



Troubleshoot

Windows Issues

Instructor Led Training
Chapter 5 – Exercise D

Topics include:


- [Start, Stop and Restart Services](#)
- [Change the Location of the Print Spooler Folder](#)
- [Review System Performance](#)
- [Review Error Messages in the Event Viewer](#)
- [Check the Free Space on the Hard Drive](#)
- [Configure the Windows Firewall](#)
- [Set Printer Permissions](#)

Start, Stop and Restart Services

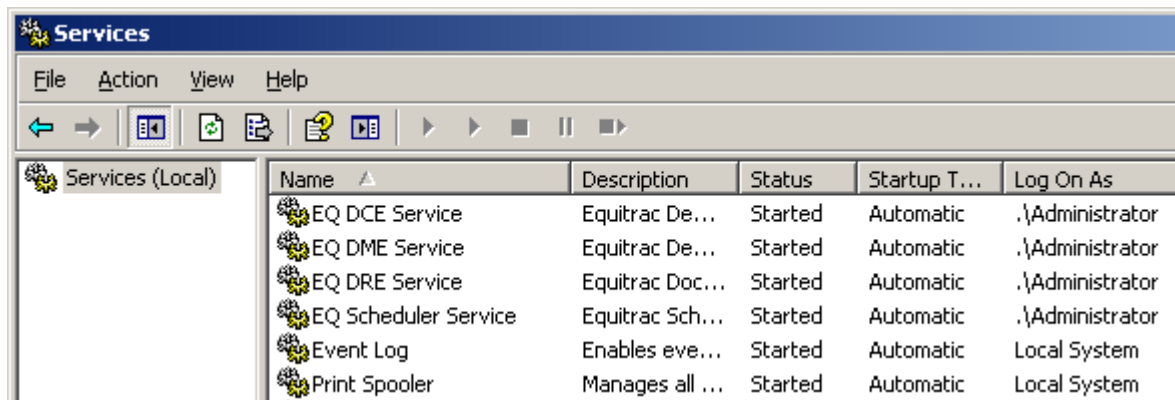
Symptoms:

1. Users are unable to print and the Print spooler folder is filling up.
2. CAS server is not tracking transactions.
3. No scheduled events are occurring.
4. Equitrac System Manager is unable to connect to CAS or the database.


Resolution:

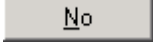
1. Click the  button and then click **Administrative Tools>Services**; the Services dialog box appears.

NOTE: Depending on the operating system and database in use, additional services than those shown below may also be required to run. Please refer to your third-party documentation to determine which services are necessary for your environment.




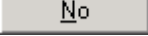
2. To manually start a service that is not running, right-click the service and click **Start**; the Service Control dialog box appears. The dialog box automatically closes when the service has successfully started.

NOTE: If there is a dependent service running, a confirmation dialog box appears listing the dependent services. Click the  button to proceed with the Start process.

However, if you click the  button, the Start process terminates. Neither the selected nor dependent services start.

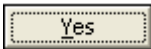
3. To manually stop a service that is running, right-click the service and click **Stop**; the Service Control dialog box appears. The dialog box automatically closes when the service has successfully stopped.

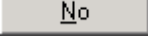
NOTE: If there is a dependent service running, a confirmation dialog box appears listing the dependent services. Click the  button to proceed with the Stop process.

However, if you click the  button, the Stop process terminates. Neither the selected nor dependent services stop.


If you choose to stop then start a service, any dependent services may not automatically start; you will need to manually start the dependent services individually.

To manually restart a service that is currently running, right-click the service and click **Restart**; the Service Control dialog box appears. The dialog box automatically closes when the service and all dependent services have successfully restarted. When restarting a running service, any dependent services **ARE** also automatically stopped and restarted; there is no need to manually restart dependent services.

NOTE: If there is a dependent service running, a confirmation dialog box appears listing the dependent services. Click the  button to proceed with the Restart process.

