

# IBM Express Runtime Quick Start Workshop

## Lab 3 - Express Runtime Console

The lab walks you through setting up the console to monitor the application you distributed with Express Runtime. After the set up is complete you will create an error condition and see how the Console can help keep your applications running smoothly.

### Part 1: Configuring the Express Runtime Console for your solution

1. Click on **Start -> Internet Explorer** to bring up a web browser window.
2. Enter the URL - <http://localhost:1180/ibm/console/>

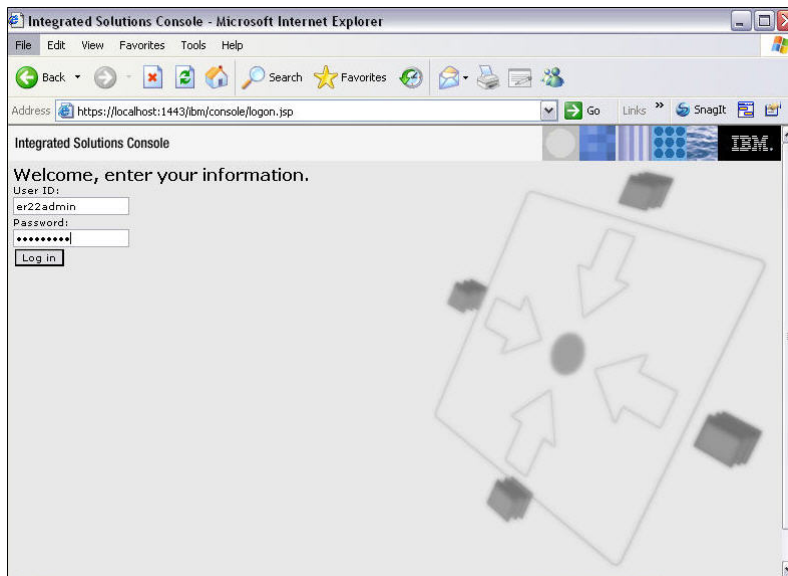


Figure 3-1 Express Runtime Console login

3. Enter **er22admin** in the User ID field and **er22admin** in the Password and click on **Log In**.
4. Depending on the classroom security, you may be presented with security warnings, ignore them for this exercise and continue.
5. You will be presented with the Welcome screen for the Express Runtime Console (Figure 3-2).

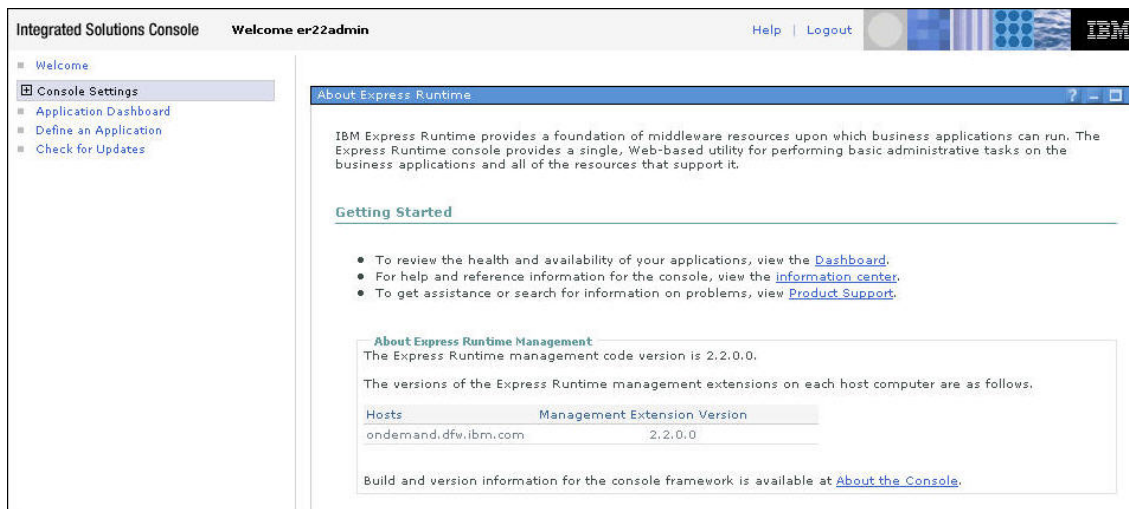


Figure 3-2 Console Welcome

# IBM Express Runtime Quick Start Workshop

## Lab 3 - Express Runtime Console

6. Click on **Define an Application**.



Figure 3-3 Define an Application

7. Click on **Define a New Application**.

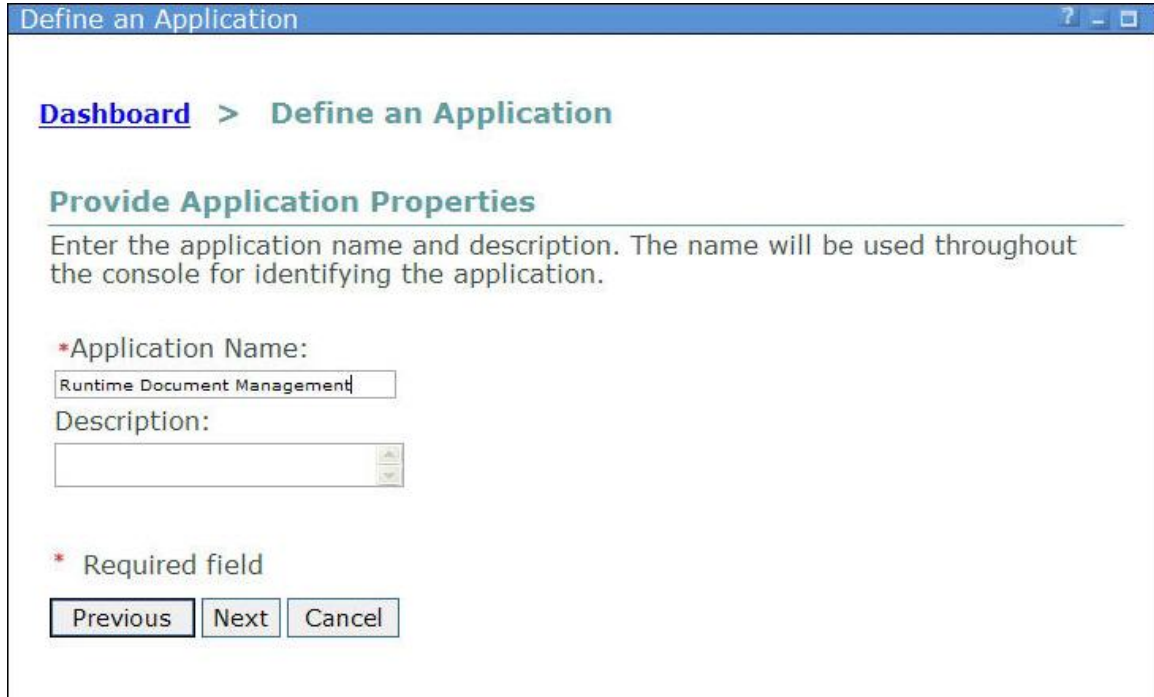


Figure 3-4 Provide Application Properties

8. Enter **Runtime Document Management** in the Application Name. Click **Next**.

# IBM Express Runtime Quick Start Workshop

## Lab 3 - Express Runtime Console

9. You should see your **Application Server**, **Database**, and **Web Server** – select all 3 and click **Next**.

Note: If you don't see the Database (**DOCMGTD**), perform the following steps:

Click on **Find Resources**.

Leave the Host Name as is, enter **er22admin** as the userid and password and click **OK**.

Accept the SSL certificate.

If you have to locate the resources, you may see duplicate entries in the resource list for the Application and Web servers (see Figure 3-5). You only need to select one of each.

