Tech Note 1018
Troubleshooting Crashes with Embedded Historian Client Trend

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Introduction

Wonderware Historian Client user can embed the Historian Client (or HistClient) Trend in an InTouch application using either the ActiveX or the .NET Control. However, there can be issues such as software component version conflict that can cause the trend to crash when the screen containing the trend object is opened.

Microsoft Debug Diagnostic (**DebugDiag**) is a tool designed for troubleshooting issues such as hang, crash, slow performance, memory leak, etc. in software.

This *Tech Note* shows you how to generate a dump file containing information about the crash. You should then be able to use the tool to open the dump file to see what might have caused the problem to the HistClient Trend.

Application Version

- Microsoft DebugDiag v. 1.2

- Wonderware Historian Client 10 and later

Procedure

1. **Download the Microsoft DebugDiag utility** and install it.

   Be sure to download the correct edition of the DebugDiag for your Operating System. If it is a 64- bit O/S, you need to download the corresponding 64-bit version.

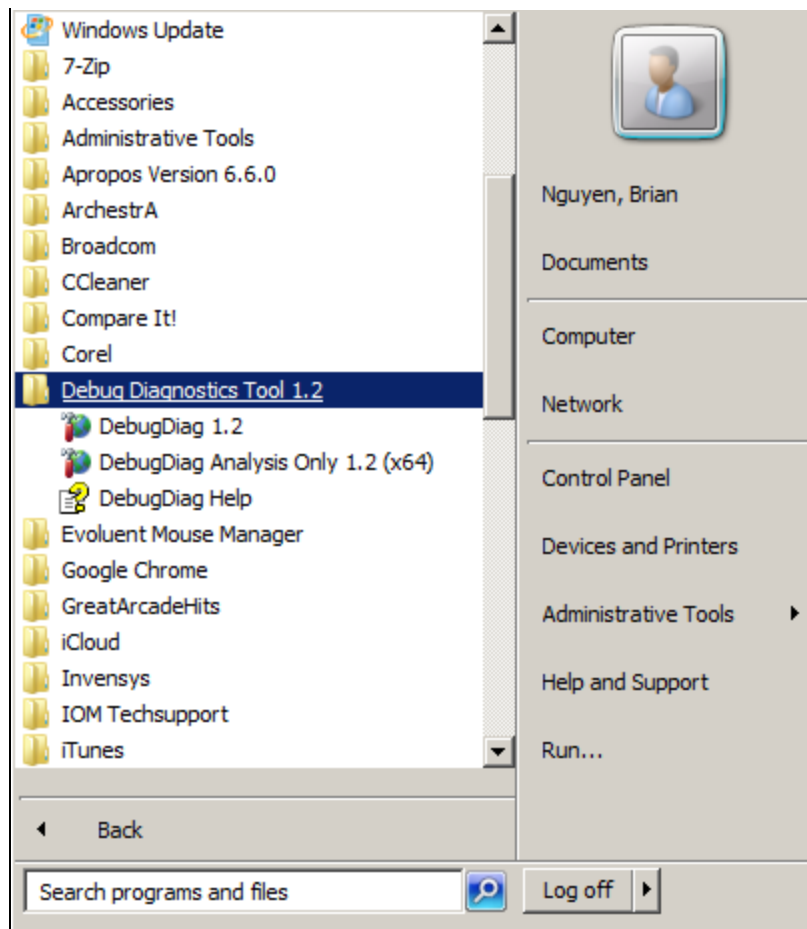2. After the install, you should see the following items in the Start Menu:

FIGURE 1: START MENU FOR DEBUG DIAGNOSTICS TOOL

3. Click **DebugDiag 1.2** to start the tool.

4. Click the **Add Rule** button add a new rule.

   For this example, we select **Crash** and click **Next** to proceed (Figure 2 below).
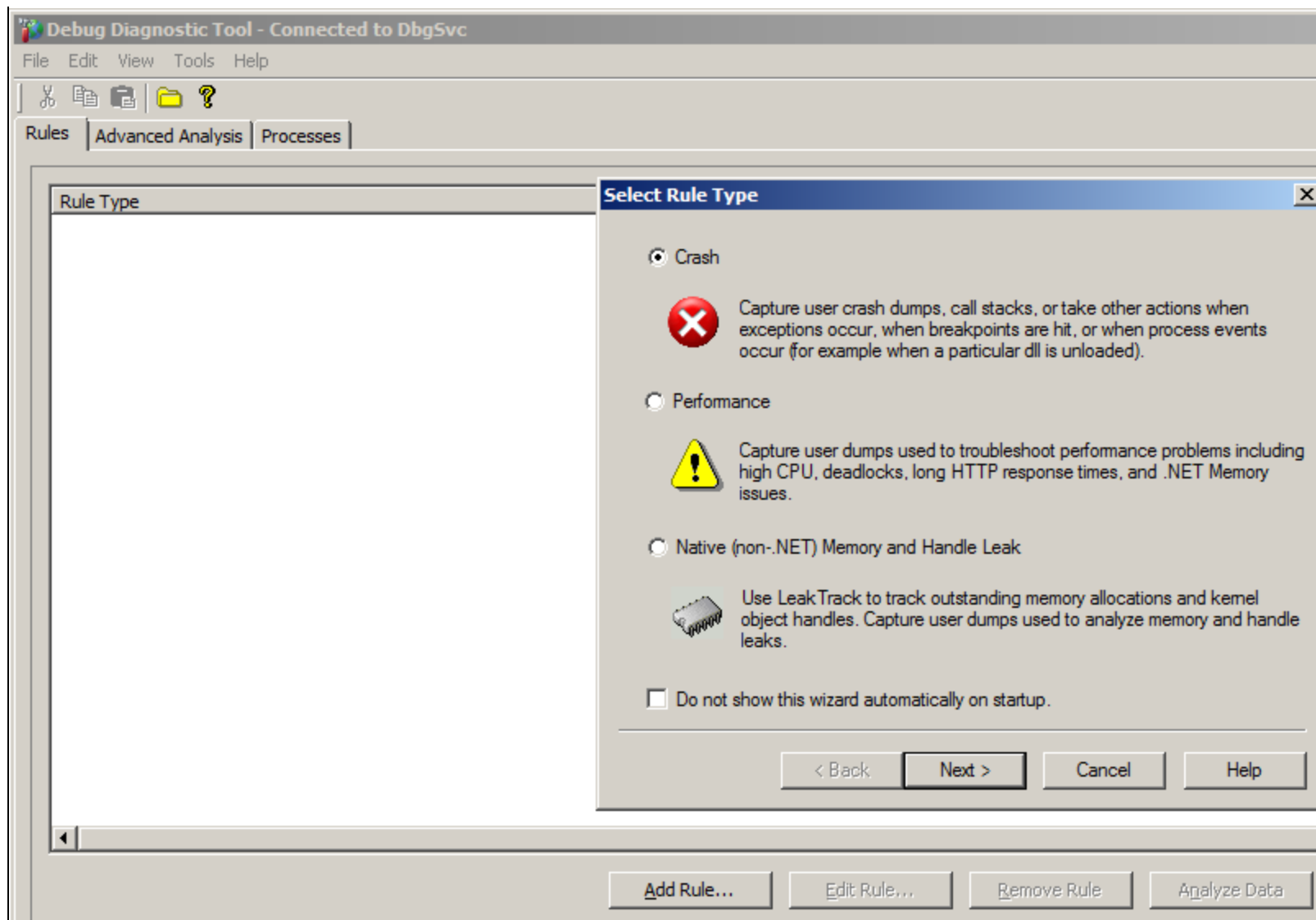
FIGURE 2: SELECT RULE TYPE

5. On the **Select Target Type** dialog box, select a specific process and click Next (Figure 3 below).
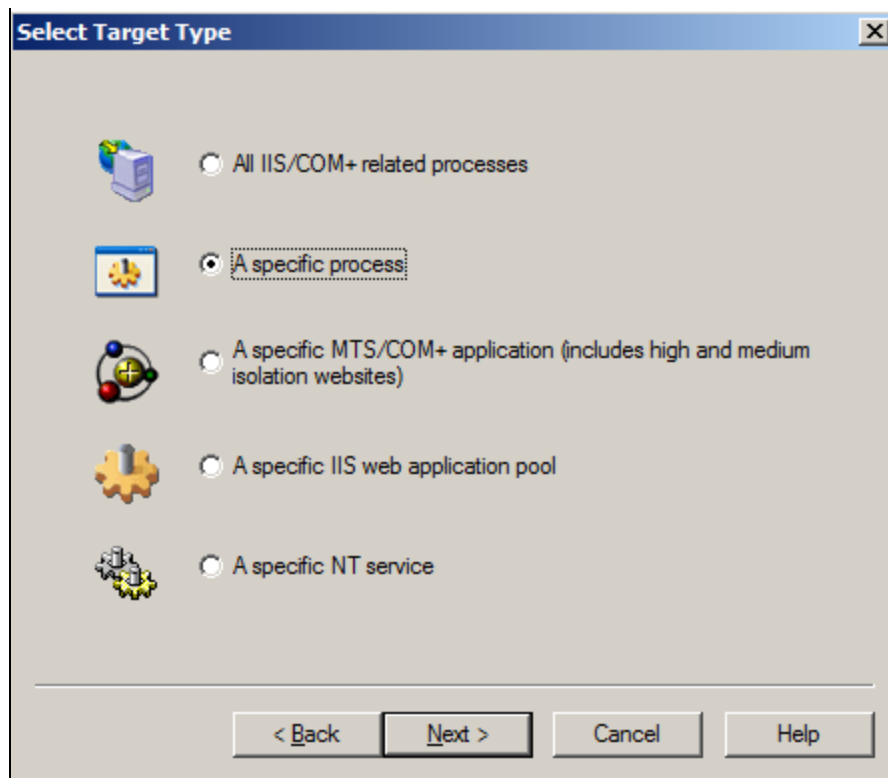
FIGURE 3: SELECT TARGET TYPE

