Chapter 6

Troubleshooting AppMetrics

This chapter explains some of the common errors you may encounter when installing and using AppMetrics for Transactions. It also describes ways to correct errors.

Frequently Asked Questions

What do I do when I receive the following message: "Failed to start AppMetrics Server Agent"?

The User Name or Password for the run-as account entered during the install may be incorrect. You can re-enter this information for the AppMetrics service using the Services administration component in Windows. In the Services component, find AppMetrics in the list. Right-click AppMetrics, then select Properties. Click the Log On tab. Re-enter the account information and then click OK. Finally, start the service.

What do I do about password changes for the SQL Server accounts, service account, or remote-access account?

AppMetrics requires a SQL Server account. It also requires a run-as service account on Windows or a remote-access account on Windows NT. AppMetrics obtains this account information from you during the install, and it stores the account information internally. When a password for any of these accounts is changed outside of AppMetrics, errors will occur during certain procedures, including some of the following:

- Creating Monitors

- Uploading Data to the Database

- Running Reports

To reset the passwords within AppMetrics:

- On Windows, in the Add/Remove Programs, run the AppMetrics install with the "Repair" option. This enables you to specify the accounts and their new passwords. Or if you are only updating the password for the service account, you can use the steps to re-enter the service account information provided in the answer to the previous question.

What do I do if I receive "Access Denied" errors between Manager and Agent machines?

These problems can be caused by accounts that have the following:

- No proper rights to access AppMetrics

- Insufficient privileges and rights restrictions against accessing the network and logging into the other machine

- A firewall exists between the two machines

Verify that the accounts are free from these restrictions. Also make sure that your login account, the service account (Windows), or the remote access account (Windows NT) are members of the AppMetrics Administrators local group on both the Manager and Agent machines.

You can also diagnose other types of logon problems using audit logging. In the Local Security Settings on both machines, enable both the Success and Failure settings in the policy named "Audit logon events". Retry the operation that caused the "Access Denied" error. Then check the security log. Verify that the accounts are not having network problems or restrictions against accessing the targeted machines.

AppMetrics uses the DCOM (distributed COM) protocol to communicate. Testing and configuring DCOM to work across a firewall requires the following:

- Basic IP connectivity. Test this by ensuring that you can PING the Manager from the Agent, and the Agent from the Manager.

- DNS/Netbios connectivity (needed when entering a 'pretty name' in the Manager configuration). Test this by PINGing the Manager with its computer name from the Agent, and PINGing the Agent with its computer name from the Manager.

- DCOM port configuration. DCOM uses TCP port 135. Test that DCOM is using TCP as its default protocol by launching DCOMCNFG from the Windows command line, navigating to the Default Protocols tab, and selecting TCP as the highest order default protocol.

- DCOM can be restricted to a user-specified subset of ports for its machine-to-machine communication. This minimizes the number of ports that need to be opened on the firewall. See Microsoft's White Paper Using Distributed COM with Firewalls

- In addition to the Service Control Manager (SCM) port 135, AppMetrics uses two dynamic DCOM ports per monitor, and two dynamic DCOM ports for the console. Therefore, you need to reserve at minimum four dynamic DCOM ports in order to run one monitor, and a set of two more for each additional monitor.

What should I do if I receive a File Error prompt during a Modify or Upgrade/Repair install?
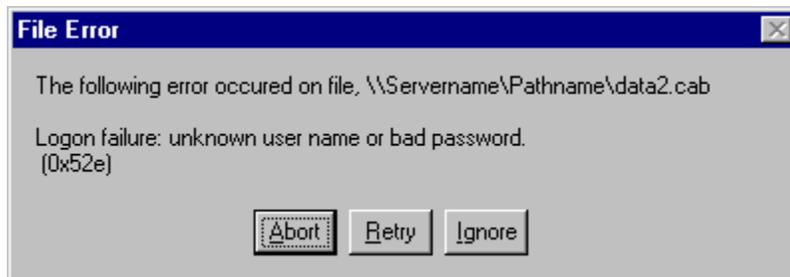
If the error is the result of a logon failure, then the install process is trying to access its files on a directory that requires specific privileges, and the currently logged on user does not have these privileges. For example, if the install files are on a network drive, and the currently logged on account is only a local account (not a domain account), then this account has insufficient privileges to access the files on the network drive. This results in the install error.