However, if you click the  button, the Restart process terminates. Neither the selected nor dependent services are stopped or restarted.

Exercise:

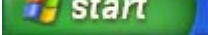
1. In the Services dialog box, restart the Print Spooler service.
2. Click the  button to close the Services window.

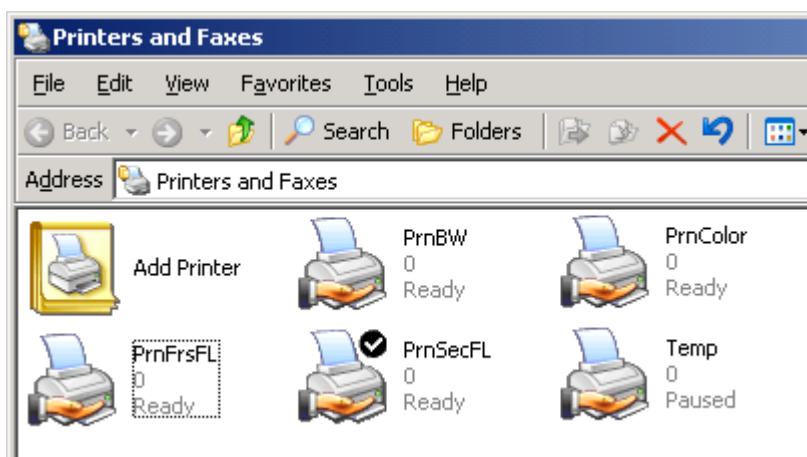
Change the Location of the Print Spooler Folder

Symptom:

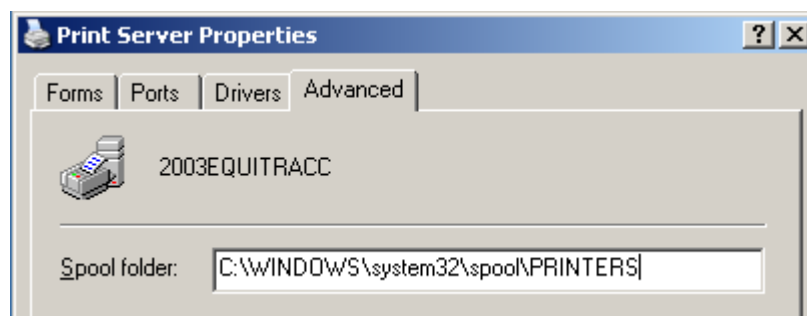
The hard drive on the print server is filling up. As your operating system partition (usually the C:\ drive) begins to fill up, your operating system begins to slow down and eventually stops responding when it becomes full.



Resolution:

1. Click the  button and then click **Printers and Faxes**; the Printers and Faxes window appears.



2. Ensure that there is no printer icon selected.
3. Click **File>Server Properties**; the Print Server Properties dialog box appears.



4. Click the **Advanced** tab.
5. In the **Spool folder** field, type the path to the new location.
6. Click the  button to save the changes.
7. Click the  button to close the Print Server Properties dialog box.

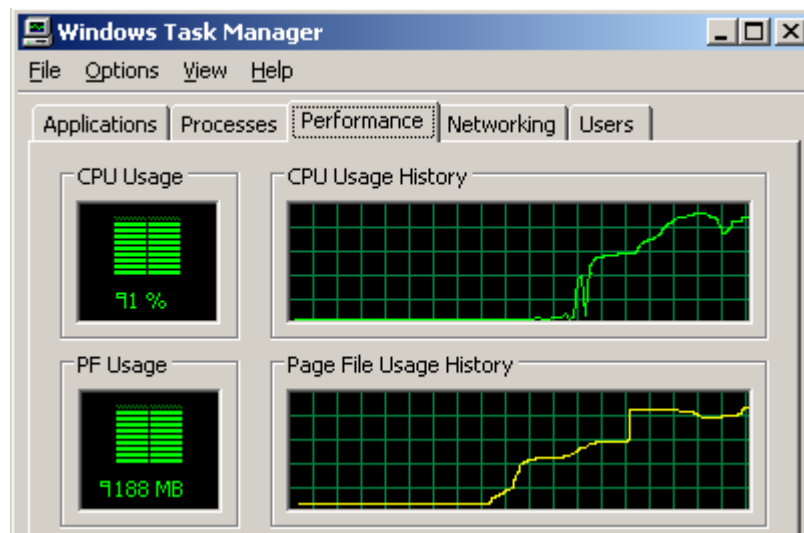
Review System Performance


Symptom:

Server appears to be running slowly.

