown below:



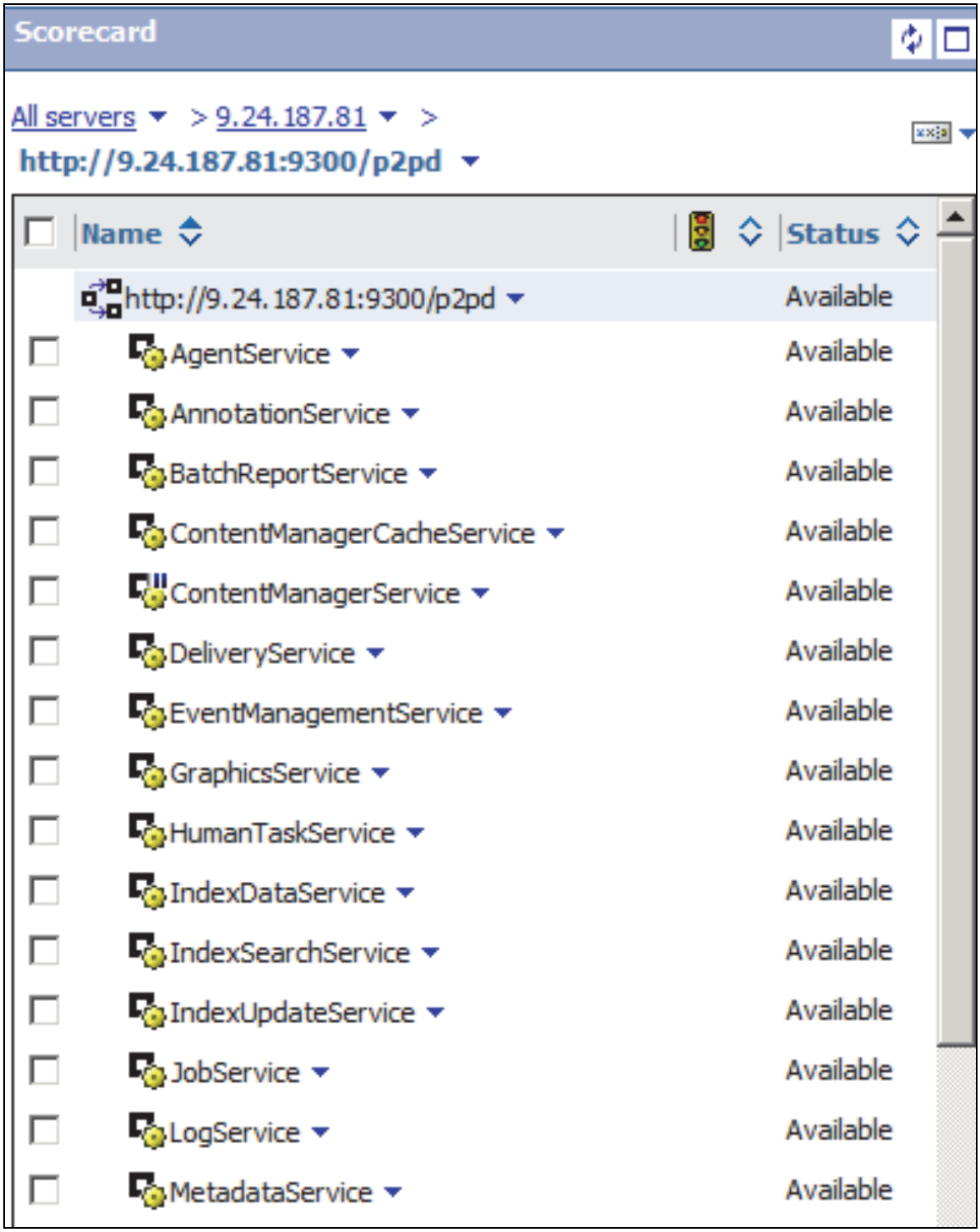
On Machine B, after configuring the Content Manager URIs property for the standby Content Manager component, the Value - Content Manager URIs dialog box appears as shown below:



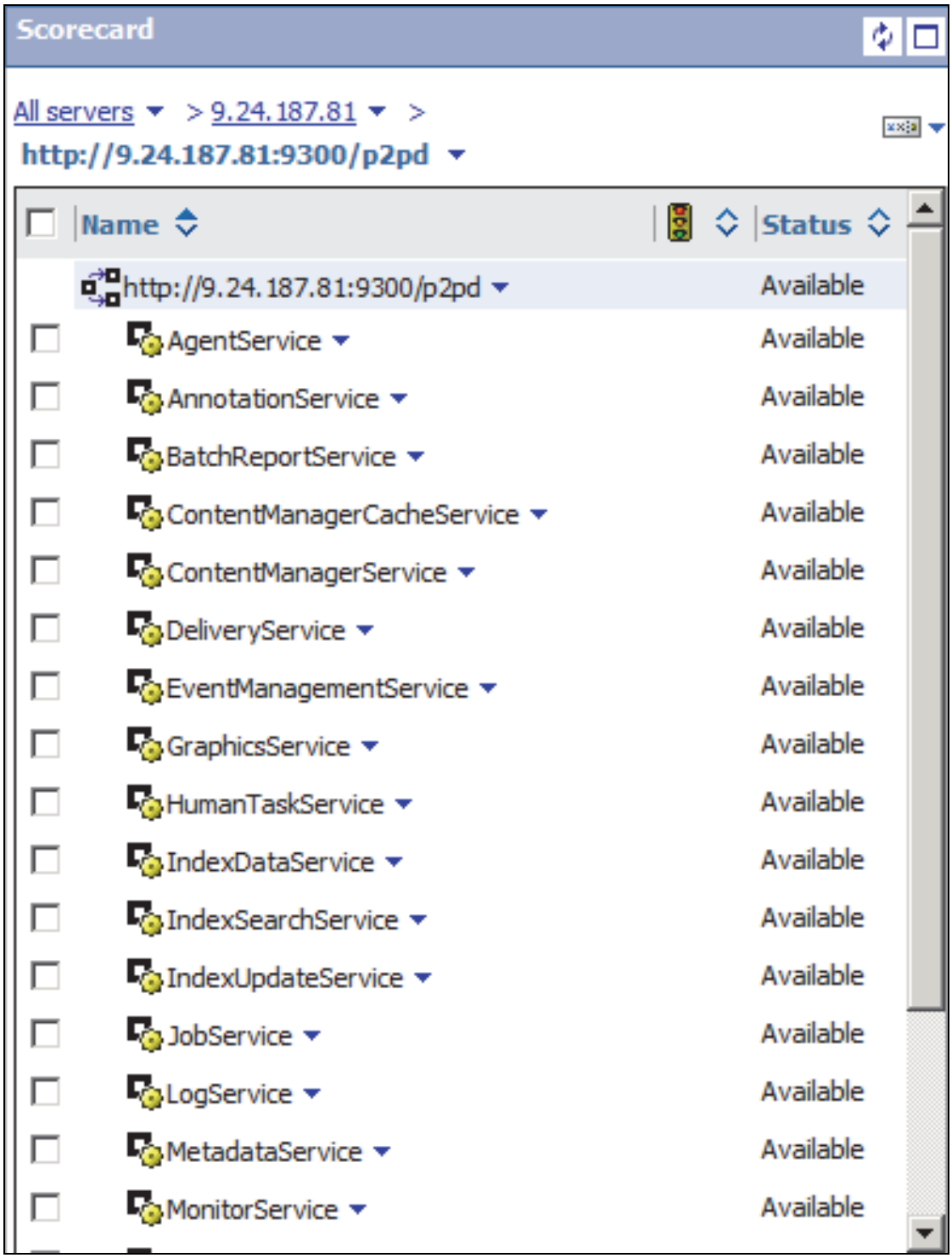
In IBM Cognos Administration, after identifying that the default active Content Manager is running on Machine D, the Scorecard pane appears as shown below:



In IBM Cognos Administration, after identifying that the standby Content Manager is inactive on Machine C, the Scorecard pane appears as shown below:



After stopping the services on Machine D, the status of the ContentManagerService on Machine C appears as shown below:



Workshop 2: Step-by-Step Instructions

Task 1. Configure additional environment properties on the machine hosting the default active Content Manager.