To recover from this error:

1. In the File Error prompt, click the Abort button, and then cancel out of the install process.

2. Log off from the current user session.

3. Log on with an account that has the required privileges for the directory where the install files reside.

4. Restart the Modify or Upgrade/Repair install.

What do I do if MMC hangs when it is open?

Make sure that the service is running. You can do this via the Services function in the Control Panel.

What do I do when monitors become inaccessible?

A possible cause is that the connection to the server has been lost. To reconnect to the server, right-click the mouse on the AppMetrics Console node. Select **Refresh** from the pop-up menu. If the server is available, the connection should be established and the monitors should become available again. Note that when the connection is re-established, all monitors are in the Stopped state.

How do I make a change in the controls in the right pane?

Always stop the monitor first, then change the values, apply the changes and re-start the monitor.

How do I capture data to update benchmark values, they don't seem to update as the monitor is running?

The values displayed on the Benchmark and Thresholds tabs do not update until the monitor is stopped. The values at a given interval are displayed at the monitor node level. When the values reach the values you want to capture for a benchmark, stop the monitor, go to the Benchmark & Thresholds node and the values may then be updated. You may then re-start the monitor.

How do I rename the monitor?

Monitors may not be renamed at this time. Monitors may be deleted and new monitors created.

How do I find the log file(s) created by the monitor?

If you have chosen the default directories for the data, the log files are in the ProgramFiles/Xtremesoft/AppMetircs/Data directory. Subdirectories are created for each monitor.

Why are the values zero when I try to update the Benchmarks?

- The package/application has stopped running prior to stopping the monitor.

- Once the package/application has stopped running the values return to zero and they are the last values available for that package. To update the benchmark values, always stop the monitor while the package is still active

When the package has stopped, why is the monitor still showing it as "Active"?

There is a delay time when the MTS package is still active even after it appears the package has stopped. This can also be seen in the Task Manager, processes will still be listed for a short time after the process appears to have stopped.

Why do I receive no notifications, even after I have configured the items in the Notification panel?

The Current Benchmarks value may be set to zero for all the metrics in the components and transactions. This prevents notifications from occurring. For the components or transactions for which you want to receive notifications, set the Current Benchmark value for the specific metric (such as Number Aborted, Number Started, and/or Duration) to an integer larger than zero.

What can I do about a report that is missing data for a particular time segment?

The data may have failed to upload from the log files to the database, which is the source for reports. See the section named "Recovering Data After a Database Upload Failure" in Chapter 3.

What are dump files?

AppMetrics for Transactions creates a full memory process dump when it gets an exception or when it gets into certain problem situations. The creation of dump files is rare, but if you see one of the following messages in the event log, you should call Xtremesoft Technical Support:

- `%1 caught at File %2 Line %3 (%4) for exception %5`

- `%1 caught at File %2 Line %3 (%4) for an Access Violation attempting %5 access to address %6`

- `AppMetrics created process dump %1 for process %2. Please contact AppMetrics support.`

Before you call Technical Support, make sure you have easy access to the following:

- The dump file that AppMetrics created. The name of this file is substituted for %1 in the event log messages above.

- If you get either of the first two messages listed above, the dump file is a text file with information about an exception, process, and processor. The file may reference a process dump; if the file contains the following line:

  `Process Dump created in %s`

  Locate the process dump specified by %s.

- The ServerSvc.log file, located in the Xtremesoft\data directory.

- The Errors.log file for the monitor that created the dump file, located in the subdirectory under Xtremesoft\data with the name of the monitor.

- Any information about system behavior when the dump file was created. For example, you might have been having network difficulties or you might have been stopping the system.

Additionally, it might be helpful to have access to the following information:

- The serverSvc.log and errors.log for the associated agent or manager.

- The application and system event logs for both the manager and agent.

By default, AppMetrics for Transactions creates a full memory process dump because this type of file helps Technical Support best diagnose your problem. However, a full memory process dump is a large file. You might not always want to create such a large dump file, for example, you might not want to use so much disk space or you're unable to transmit a large file to Xtremesoft.

1. To produce a smaller dump file or to disable the production of a dump file all together:

2. Open Regedit and go to HKEY_LOCAL_MACHINE\SOFTWARE\Xtremesoft\AXSServer.

3. Under this node, create a DWORD value named ProcessDumpLevel.

4. Set the value to one of the following:

   - To create a smaller dump file instead of a full dump, set this to 2.

   - To produce a full dump, set it to 3, or delete the value node.

   - To produce no dump, set it to 1.