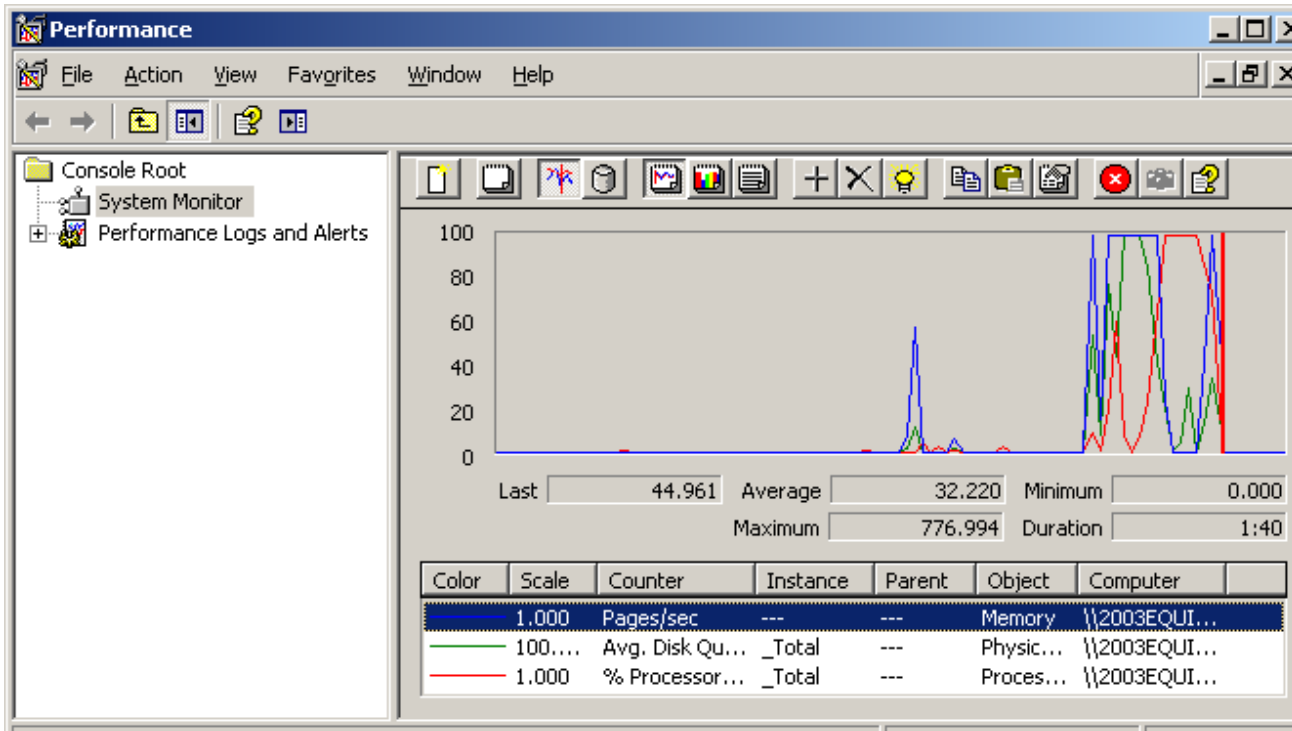
Resolution:

1. Right-click the Windows Taskbar and then click **Task Manager**.

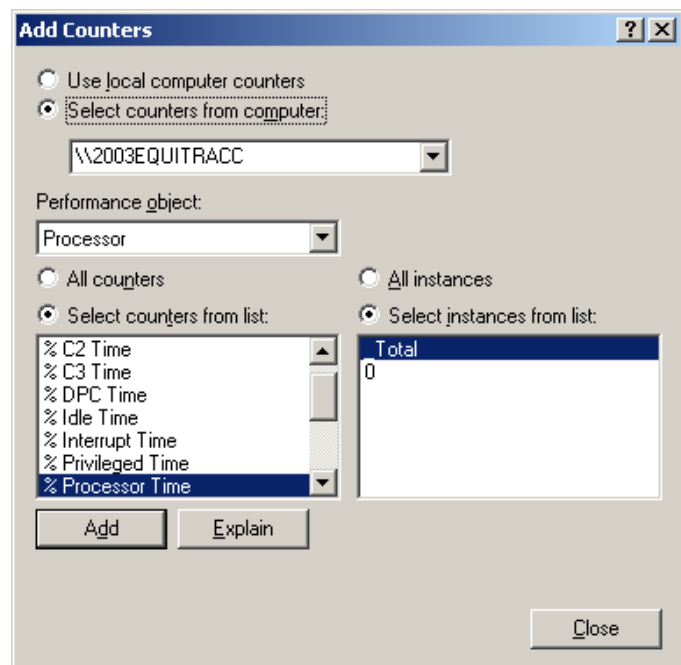


2. Review the graph in the CPU Usage History section. If the graph is majorly in the top quarter of the graph (for example, consistently above 85%), it is recommended that you reevaluate your hardware.
3. Review the graph in the Page File usage History section. If the graph is majorly in the top quarter of the graph, it is recommended that you increase the amount of RAM on the server.
4. Click the  button and then click **Administrative Tools>Performance**; the Performance window opens.

NOTE: The Performance Monitor is similar to Task Manager; however, it can be configured to monitor and graph more objects and counters. This can assist in identifying the cause of a slowness issue on the server.



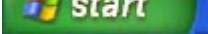
- Top modify the objects and counters, click the **+** button on the toolbar; the Add Counters dialog box appears.
- Adjust the various settings to monitor the servers, objects and counters to assist you in indentifying the cause of the slowness.
- Click the **Add** button after defining each Object and Counter combination.
- Click the **Close** button when finished; the system begins monitoring immediately.

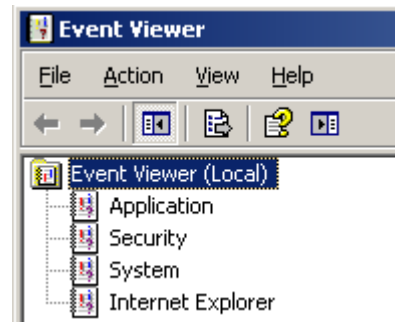


Review Error Messages in the Event Viewer**Symptom:**

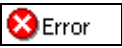
1. An error message appears on the monitor.
2. Unexpected behavior is occurring.


















Resolution:

1. Click the  button and then click **Administrative Tools>Event Viewer**; the Event Viewer window appears.

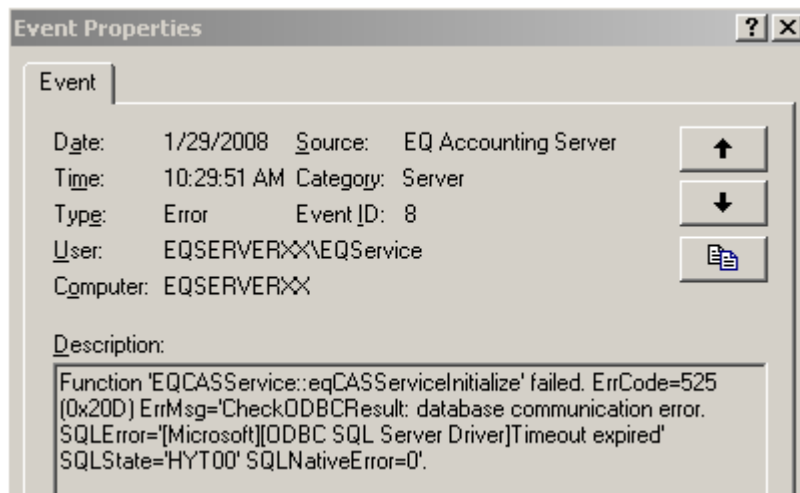


NOTE: The list of log files might vary, depending on the configuration of your server.