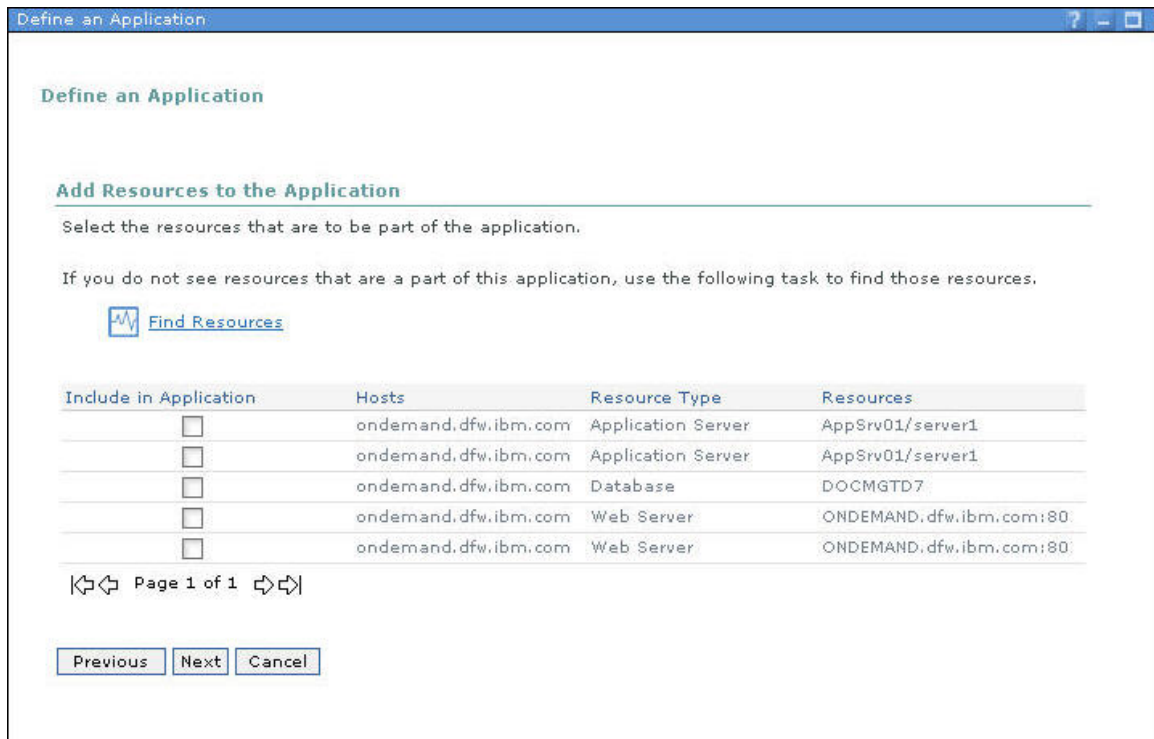
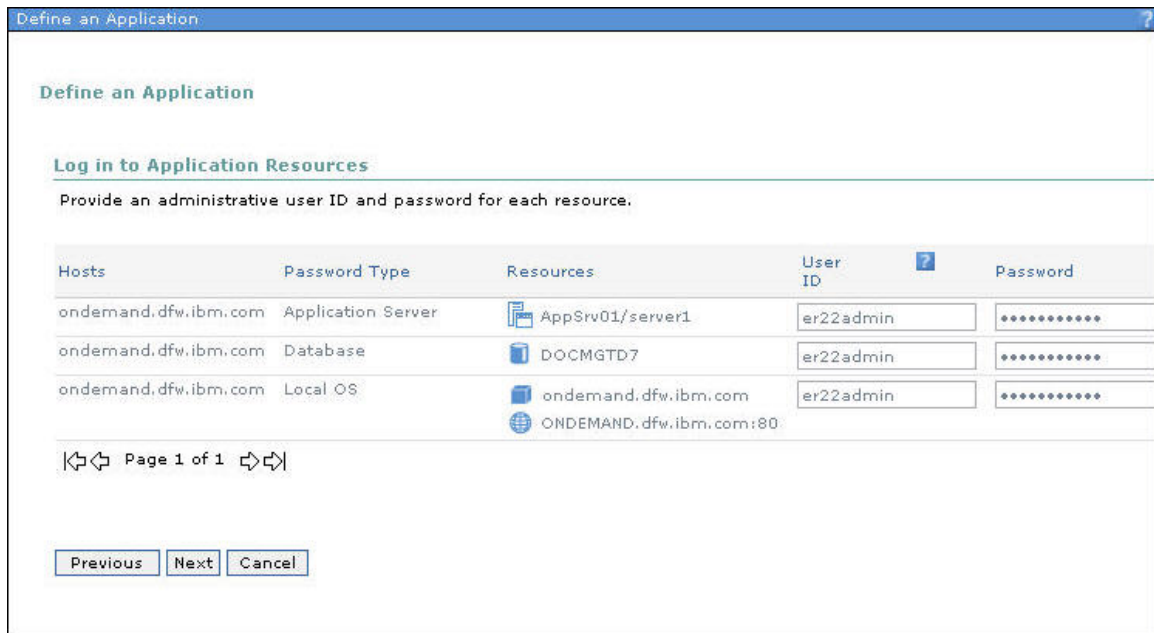


Figure 3-5 Add Resources

# IBM Express Runtime Quick Start Workshop

## Lab 3 - Express Runtime Console

10. You will be prompted to enter an administrator user ID and password (Figure 3-6).



The screenshot shows a web-based console window titled "Define an Application". Below the title is a section "Log in to Application Resources" with the instruction "Provide an administrative user ID and password for each resource." A table lists three resources with columns for Hosts, Password Type, Resources, User ID, and Password. The User ID and Password fields are populated with "er22admin" and masked with dots. At the bottom, there are navigation buttons: "Previous", "Next", and "Cancel".

Hosts	Password Type	Resources	User ID	Password
ondemand.dfw.ibm.com	Application Server	AppSrv01/server1	er22admin	.....
ondemand.dfw.ibm.com	Database	DOCMGTD7	er22admin	.....
ondemand.dfw.ibm.com	Local OS	ondemand.dfw.ibm.com ONDEMAND.dfw.ibm.com:80	er22admin	.....

Figure 3-6 Provide user Ids and passwords

11. Enter **er22admin** for the User ID and Password for each of these resources. Click **Next**.
12. You will see a list of all the resources that are going to be associated with your application, click **Finish**.

