Module 7

Lab Answer Key: Optimizing and Maintaining Windows 7 Client Computers

Contents:

Lab: Optimizing and Maintaining Windows 7 Client Computers

□ Computers in this lab

Before you begin the lab, you must start the virtual machines. The virtual machines used at the start of this lab are:

- **AMA-DC1**
- **AMA-CL1**

□ Start the virtual machines

1. On the host computer, Open Oracle VM Virtualbox Manager
2. In the **Virtual Machines** pane, click the virtual machine name. In the **Actions** pane, under the virtual machine name, click **Start**.
3. To connect to the virtual machine, click the virtual machine name, and in the **Actions** pane, under the virtual machine name, click **Connect**.

Exercise 1: Monitoring System Performance

□ Task 1: Review the running processes by using Resource Monitor

1. Log on to the **AMA-CL1** virtual machine as **AMAES\Administrator** with a password of **Pa$$w0rd**.
2. Click **Start**, point to **All Programs**, click **Accessories**, click **System Tools**, and then click **Resource Monitor**.
3. If necessary, click the **Overview** tab.
4. Is any process causing high CPU utilization?
No, overall CPU utilization is low.
5. Is any process causing high disk I/O?
No, overall disk I/O is low.
6. Is any process causing high network utilization?
No, overall network utilization is low.
7. Is any process causing high memory utilization?
No, overall memory utilization is low.
8. Close Resource Monitor.

□ Task 2: Create a data collector set

1. Click **Start**, type **per**, and then click **Performance Monitor**.
2. In the left pane, expand **Data Collector Sets** and then click **User Defined**.
3. Right click **User Defined**, point to **New**, and then click **Data Collector Set**.
4. In the **Name** box, type **Bottleneck** and then click **Next**.
5. In the **Which template would you like to use?** box, click **System Performance** and then click **Finish**.

□ Task 3: Configure the data collector set schedule and stop condition

1. In the Performance Monitor window, right-click **Bottleneck** and click **Properties**.
2. Review the keywords listed on the **General** tab.
3. Click the **Schedule** tab and then click **Add**.
4. In the **Beginning date** box, verify that today's date is listed.
5. Select the **Expiration date** checkbox and then select a date one week from today.
6. In the **Launch** area, in the **Start time** box, select **1:05 pm**.
7. Verify that all days of the week are selected and then click **OK**.
8. Click the **Stop Condition** tab.
9. In the **Overall duration** box, verify that **1 minute** is selected.
10. In the **Limits** area, select the **Maximum size** checkbox, type **10** and then click **OK**.

□ Task 4: Review the data collector set counters

1. In the Performance Monitor window, right-click **Performance Counter** and then click **Properties**.
2. Review the counters listed in the **Performance counters** box.
3. Click **Cancel**.

□ Task 5: Test the data collector set

1. In the Performance Monitor window, right-click **Bottleneck** and click **Start**.
2. Wait for Bottleneck to finish running.
3. Right-click **Bottleneck** and then click **Latest Report**.
4. Review the information listed under **Performance**.
5. Is there any resource that appears to be a bottleneck at this time?
No, utilization of all resources is low.
6. Expand the **CPU** bar and then expand the **Process** bar and review the CPU utilization information.
7. Close Performance Monitor.

Exercise 2: Backing Up and Restoring Data

□ Task 1: Create a data file to be backed up

1. On **AMA-CL1**, click **Start** and then click **Documents**.
2. In the **Documents library** area, right-click an open area, point to **New**, and then click **Text Document**.
3. To rename the document, type **Important Document** and then press ENTER.
4. Double-click **Important Document** to open it.
5. Type **This is my important document** and then close Notepad.
6. Click **Save**.
7. Close the Documents window.

□ Task 2: Create a backup job for all user data

1. Click **Start**, point to **All Programs**, click **Maintenance**, and then click **Backup and Restore**.
2. Click **Set up backup**.
3. Click **Allfiles (E:)** and then click **Next**.
4. Click **Let me choose** and then click **Next**.
5. Under **Data Files**, select all checkboxes.
6. Under **Computer**, clear all checkboxes.
7. Clear the **Include a system image of drives: System Reserved, (C:)** checkbox and then click **Next**.
8. On the **Review your backup settings** page, click **Change schedule**.
9. Clear the **Run backup on a schedule** box and then click **OK**.
10. Click **Save settings and run backup**.

11. When the backup is complete, close Backup and Restore.

□ Task 3: Delete a backed up data file

1. On **AMA-CL1**, click **Start** and then click **Documents**.
2. In the **Documents library** area, right-click **Important Document** and then click **Delete**.
3. Click **Yes** to confirm and then close the Documents window.