2. Left-click the log file in the left pane (for example, Application); the events associated with the log file appear in the right pane.
3. Review the events listed. An  in the Type column indicates a problem that needs immediate attention.

System 306 event(s)			
Type	Date	Time	Source
 Information	2/4/2008	9:56:03 AM	W32Time
 Information	2/4/2008	9:56:01 AM	LPDSVC
 Information	2/4/2008	9:55:59 AM	AeLookupSvc
 Information	2/4/2008	9:55:55 AM	DCOM
 Information	2/4/2008	9:55:55 AM	eventlog
 Information	2/4/2008	9:55:55 AM	eventlog
 Error	2/4/2008	9:55:55 AM	eventlog
 Information	1/24/2008	12:27:30 PM	Print
 Information	1/24/2008	12:27:29 PM	Print
 Information	1/24/2008	12:27:29 PM	Print
 Information	1/24/2008	12:27:28 PM	Print
 Error	1/24/2008	12:26:57 PM	Print
 Error	1/24/2008	12:26:51 PM	Print
 Error	1/24/2008	12:26:47 PM	Print
 Error	1/24/2008	12:26:47 PM	Print
 Information	1/24/2008	12:26:26 PM	Print
 Information	1/24/2008	12:26:20 PM	Print

4. To display the details of an event, double-click the event in the right pane; the Event Properties dialog box opens.



NOTE: By default, the most recent events are listed at the top of the list. However, a single issue might result in multiple events being recorded. It is recommended that you review items within the suspected time frame in which the issue occurred, oldest to most recent.

5. The  button in the Event Properties window allows you to view the event listed immediately above (which happened after the open event); the  button allows you to view the events below (which happened before the open event).
6. The  button allows you to copy the information in the dialog box to the clipboard. This information can then be pasted into another application, such as an email message.
7. For clarification on the significance, impact, or resolution of the error message, refer to the vendor's website or use www.Google.com to search for information on the specific error message.

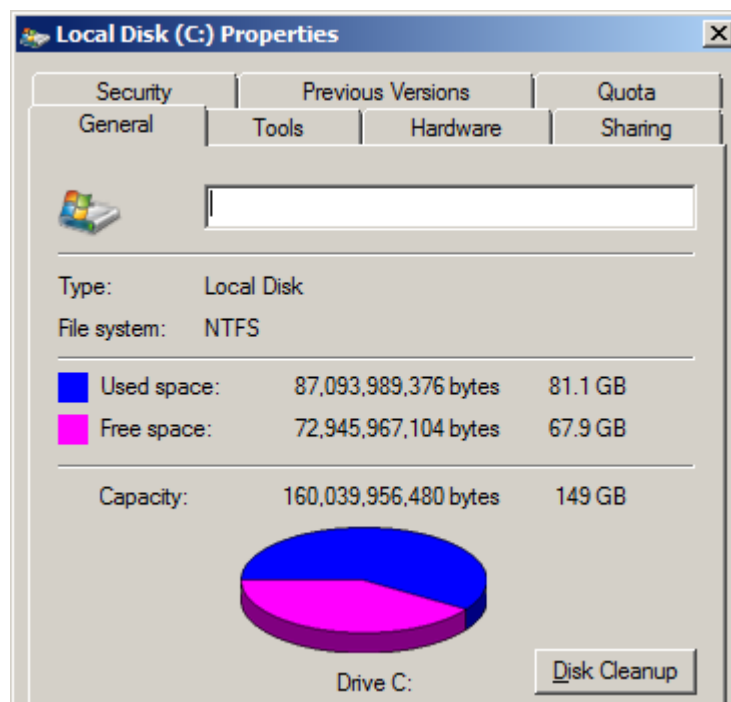
Check the Free Space on the Hard Drive



Symptom:

Error message appears indicating that the Print spooler or database is running low on disk space.