# IBM Express Runtime Quick Start Workshop

## Lab 3 - Express Runtime Console

13. Click on **Application Dashboard** to see the Application perspective.

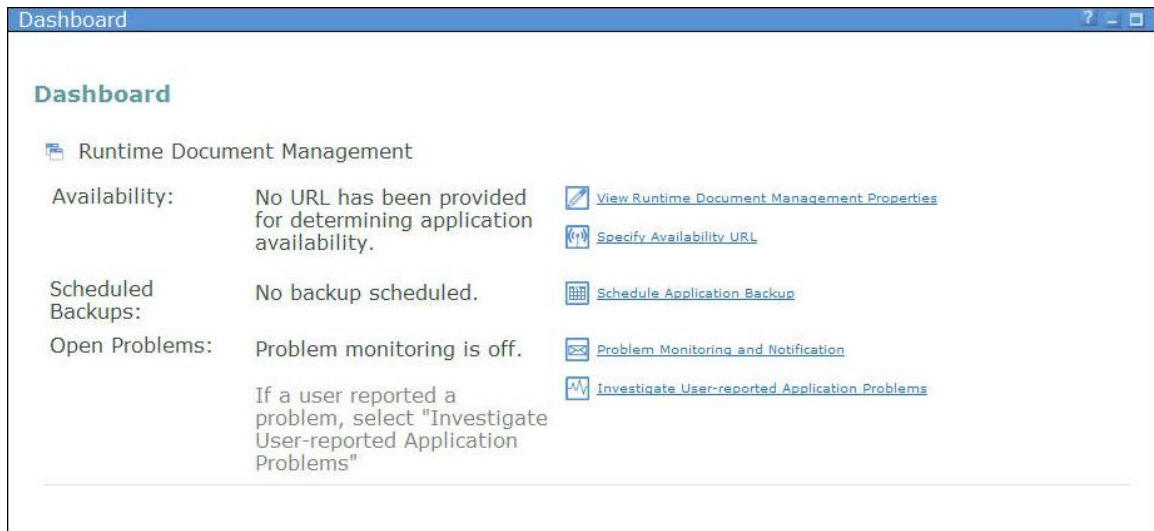


Figure 3-7 Dashboard

14. Now that you have defined the servers that are needed for this application to function properly, you can set up the Console to keep watch for problems with your application. Click on **Specify Availability URL** – this should point to a welcome screen or log-in screen, the Console will connect to this location as an indicator that the application is up and running.

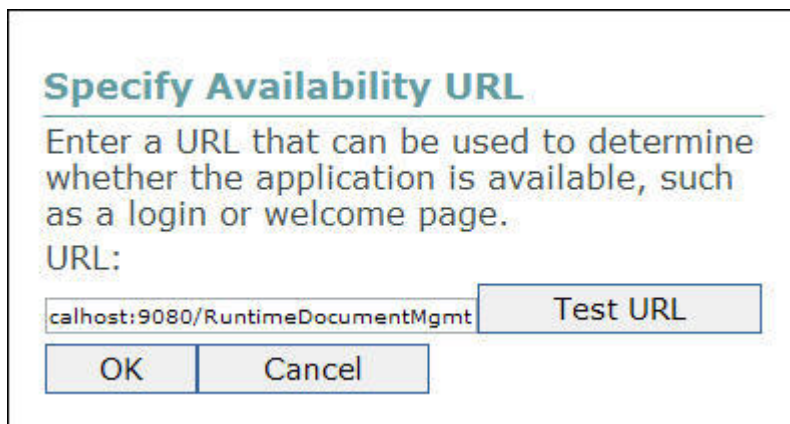


Figure 3-8 Specify URL

Note: The URL information can also be specified in the Console definition XML file.

15. Enter **http://localhost:9080/RuntimeDocumentMgmt** and click on **Test URL** to verify that the Console can connect to this location.
16. When the URL test is successful, click **OK**.

# IBM Express Runtime Quick Start Workshop

## Lab 3 - Express Runtime Console

17. Now we will set up the Console to automatically back up our application. Click on **Schedule Application Backup**. The first screen you see describes the 2 backup options (Figure 3-9). Click **Next**.

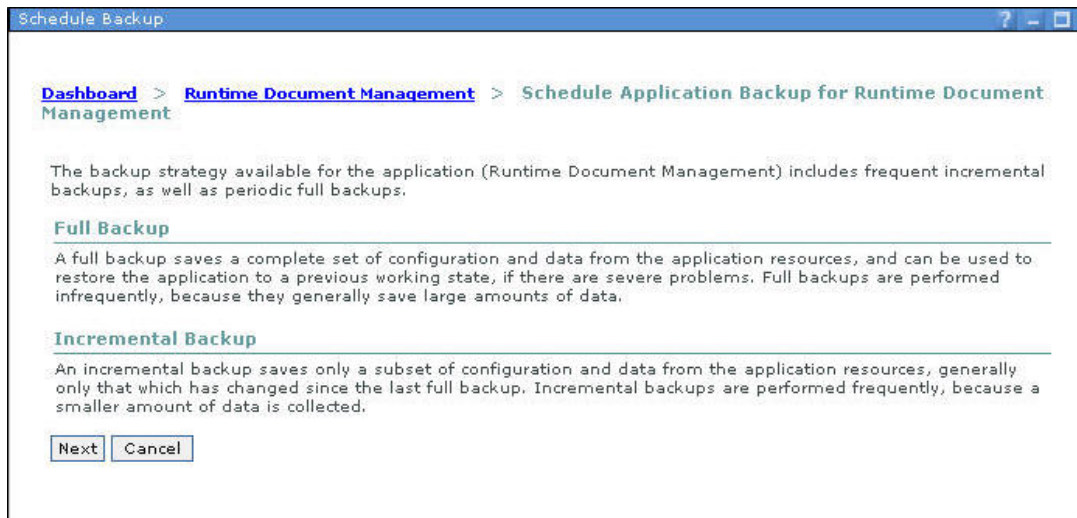


Figure 3-9 Backup options

18. You see the options for the Full Backup (Figure 3-10). Specify a Start Date, Start Time, and the Day(s) of the week to perform a full backup. Click **Next**.

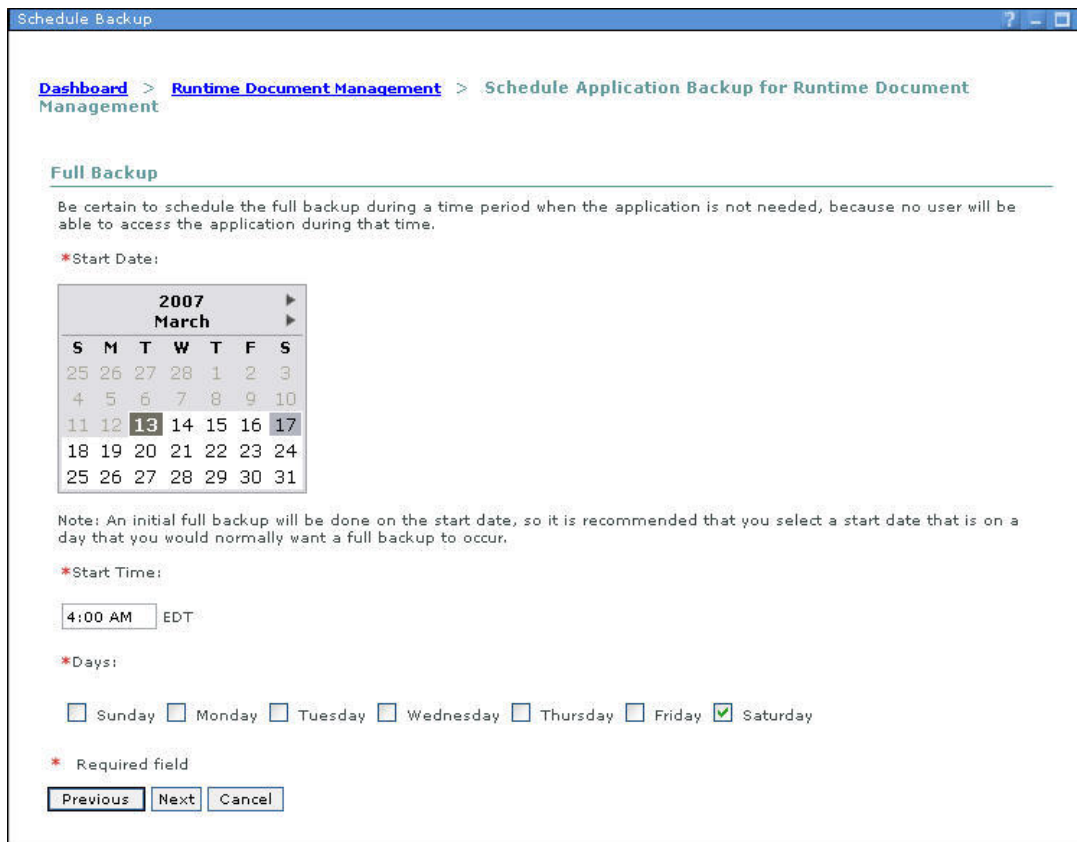


Figure 3-10 Full backup options

# IBM Express Runtime Quick Start Workshop

## Lab 3 - Express Runtime Console

19. Specify the location you want to use to back up the data. Click **Next**.

Screenshot of the "Schedule Backup" window. The breadcrumb trail is: Dashboard > Runtime Document Management > Schedule Application Backup for Runtime Document Management. The section is titled "Full Backup". The text says: "The data will be backed up to a location on each host machine in the solution." The host name is "ondemand.dfw.ibm.com". The "Select the Backup Method to Use" dropdown is set to "Directory or Tape". The "Location" field contains "c:\acme\full\_backup" and has a "Browse..." button. A red asterisk indicates a required field. At the bottom are "Previous", "Next", and "Cancel" buttons.

