Administrative Tools

Lesson 3

Administrative Tools is a group of tools within Control Panel used by advanced users and administrators. The available tools are slightly different in different versions of Windows. For example, in Windows Vista, Component Services is not available in Administrative Tools but is still available on the computer. The following sections describe many of the common Administrative Tools.

To access Administrative Tools in any system, click Start, Control Panel, change the display to list applets individually, and select Administrative Tools.

Administrative Privileges

Many of these tools require you to have administrative privileges on the system. On Windows Vista and Windows 7, you might be challenged by User Account Control for different applets, and if you don't have administrative privileges, you won't be able to use the tool.

Computer Management

The Computer Management tool is a valuable tool within the Administrative Tools folder that includes multiple snap-ins. Figure 7-12 shows Computer Management on a Windows 7–based computer.

In Figure 7-12, you can see that the tools are organized in three sections: System Tools, Storage, and Services And Applications. The following sections describe some of the tools. Other tools are covered individually in other chapters.

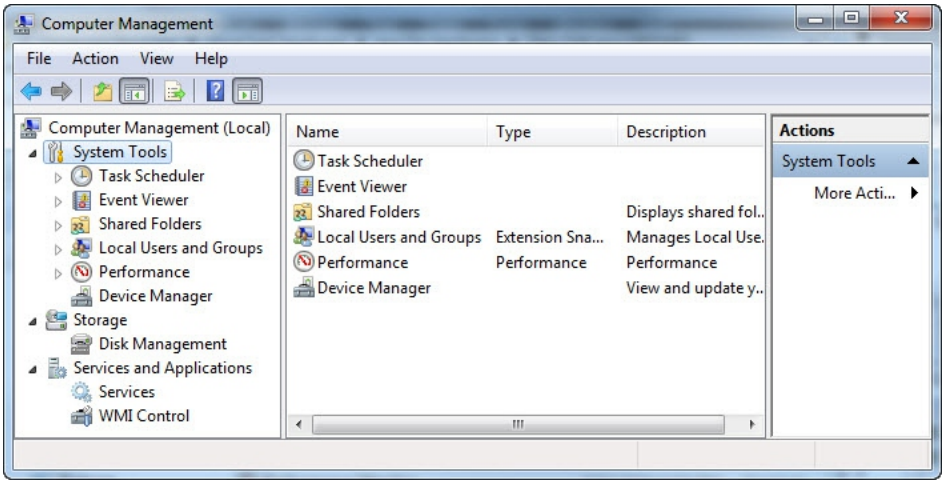


Figure 7-12 Computer Management.

Task Scheduler

You can use the Task Scheduler tool to schedule tasks to automatically run. Windows includes many preconfigured tasks.

If you open Task Scheduler, you can view existing tasks or create your own. Figure 7-13 shows the Task Scheduler opened to the Defrag task, which is preconfigured to run at 1:00 AM every Wednesday.

The four security zones are as follows:

- **Triggers.** This identifies when the task runs and is normally based on a day and time.
- **Actions.** This identifies the task that will run.
- **Conditions.** You can set conditions, such as running only when the computer is using
- AC power (not on battery power).
- **Settings.** These settings allow you to fine-tune the behavior of the task. For example,
- you can select it to run as soon as possible if a schedule start is missed.
- **History.** This shows details about when the task has run.

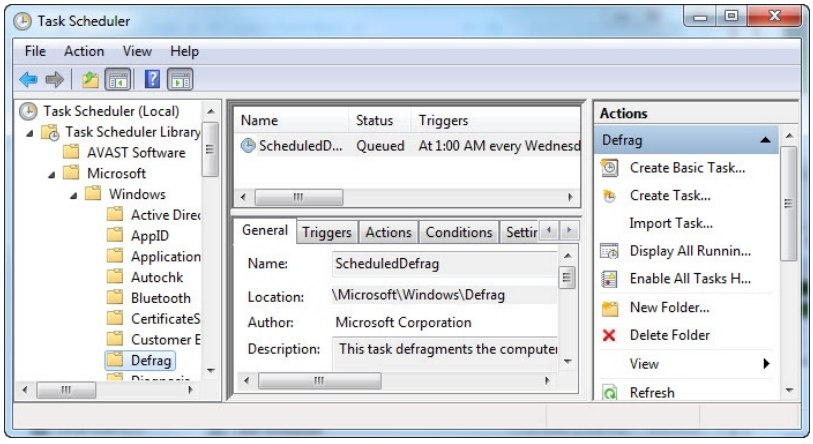


Figure 7-13 Task Scheduler.