Resolution:

1. Double-click the **My Computer** icon, right-click the hard drive in question, and then left-click **Properties**.
2. Note the free space available (pink).




3. Click the  button to close the Properties dialog box.
4. Click the  button to close the **My Computer** window.

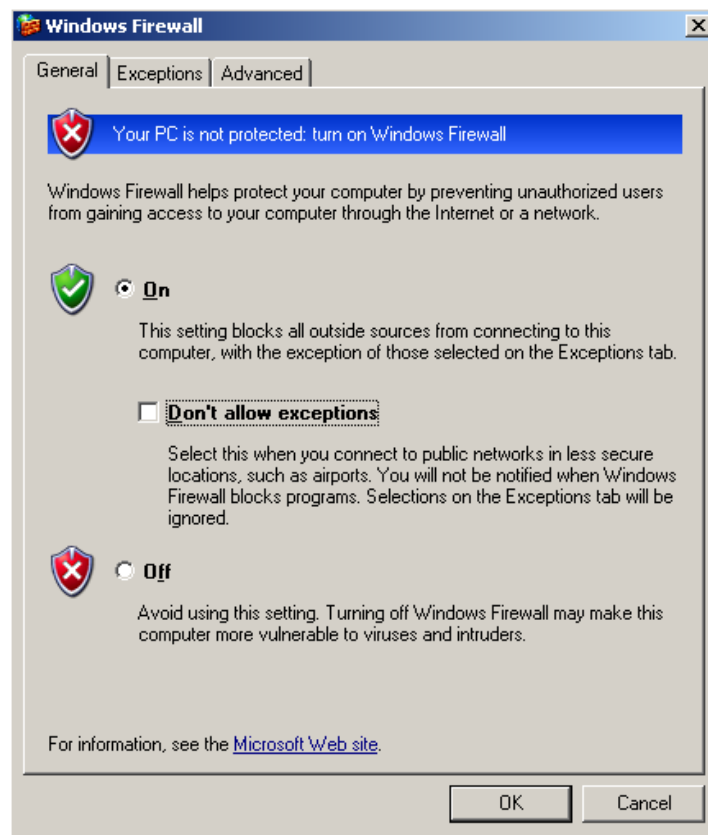
Configure the Windows Firewall

Symptom:

Network communication is failing between servers and/or devices.

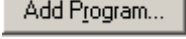
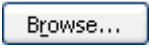
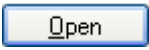

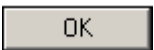
Resolution:

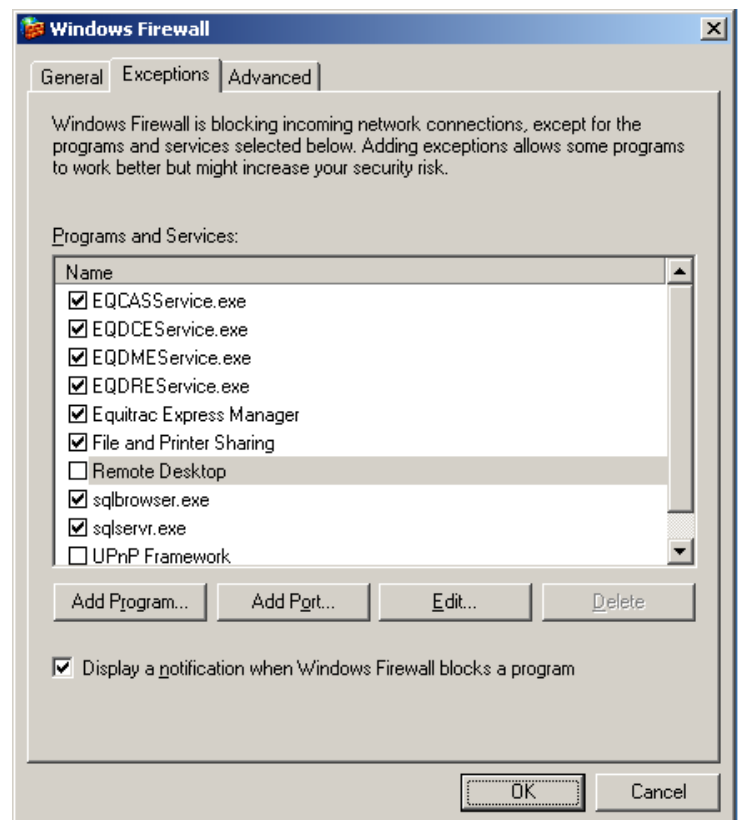
1. Click the  button and then click **Control Panel>Windows firewall**; the Windows Firewall dialog box appears.



2. If the **On** radio button is selected, ensure that the **Don't allow exceptions** check box is **NOT** selected.
3. Click the **Exceptions** tab.

When you add a program to the exceptions list, Windows Firewall dynamically opens (unblocks) and closes (blocks) the ports required by the program. When a program is running and listening for incoming traffic, Windows Firewall opens the required ports; when the program is not running or listening for incoming traffic, Windows Firewall closes the ports. As a result of this dynamic behavior, adding programs to the exceptions list is the recommended method for allowing unsolicited incoming traffic through the Windows Firewall. In some instances, if you cannot add a program or system service to the exceptions list, you must determine which specific port or ports the program or system service uses and then add the port or ports to the Windows Firewall exceptions list.

4. Click the  button, to add the required programs or services to the Exceptions rule.
5. Click the  button to locate each of the following Equitrac and SQL service programs:
 - C:\Program Files\Equitrac\Express\Accounting Service\EQCASService.exe
 - C:\Program Files\Equitrac\Express\Device Control Engine\EQDCEService.exe
 - C:\Program Files\Equitrac\Express\Device Monitoring Engine\EQDMEService.exe
 - C:\Program Files\Equitrac\Express\Document Routing Engine\EQDRESservice.exe
 - C:\Program Files\Microsoft SQL Server\90\Shared\sqlwriter.exe
 - C:\Program Files\Microsoft SQL Server\MSSQL.1\MSSQL\Binn\sqlservr.exe
 - Or add the exception by port numbers (1234, 1433, 2910, 2938, 2939, 2941, 2942, respectively)
6. Click the  button, to select the program.
7. Click  to add the program to the list.
8. Add each program listed above separately.
9. Click the  button when finished.



Set Printer Permissions


Symptom:

Users receive an error message indicating that they are denied access to print to the specified printer, or they are unable to delete there print jobs.

Permissions Overview

- **Print** - By default, each user can print, cancel, pause, or restart documents or files that they send to a printer.
- **Manage documents** - If you have this permission, you can manage all jobs for a printer that are waiting in the print queue, including documents or files that are being printed by other users.
- **Manage printers** - This permission allows you to rename, delete, share, and choose preferences for the printer. It also allows you to choose printer permissions for other users and to manage all jobs for the printer. Members of the administrator group for a computer have permission to manage printers by default.

Resolution:

1. Click the  button and then click **Printers and Faxes**.
2. Right-click the printer to which the user is denied access, and then clicks **Properties**.
3. Click the **Security** Tab.
 - The Administrators group should have the following rights:
 - Allow – Print
 - Allow - Manage Printers
 - Allow - Manage Documents
 - The CREATOR OWNER group should have the following rights:
 - Allow - Manage Documents
 - Add the group of user who needs access to print to the selected printer and grant the following rights:
 - Allow – Print