Figure 3-11 Full backup location

20. Optionally, you can set up days to perform incremental backups. Click **Next**.

Screenshot of the "Schedule Backup" window. The breadcrumb trail is: Dashboard > Runtime Document Management > Schedule Application Backup for Runtime Document Management. The section is titled "Incremental Backup". The text says: "Schedule the incremental backup during a time period of relative inactivity, because system performance is likely to be impacted by the backup." The "Start Time" is "03:00 AM EDT". The "Days" section has checkboxes for Sunday, Monday, Tuesday, Wednesday, Thursday, Friday, and Saturday. Monday, Wednesday, and Friday are checked. At the bottom are "Previous", "Next", and "Cancel" buttons.

Figure 3-12 Incremental backup schedule

# IBM Express Runtime Quick Start Workshop

## Lab 3 - Express Runtime Console

21. Specify the location you want to use to back up the data. Click **Next**.

Schedule Backup

Dashboard > Runtime Document Management > Schedule Application Backup for Runtime Document Management

### Incremental Backup

The data will be backed up to a location on each host machine in the solution.

ondemand.dfw.ibm.com

Select the Backup Method to Use: Directory or Tape

\*Location: c:\acme\inc\_backup

\* Required field

Figure 3-13 Incremental backup location

22. You will be presented with a summary of the backups that are going to be performed by week (Figure 3-14). . Click **OK**.

Schedule Backup

Dashboard > Runtime Document Management > Schedule Application Backup for Runtime Document Management

### Current Backup Schedule

The following backup schedule is based upon the full and incremental backup settings that have been saved. If necessary, you can cancel a backup that is scheduled for a specific date.

< Previous Week

Time	Day	Date	Backup Type
---	Sunday	March 18, 2007	---
3:00:00 AM EST	Monday	March 19, 2007	Incremental
---	Tuesday	March 20, 2007	---
3:00:00 AM EST	Wednesday	March 21, 2007	Incremental
---	Thursday	March 22, 2007	---
3:00:00 AM EST	Friday	March 23, 2007	Incremental
4:00:00 AM EST	Saturday	March 24, 2007	Full

Next Week >

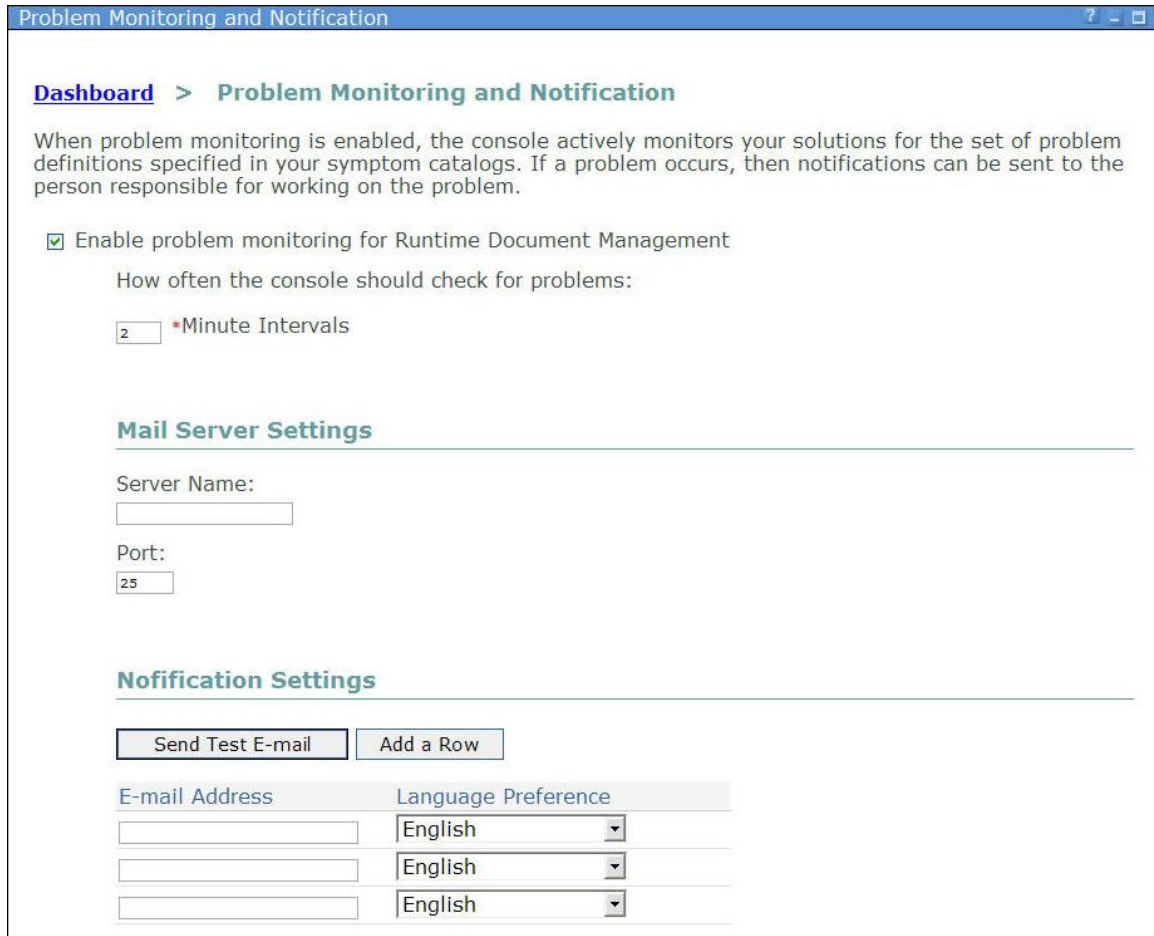
Figure 3-14 Backup summary



# IBM Express Runtime Quick Start Workshop

## Lab 3 - Express Runtime Console

23. The final step in defining the application is to activate the monitoring. Click on **Problem Monitoring and Notification**.



The screenshot shows a window titled "Problem Monitoring and Notification". At the top, there is a breadcrumb trail: "Dashboard > Problem Monitoring and Notification". Below this, a paragraph explains that when monitoring is enabled, the console actively monitors solutions for problem definitions. A checkbox labeled "Enable problem monitoring for Runtime Document Management" is checked. Underneath, it asks "How often the console should check for problems:" with a text input field containing "2" and the label "\*Minute Intervals".

The "Mail Server Settings" section includes a "Server Name:" label and an empty text input field, and a "Port:" label with a text input field containing "25".

The "Notification Settings" section features two buttons: "Send Test E-mail" and "Add a Row". Below these is a table with two columns: "E-mail Address" and "Language Preference". The table contains three rows, each with an empty text input field for the address and a dropdown menu set to "English".