Schedule Tasks

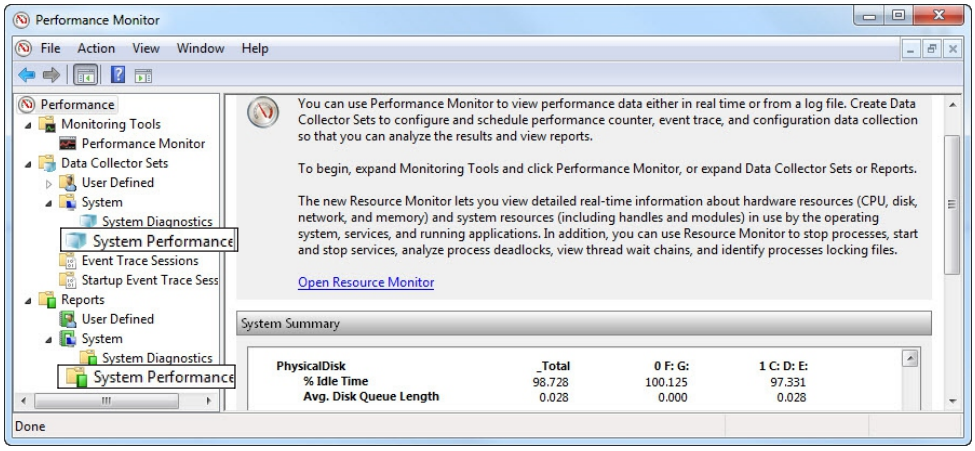
Windows XP included Scheduled Tasks within the Control Panel, but not the Task Scheduler as part of Administrative Tools. Task Scheduler is available in both Windows Vista and Windows 7 from within Administrative Tools.

Performance

Performance (also called Performance Monitor) is an extension of the Task Manager. The Task Manager gives you a snapshot of the performance of your system, but Performance provides many more details. Performance monitors four primary resources: processor, memory, disk, and network.

This tool was enhanced in Windows Vista and Windows 7 by adding Data Collector sets. You can quickly run a check on your system and view a comprehensive report by using the following steps on Windows 7.

1. Click Start and select Control Panel. If necessary, change the view to Large Icons.
2. Select Administrative Tools. Double-click Performance Monitor.
3. If necessary, double-click Data Collector Sets to expand it.
4. Double-click System.
5. Right-click System and select Start. It will run for one minute and then stop.
6. When it stops, expand Reports, System, and System Performance.
7. Select the report you just ran. Your display will resemble the following graphic.

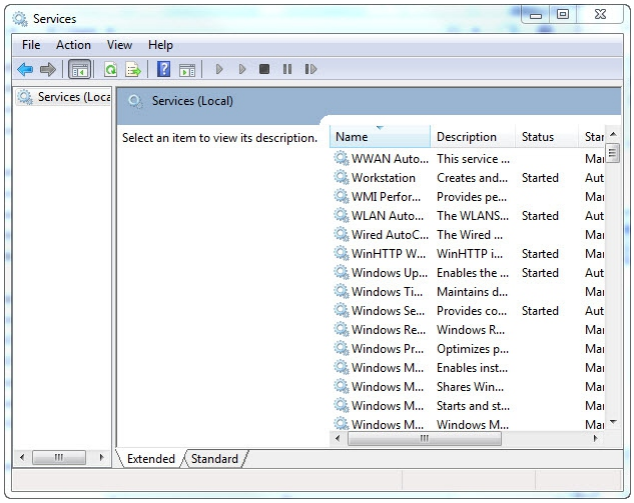


The left pane of the graphic highlights the System Performance Data Collector set and the System Performance report. The center pane shows a small portion of the report. You can scroll up and down to view more of the report, and you can click the arrows in the headers to expand or collapse different sections.

Key items to look for that can indicate problems are high CPU utilization and high memory utilization. If any items are high, you can expand the report to get more details.

Services

The Services applet is an important tool that you can use to stop, start, and configure services. As a reminder, a service starts without user intervention, and many services will start automatically when the system starts.



Chapter 10 covers printers and introduces a common reason why you might need to go into the Services applet. If the print spooler stops sending print jobs to your printer, print jobs will back up. A common solution is to restart the Print Spooler service.