1. Open **IBM Cognos Configuration** on Machine D.
2. Stop the services.
3. In the **Explorer** pane, click the **Environment** node.
4. In the **Properties** pane, click in the box beside the **Content Manager URIs** property, click **Edit**, and then click **Add**.
5. In the **Current values** box, type **http://<machine C_IP address>:9300/p2pd/servlet**, and then press **Enter**.
6. Click **OK**, save the configuration, and then start the services.

   Because the instance of Content Manager on Machine D is the first one started, it becomes the default active Content Manager.
7. Close **IBM Cognos Configuration**.

Task 2. Install the standby Content Manager.

1. On Machine C, open **IBM Cognos Configuration**, and then stop the services, and then close **IBM Cognos Configuration**.
2. When prompted to start the service, click **No**.
3. In **Windows Explorer**, navigate to **C:\Edcognos\B5155_sa\03-Identify_IBM_Cognos_BI_Architecture\IBM Cognos BI Install Files\bisrvr\win32**, and then double-click **issetup.exe**.
4. Install the standby Content Manager component as per the steps in **Workshop 1**, **Task 2**.

   During the installation, ensure that only the **Content Manager** component is selected.

Task 3. Configure the machine hosting Application Tier Components to know the location of the standby Content Manager.

1. On Machine C, open **IBM Cognos Configuration**, and then in the **Explorer** pane, click the **Environment** node.
2. In the **Properties** pane, click in the box beside the **Content Manager URIs** property, click **Edit**, and then click **Add**.
3. In the **Current values** box, type **http://<machine C_IP address>:9300/p2pd/servlet**, and then press **Enter**.
4. Click **OK**.

Task 4. Configure the connection from the standby Content Manager to the content store.

1. In the **Explorer** pane, click **Content Store**, and then in the **Properties** pane, set the following properties

   Database server and port number: **<machine D_IP address>:50000**

   User ID and Password

   User ID: **C10User**

   Password: **Education1!**

   Database name: **cm**
2. Test the connection, save the configuration, and then start services.

   Because the instance of Content Manager on Machine C is the second one started, it becomes the standby Content Manager.
3. Close **IBM Cognos Configuration**.

Task 5. Configure the other machine hosting Application Tier Components to know the location of the standby Content Manager.

1. On Machine B, open **IBM Cognos Configuration**.
2. In the **Explorer** pane, click the **Environment** node.
3. In the **Properties** pane, click in the box beside the **Content Manager URIs** property, click **Edit**, and then click **Add**.
4. In the **Current values** box, type **http://<machine C_IP address>:9300/p2pd/servlet**, and then press **Enter**, to identify that all machines hosting Application Tier Components must know the location of all Content Manager computers.
5. Click **OK**.
6. Save the configuration, restart the services, and then close **IBM Cognos Configuration**.

Task 6. Test the installation and configuration.

1. On any machine, open IBM Cognos BI in **Internet Explorer**, to verify that the **IBM Cognos software** page can be accessed.
2. Click **Administer IBM Cognos content**, and then click **System**.
3. In the **Scorecard** pane, click **<machine D_IP address>**, and then click **http://<machine D_IP address>:9300/p2pd** to identify:
   - that the default active Content Manager is running on Machine D
   - the  icon that appears beside **ContentManagerService**.
4. Click **All servers**, click **<machine C_IP address>**, and then click **http://<machine C_IP address>:9300/p2pd** to identify that the **ContentManagerService** on Machine C is available but it is in standby mode.

   Note: the  icon that appears beside ContentManagerService.

Task 7. Test the failover.

1. Open **IBM Cognos Configuration** on Machine D, and then stop the services.
2. Return to **IBM Cognos Administration**, and then at the top of the **Scorecard** pane, click **Refresh**  to identify that the status of the ContentManagerService on Machine C is now active  .
3. In **IBM Cognos Configuration**, on Machine D, start services, and then close **IBM Cognos Configuration**.
4. Close **Internet Explorer**.