Figure 3-15 Problem Monitoring and Notification

24. Click on **Enable problem monitoring for Runtime Document Management**. You could set up the console to notify via e-mail, but for this exercise we will stick to alerts on the Console. Click **OK**.
25. You will get a warning about not specify and e-mail, click **OK**.

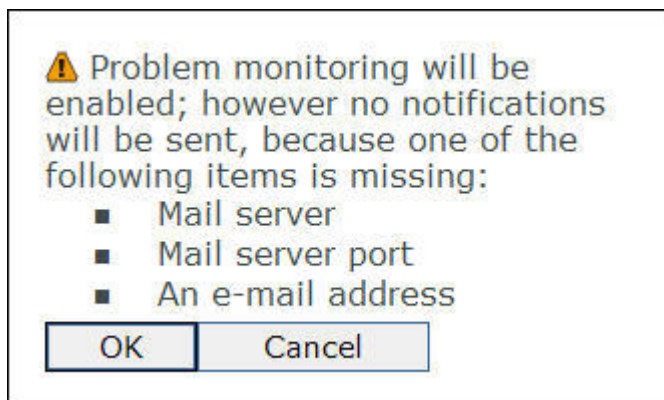


Figure 3-16 Monitoring warning

# IBM Express Runtime Quick Start Workshop

## Lab 3 - Express Runtime Console

26. The Console is now checking for problems with this application and the screen should look like this:

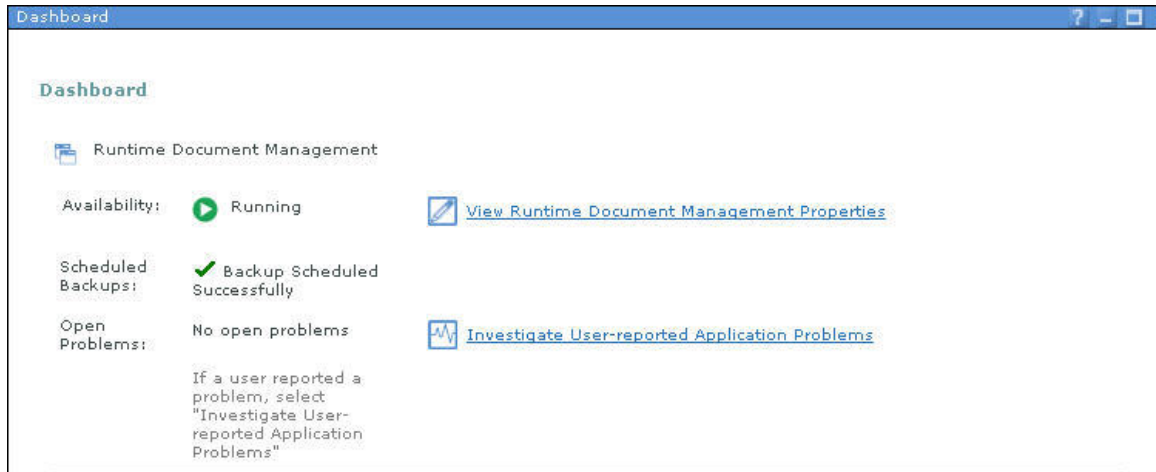


Figure 3-17 Dashboard for Runtime Document Management

27. Now that Monitoring is turned on, we will simulate a problem with one of the resources in your solution.

# IBM Express Runtime Quick Start Workshop

## Lab 3 - Express Runtime Console

### Part 2: Problem Determination

1. **Start** -> **Internet Explorer** to bring up another web browser window.
2. Enter <http://localhost:9080/RuntimeDocumentMgmt/> to start the sample application.

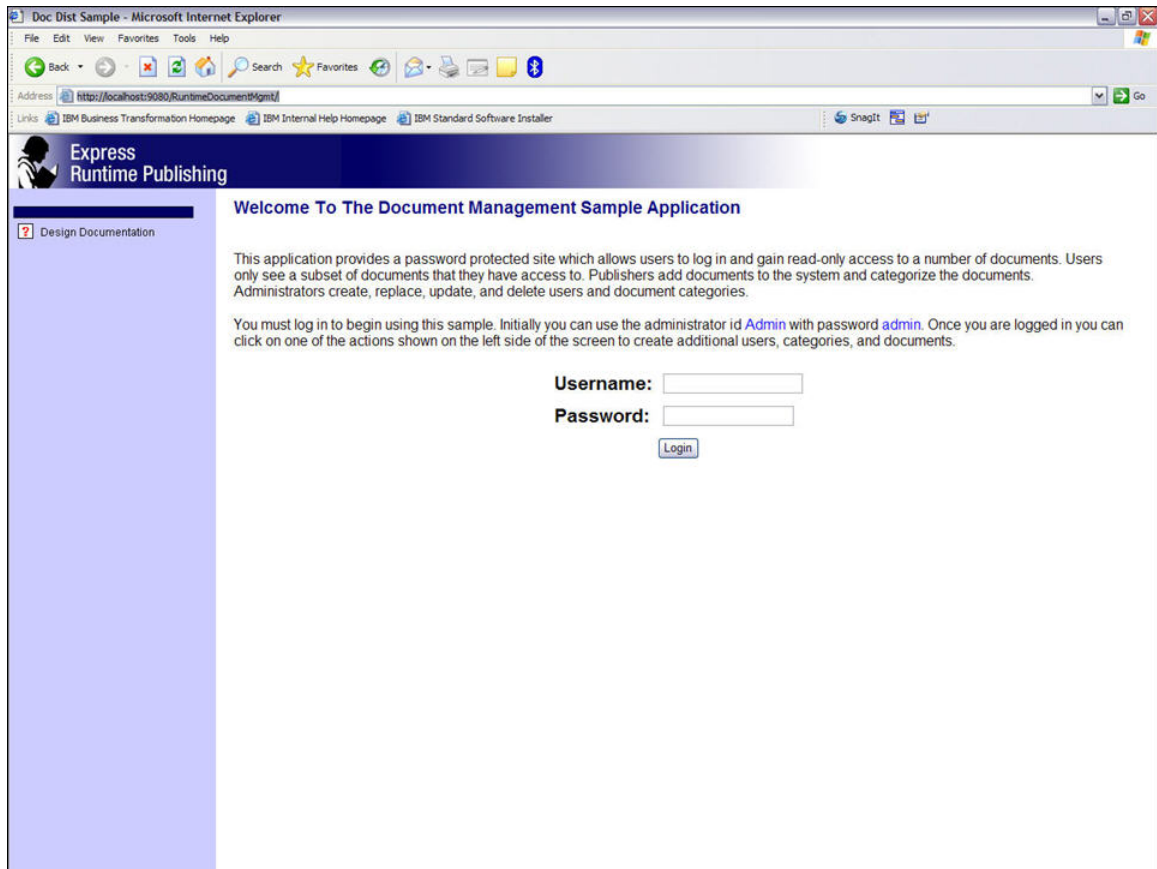


Figure 3-18 Runtime Document Management application

3. Enter **Admin** for the userid and **admin** for the password and click on **Login**.

# IBM Express Runtime Quick Start Workshop

## Lab 3 - Express Runtime Console

4. Back on the **Console Dashboard**, click on **View Runtime Document Management Properties**. You will see the status of each of the resources defined for this solution (Figure 3-19).