6. Select or Enter aaTrend.exe, which is an executable for Historian Client Trend application, in the Selected Process field. Click Next.
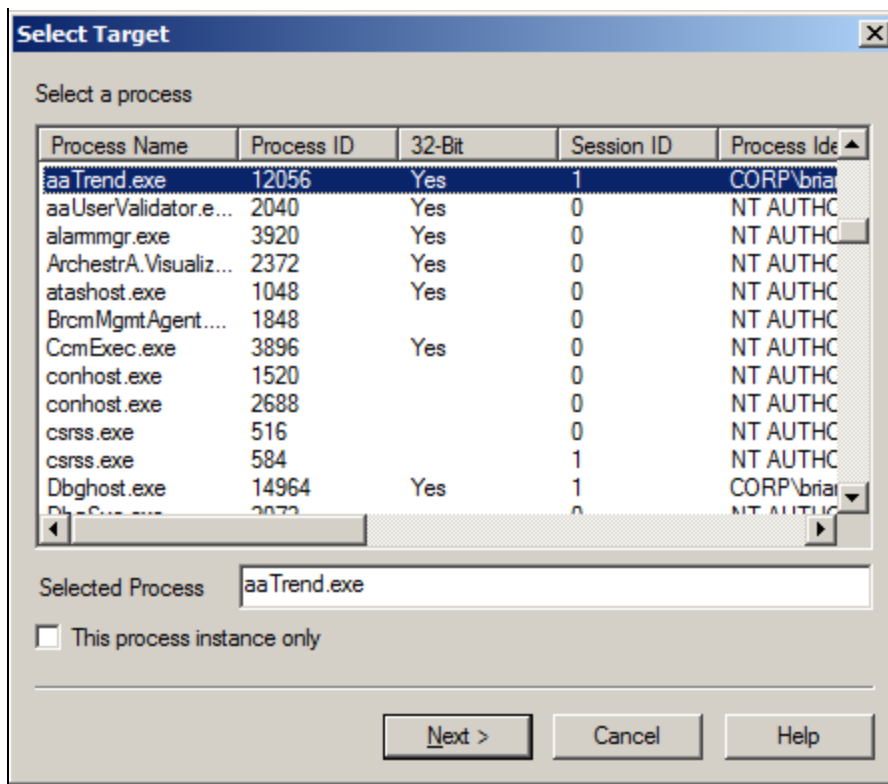
FIGURE 4: TARGET AATREND.EXE

You can start the terget application (Historian Client Trend in this example) after completing the configuration for the DebugDiag, and activate it if you expect the crash to happen during application startup.

7. Select **Full Userdump** for option Action type for unconfigured first chance exceptions. Enter a value greater than zero in Action limit for unconfigured first chance exceptions. Click Next.
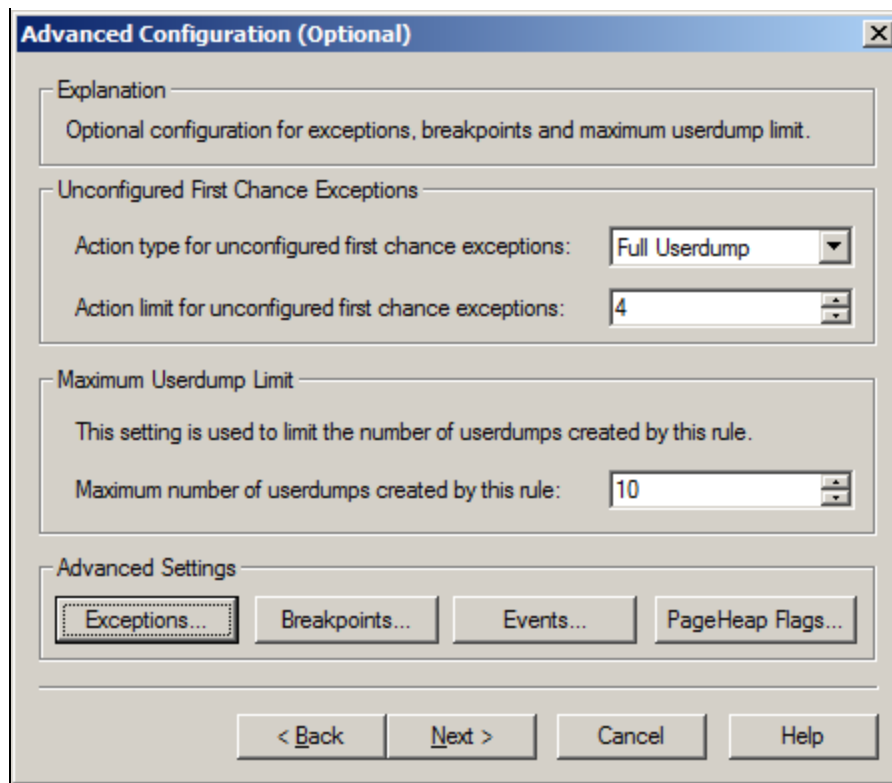
FIGURE 5: FULL USER DUMP ACTION TYPE

