

Title: Using the Event Log Viewer to Diagnose MCAPI Startup Problems
Products(s): MultiFlex, DCX-PCI300, DCX-PCI100
Keywords: startup, event log, firmware
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Summary

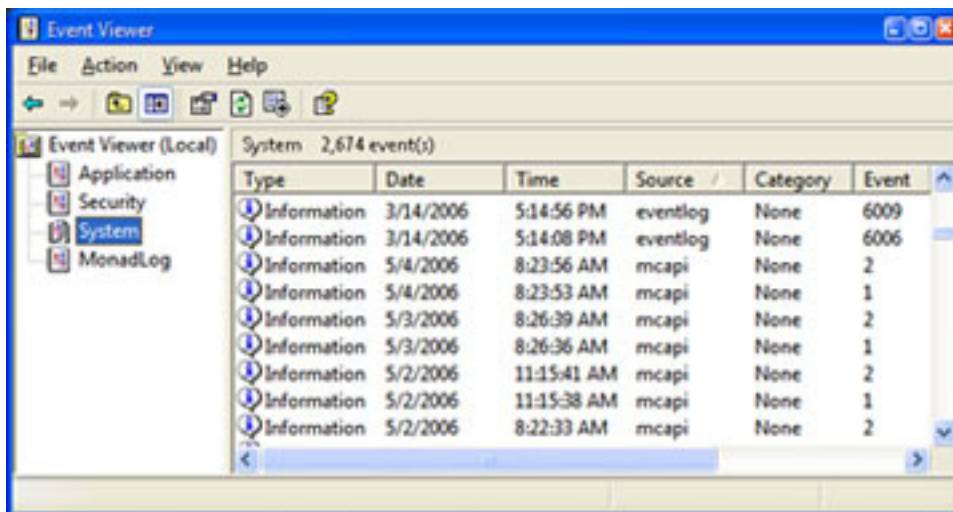
If you experience problems with a motion control card failing to initialize correctly when the PC boots the Windows Event Log on NT/2000/XP/Vista may contain information that can help PMC technical support to diagnose the problem.

More Information

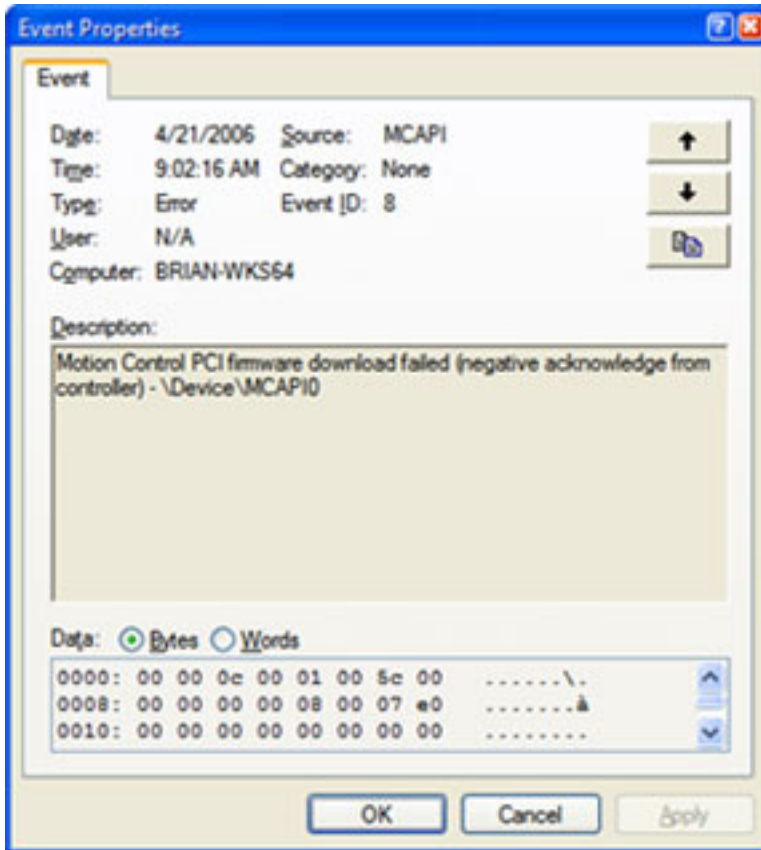
During PC boot up the operating firmware for PMC's PCI-bus motion control cards is downloaded from the PC to the card. The card is then instructed to start executing this code. If there are any problems in this startup sequence the device driver will create informative events in the Windows NT/2000/XP/Vista event log.

To reach the event log from the start menu go to Start | Settings | Control Panel. In the control panel click on Administrative Tools followed by Event Viewer. Motion controller events are written to the System log with the source labeled MCAPI (Motion Control API). Many other system services write to the event log, so you will need to search to locate the MCAPI events. Events are listed by default in reverse chronological order, with the most recent events at the top.

Beginning with version 4.0.2 of the MCAPI you should see a single #1 MCAPI event per boot, followed by a #2 MCAPI event for each installed controller (don't forget events are in reverse chronological order). This example shows a successful boot for a PC running MCAPI 4.0.2 with a single controller installed:



On earlier versions of MCAPI you will get single #1 event for each installed motion controller. Any event numbered higher than #3 on version 4.0.2 of MCAPI, or higher than #2 on previous versions of MCAPI, indicates an error.



To see the details of a particular event log entry double click on that entry (see the screen capture to the left).

To send the event information to PMC, locate the three vertically arranged buttons on the upper right of the Event Properties dialog. The bottommost button copies the event as text to the clipboard. Use this button to copy the event and paste the results into an email. Using cut and paste ensures that PMC engineers receive all the data in the event, sending a screen capture of the Event Properties dialog does not include the entire Data portion of the event.

Here is an example of using cut and paste to copy the event shown in the previous screen capture, note the extended Data portion compared to the screen capture:

```

Event Type: Error
Event Source: MCAPI
Event Category: None
Event ID: 8
Date: 4/21/2006
Time: 9:02:16 AM
User: N/A
Computer: BRIAN-WKS64
Description:
Motion Control PCI firmware download failed (negative acknowledge
from controller) - \Device\MCAPI0
Data:
0000: 00 00 0c 00 01 00 5c 00 .....\.
0008: 00 00 00 00 08 00 07 e0 .....à
0010: 00 00 00 00 00 00 00 00 .....
0018: 00 00 00 00 00 00 00 00 .....
0020: 00 00 00 00 00 00 00 00 .....
0028: ca 5a da f2 30 70 21 82 ÊZÚð0p!,
0030: e8 70 21 82 èp!,
  
```