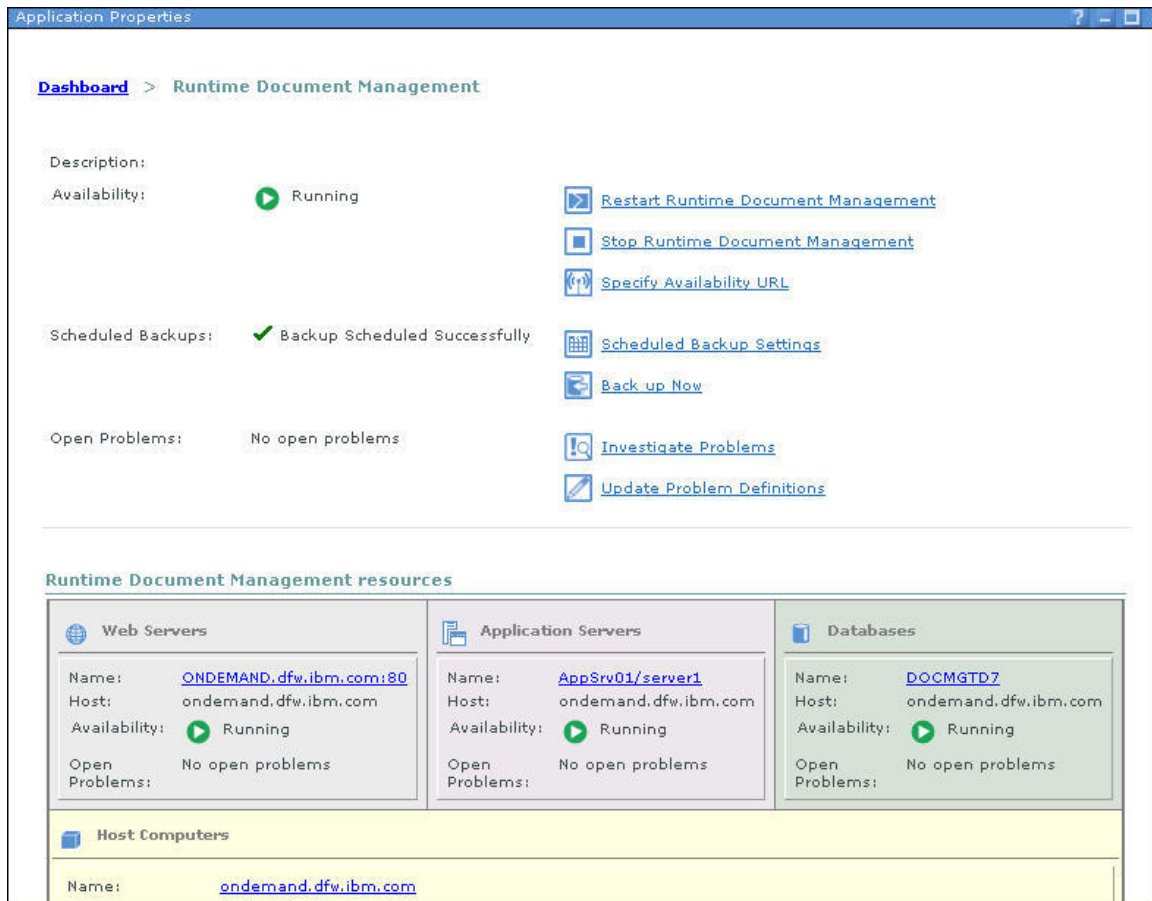


Figure 3-19 Runtime Document Management Properties

5. Click on the Database: **DOCMGTD7** to view the options for the database server.

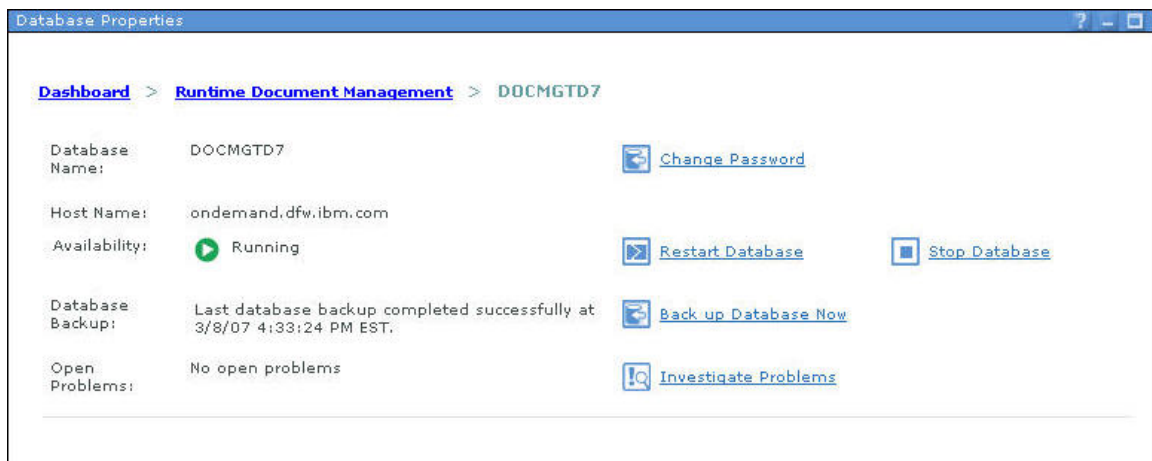


Figure 3-20 Database server options

# IBM Express Runtime Quick Start Workshop

## Lab 3 - Express Runtime Console

6. Click on **Stop Database**.
7. You will get a warning message (Figure 3-23), but select **Disconnect all users and applications** and click **OK**.



Figure 3-21 Database warning message

8. The database has been stopped and this status is reflected in the Database properties.

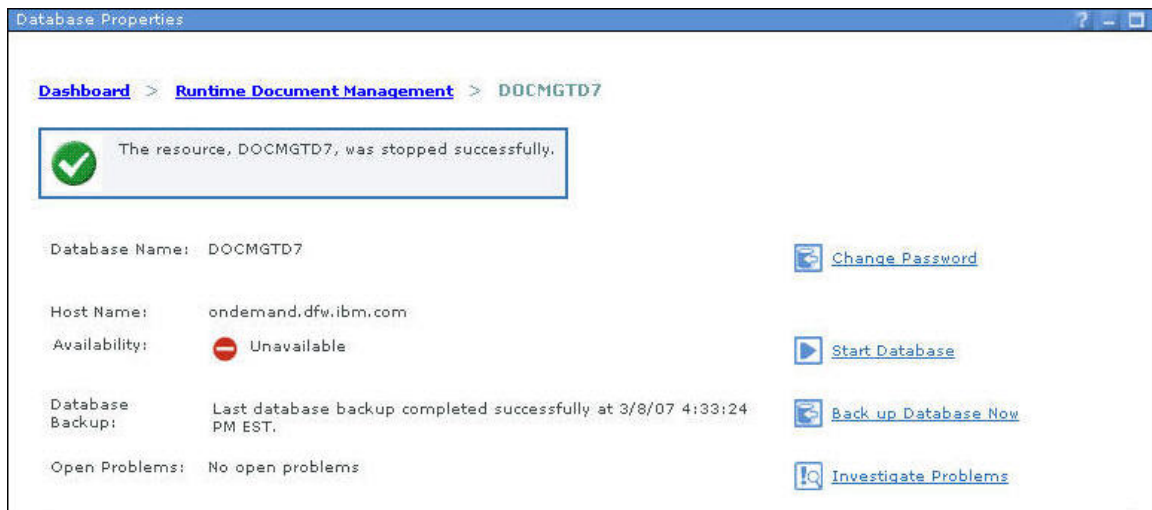


Figure 3-22 Database properties

# IBM Express Runtime Quick Start Workshop

## Lab 3 - Express Runtime Console

- Bring up the other Internet Explorer window that is running the Runtime Document Management application and click on **Administer users**. You will get an error from the application.