The Full Userdump allows a complete analysis to be done on the dump files created by this option.

• **Action Limit**: For unconfigured first chance exceptions, if the action type is set to Mini or Full userdump, the Action Limit should be set to something other than zero. Setting a value other than 0 limits the number of dump files created for unconfigured first chance exceptions. However, the number of dump files is limited by the Maximum number of userdump created by this rule.

8. The **Select Dump Location And Rule Name** dialog box should now appear. Type a name for the rule name.

9. Specify the path for the dump file location. In this example, we are using the default path (C:\Program Files\DebugDiag\Logs\Crash rule for all instances of aaTrend.exe). Click **Next**.
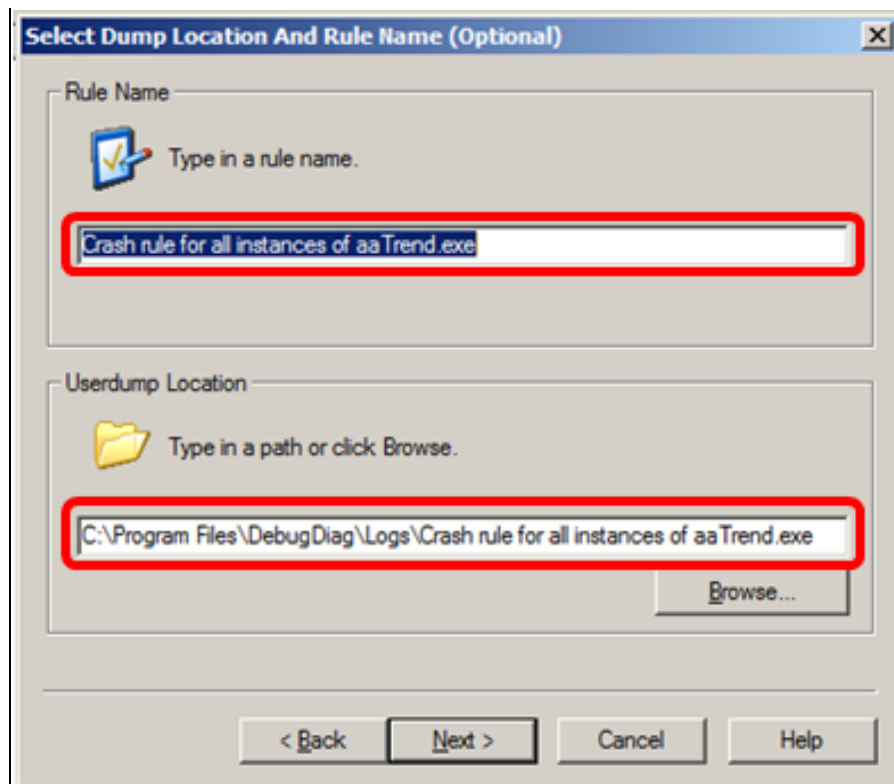
FIGURE 6: RULE NAME AND FILE PATH

10. In the **Rule Completed** dialog box, select **Activate the rule now** then click **Finish**.

FIGURE 7: ACTIVATE THE RULE NOW

The Crash Rule is now active and DebugDiag will be monitoring the aaTrend.exe service for exceptions.

If the aaTrend.exe service terminates, a corresponding dump file will be created in the output folder specified in the rule configuration (**C:\Program Files\DebugDiag\Logs\Crash rule for all instances of aaTrend.exe**.)

All other first chance exceptions will be put in a log file that is located in the Logs folder (**C:\Program Files\DebugDiag\Logs**.) You can now zip the dump files and send them to Wonderware Technical Support for further analysis.

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For technical support questions, send an e-mail to **wwsupport@invensys.com**.

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