□ Task 4: Restore the deleted data file

1. Click **Start**, point to **All Programs**, click **Maintenance**, and then click **Backup and Restore**.
2. Click **Restore my files** and then click **Search**.
3. In the **Search for** box, type **Important** and then click **Search**.
4. Select the **Important Document** checkbox and then click **OK**.
5. Click **Next**.
6. Click **Restore** to restore the file in the original location.
7. Click **Finish** and then close **Backup and Restore**.

□ Task 5: Verify that the data file is restored

1. Click **Start** and then click **Documents**.
2. Verify that **Important Document** is present.
3. Close the Documents window.

Exercise 3: Configuring System Restore Points

□ Task 1: Enable restore points for all disks except the backup disk

1. On **AMA-CL1**, click **Start**, right-click **Computer** and then click **Properties**.
2. In the System window, click **System protection**.
3. In the **Protection settings** area, click **Local Disk (C:) (System)** and then click **Configure**.
4. In the **Restore Settings** area, click **Restore system settings and previous versions of files** and then click **OK**.
5. In the **Protection settings** area, click **Allfiles (E:)** and then click **Configure**.
6. In the **Restore Settings** area, click **Restore system settings and previous versions of files** and then click **OK**.

□ Task 2: Create a restore point

1. In the System Properties window, click **Create**.
2. In the System Protection window, type **Restore Point Test** and then click **Create**.
3. When restore point creation is complete, click **Close**.
4. In the System Properties window, click **OK** and then close the System window.

□ Task 3: Edit the contents of a file

1. Click **Start** and click **Documents**.
2. Double-click **Important Document**.
3. In Notepad, delete the contents of the file and then close Notepad.
4. Click **Save** to save the modified file.

□ Task 4: Verify the previous version of a file

1. Right-click **Important Document** and then click **Restore previous versions**.
2. Review the versions available to be restored. Notice that both the backup and restore point are listed.
3. Click the previous version in the Restore point and then click **Restore**.
4. Click **Restore** to confirm.

5. In the Previous Versions window, click **OK** and then click **Cancel**.
6. Double-click **Important Document**. and then read the contents. Notice that the contents have been restored.
7. Close **Notepad** and then close the Documents window.

□ Task 5: Restore a restore point

1. Click **Start**, point to **All Programs**, click **Accessories**, click **System Tools**, and then click **System Restore**.
2. Click **Next** to begin.
3. Click **Restore Point Test** and then click **Next**.
4. Click **Finish** and then click **Yes**.
5. Wait for the computer to restart and then log on as **AMAES\Administrator** with a password of **Pa$$w0rd**.
6. In the System Restore window, click **Close**.

Exercise 4: Configuring Windows Update

□ Task 1: Verify that automatic updates are disabled

1. Click **Start** and click **Control Panel**.
2. Click **System and Security** and then click **Windows Update**.
3. Click **Change setting**s and review the available settings.
4. Click **Cancel** and then close the Windows Update window.

□ Task 2: Enable automatic updates in a group policy

1. Log on to the **AMA-DC1** virtual machine as **AMAES\Administrator** with a password of **Pa$$w0rd**.
2. Click **Start**, point to **Administrative Tools**, and then click **Group Policy Management**.
3. If necessary, expand **Forest: AMAES.com**, expand **Domains**, and then click **AMAES.com**.
4. Right-click **Default Domain Policy** and click **Edit**.
5. Under **Computer Configuration**, expand **Policies**, expand **Administrative Templates**, expand **Windows Components**, and then click **Windows Update**.
6. In the right pane, double-click **Configure Automatic Updates**.
7. In the Configure Automatic Updates window, click **Enabled**.
8. In the **Configure automatic updating** box, click **4 – Auto download and schedule the install**.
9. Click **OK** and then close the Group Policy Management Editor window.
10. Close the Group Policy Management window.

□ Task 3: Verify that the automatic updates setting from the group policy is being applied

1. On **AMA-CL1**, click **Start**, type **gpupdate /force** and then press ENTER.
2. Click **Start** and click **Control Panel**.
3. Click **System and Security** and then click **Windows Update**.
4. Click **Change settings** and review the available settings. Notice that you can no longer change the settings because they are being enforced by the group policy.
5. Click **Cancel** and then close the Windows Update window.

Note: If the policy setting does not apply, restart AMA-CL1 and then repeat Task 3.

□ Task 4: Revert Virtual Machine

When you finish the lab, you should revert each virtual machine back to its initial state. To do this, complete the following steps:

1. On the host computer, start **Hyper-V Manager**.
2. Right-click each virtual machine name in the **Virtual Machines** list, and then

click **Revert**.
3. In the **Revert Virtual Machine** dialog box, click **Revert**.