Figure 7-14 shows the Services applet with the Windows Defender service selected and its property page opened. When you select any service, options appear on the left to stop, start, or restart the service, depending on its current state. Additionally, a short description appears. You can also right-click the service to manipulate it or to select Properties.

The Properties page allows you to configure how the service will start by using the following four options:

- **Automatic.** The service starts when Windows starts.
- **Automatic (Delayed Start)**. The service starts a short time after Windows has started. The delay allows Windows to start more quickly. This option is available only in Windows Vista and Windows 7.
- **Manual.** The service starts when an application sends it a start signal or when a user manually starts it.
- **Disabled.** The service cannot start.

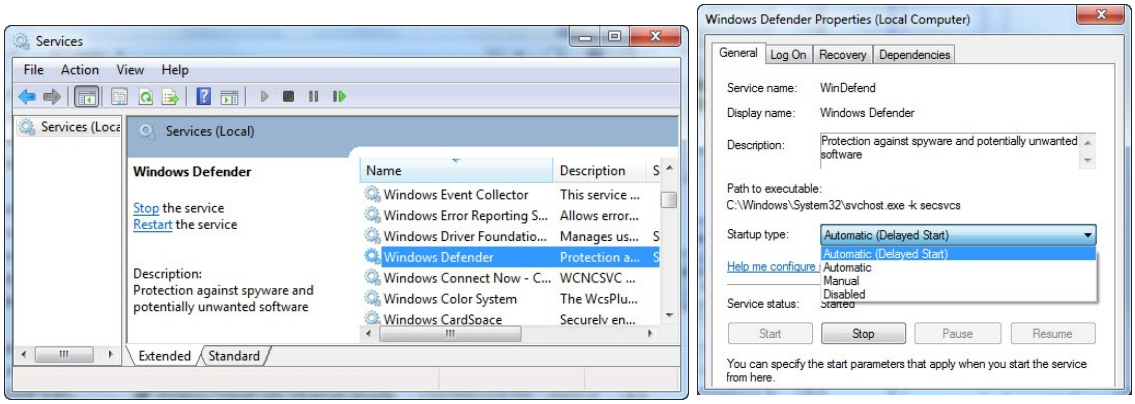
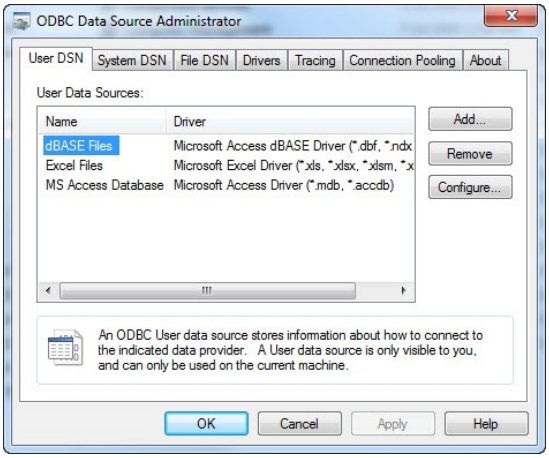


Figure 7-14 Services applet.

Some services will run only if another service is running. This is referred to as a dependency. If a service fails to start, it could be due to a problem with a dependent service. You can click the Dependencies tab to view a list of dependent services.

Data Sources



Many applications use databases to provide dynamic data to users. The application typically allows users to choose what data they want, add additional data, and modify existing data. For the application to use the data, it must connect to the database.

Most applications using a database will automatically connect to it, but occasionally you might be required to manually add the connection. You would use the Data Sources (ODBC) applet and follow the directions provided by the application developer.

Other Administrative Tools

The following Administrative Tools are covered in other chapters:

- **Local Security Policy**. This provides several settings administrators commonly use to lock down security for a computer.
- **Print Management**. Windows Vista, Windows 7, and Windows Server products include this tool, and it's used to manage multiple shared printers.
- **System Configuration**. The System Configuration tool (commonly referred to as msconfig) is a valuable tool that you can use to help identify problems that can prevent Windows from starting correctly.
- **Windows Firewall with Advanced Security**. The Windows Firewall helps protect a system from malicious traffic, and this tool provides additional capabilities to the Firewall. It's available in Windows Vista and Windows 7 but not Windows XP.
- **Windows Memory Diagnostic**. If you suspect memory problems, you can use the Windows Memory Diagnostic to test it. .