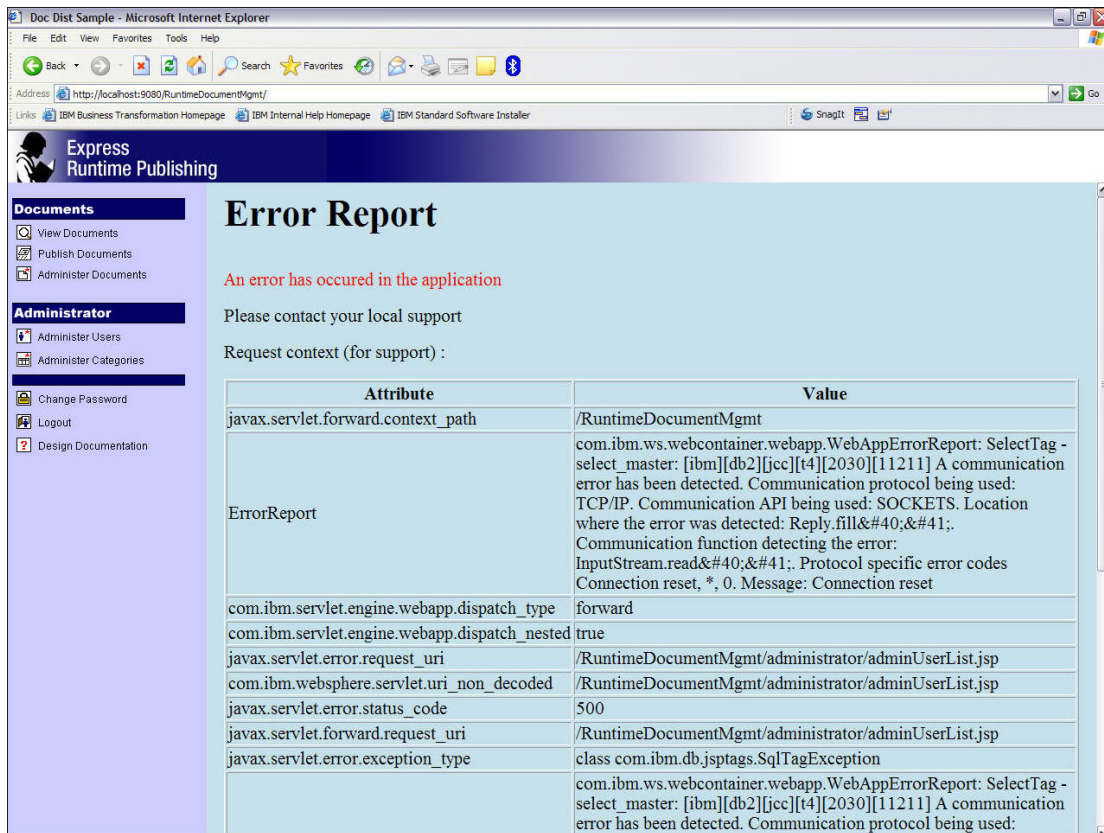


Figure 3-23 Runtime Document Management Failure

# IBM Express Runtime Quick Start Workshop

## Lab 3 - Express Runtime Console

10. Switch back to the Express Runtime Console. At the top of the panel are the navigational “bread crumbs” (*Dashboard -> Runtime Document Management -> DOCMGTD7*). Click on **Runtime Document Management** to return to the application properties panel (Figure 3-24).

The screenshot shows the 'Application Properties' window for 'Runtime Document Management'. The breadcrumb trail is 'Dashboard > Runtime Document Management'. The main section displays the following information:

- Description:** (empty)
- Availability:** Stopped (red stop icon). Action buttons: [Start Runtime Document Management](#), [Specify Availability URL](#)
- Scheduled Backups:** Backup Scheduled Successfully (green check icon). Action buttons: [Scheduled Backup Settings](#), [Back up Now](#)
- Open Problems:** 1 Alarm(s) (red X icon). Action buttons: [Investigate Problems](#), [Update Problem Definitions](#)

The 'Runtime Document Management resources' section is divided into four categories:

- Web Servers:** Name: ONDEMAND.dfw.ibm.com:80, Host: ondemand.dfw.ibm.com, Availability: Running (green play icon), Open Problems: No open problems
- Application Servers:** Name: AppSrv01/server1, Host: ondemand.dfw.ibm.com, Availability: Running (green play icon), Open Problems: 1 Alarm(s) (red X icon)
- Databases:** Name: DOCMGTD7, Host: ondemand.dfw.ibm.com, Availability: Unavailable (red stop icon), Open Problems: No open problems
- Host Computers:** Name: ondemand.dfw.ibm.com, CPU Usage: 24%, Agent Availability: Running (green play icon)

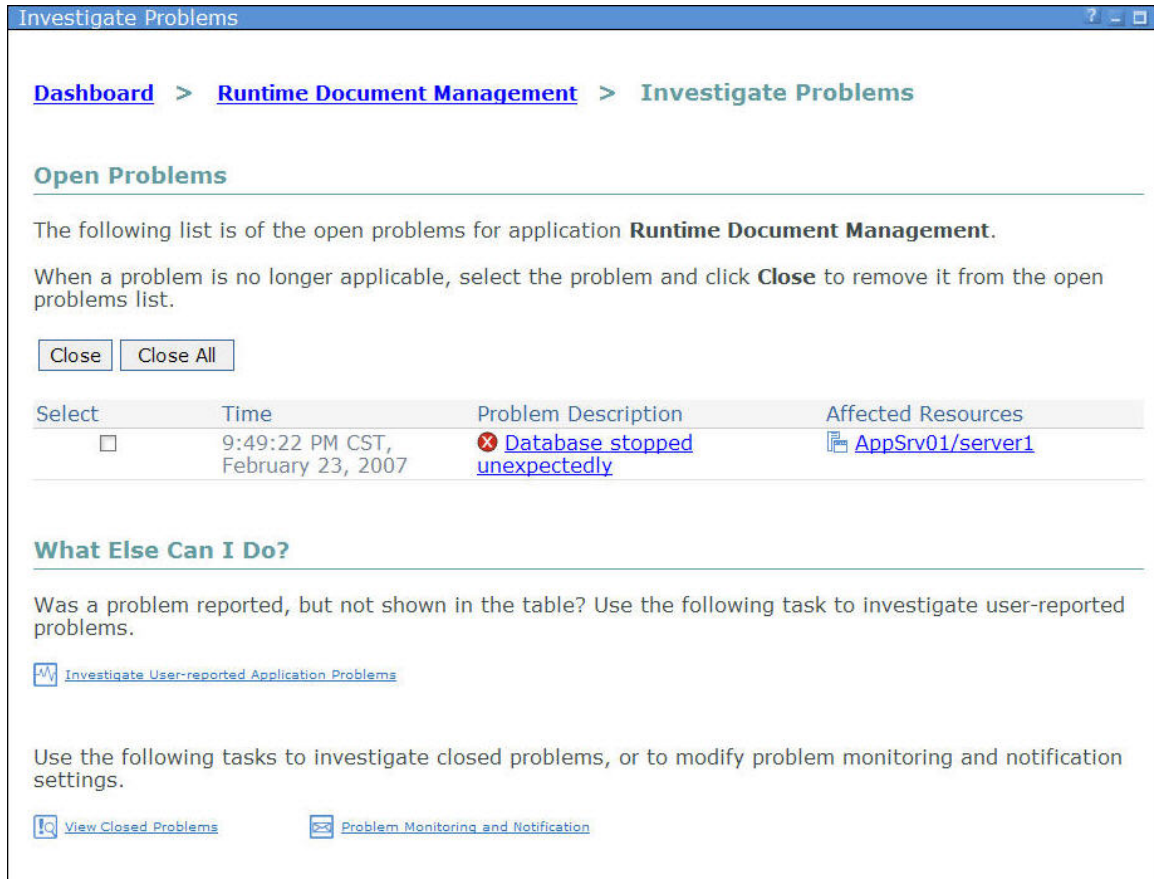
Figure 3-24 Runtime Document Management Properties

Note an alarm has been triggered and the database is unavailable.

# IBM Express Runtime Quick Start Workshop

## Lab 3 - Express Runtime Console

11. Click on **Investigate Problems**. You will be presented with a list of problems that have been identified.





The screenshot shows a web browser window titled "Investigate Problems". The breadcrumb navigation is "Dashboard > Runtime Document Management > Investigate Problems".

### Open Problems


The following list is of the open problems for application **Runtime Document Management**.

When a problem is no longer applicable, select the problem and click **Close** to remove it from the open problems list.

Select	Time	Problem Description	Affected Resources
<input type="checkbox"/>	9:49:22 PM CST, February 23, 2007	 <a href="#">Database stopped unexpectedly</a>	 <a href="#">AppSrv01/server1</a>

### What Else Can I Do?

Was a problem reported, but not shown in the table? Use the following task to investigate user-reported problems.

 [Investigate User-reported Application Problems](#)

Use the following tasks to investigate closed problems, or to modify problem monitoring and notification settings.



 [View Closed Problems](#)       [Problem Monitoring and Notification](#)

Figure 3-25 Open Problems



# IBM Express Runtime Quick Start Workshop

## Lab 3 - Express Runtime Console

- Click on **Database stopped unexpectedly** to see the details about the problem you want to resolve.

**Problem Details**

[Dashboard](#) > [Runtime Document Management](#) > [Investigate Problems](#) > [Database stopped unexpectedly](#)

### Problem Details

Description: The database stopped while the application server was accessing it.

Affected Applications: Runtime Document Management

Affected Resources: AppSrv01/server1

Time: February 23, 2007, 9:49:22 PM CST

Repeat Count: This problem has been identified 1 time(s) since 9:49:22 PM CST, February 23, 2007

### Fixing the Problem

There are recommended actions to resolve the problem. Use the following task to perform those actions.

[Help me fix this problem](#)

### What Else Can I Do?

Alternatively, you may transfer analysis of the problem to product support. Use the following task to package and send the relevant data.

[Send Problem to Product Support](#)

If the problem has been fixed, or it is not a concern, then use the following task to close the problem and remove it from the open problems list.

[Close this problem](#)

Figure 3-26 Problem Details

- This is a problem that the Console recognizes from the *Symptoms catalog*, so there are suggested actions to take to correct the problem. Click on **Help me fix this problem**. You will see a list of actions that should be taken to attempt to resolve this error.

**Help Me Fix This**

[Dashboard](#) > [Runtime Document Management](#) > [Investigate Problems](#) > [Database stopped unexpectedly](#) > [Database stopped unexpectedly](#)

The following recommended action plan provides a full set of actions that should be completed in the order presented to fix the problem.

### Recommended Actions

Action Description	Host Computers	Resources	Status
Stop the database server.	ondemand.dfw.ibm.com	DOCMGTD7	-
Start the database server.	ondemand.dfw.ibm.com	DOCMGTD7	-

Figure 3-27 Recommended Actions

# IBM Express Runtime Quick Start Workshop

## Lab 3 - Express Runtime Console

14. Click on **Perform All Actions** to try the suggested corrective action. The Console will process the recommended steps.
15. After the tasks are completed, click **Next**.
16. You will see a summary of all the actions that have been taken to resolve this problem (Figure 3-28). In this case, the corrective action was successful.



Figure 3-28 Problem Summary

17. Click **Finish**.

# IBM Express Runtime Quick Start Workshop

## Lab 3 - Express Runtime Console

- Click on the **Runtime Document Management** “breadcrumb” to refresh the status of the application and all the associated resources.

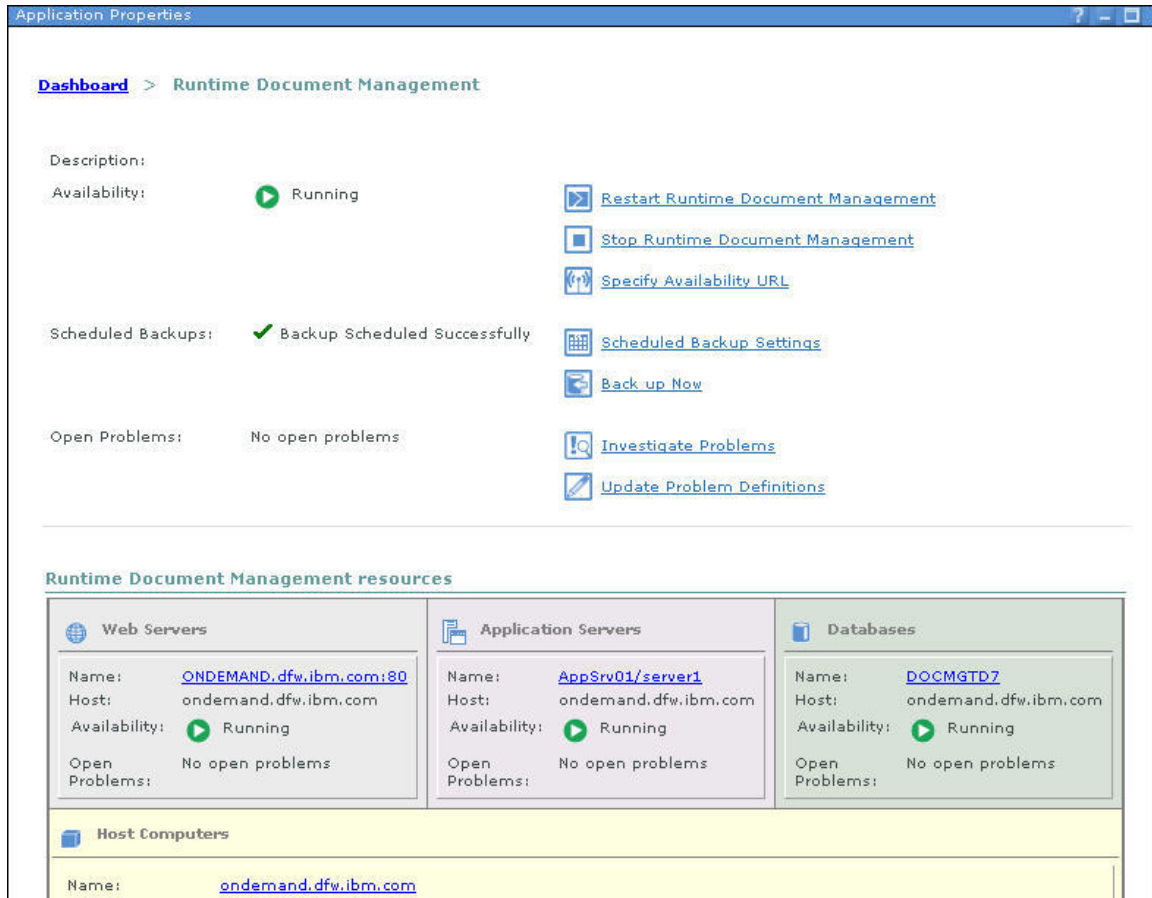


Figure 3-29 Runtime Document Management Properties

- As you can see, your application is back up and running. You can verify this by re-running the Runtime Document Management application in another Internet Explorer window.

- Click on **Logout** to close the Express Runtime Console.

**Congratulations!** You have successfully used the Express Runtime Console to discover a problem and resolve it. This could have been your customer’s environment you were monitoring across the network.