



TECHNICAL BULLETIN # 104

Performing an ISDN Trace on PrimeNet MM Cards

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| Date Issued: | July 31 st , 2001 |
| Software Version: | MonteCarlo v5.6 and greater |
| Product(s): | PrimeNet MM PCI and cPCI |
| Purpose: | Describes how to obtain a D-channel ISDN trace on a PrimeNet MM card for debugging purposes. |

The debug version of the MonteCarlo driver can generate debug information to debug output. It will send all messages delivered to and from the PIKA card. A debug tool, which is capable of displaying debug output, must be used. The following steps show how to obtain this trace, and how to convert it into a readable format.

Required Items

Certain items are required to obtain a debug trace of the PrimeNet MM card. Please contact PIKA Technical Support for the following items:

- Debug version of PikaOctal.sys driver
- Debug View (freely distributed by System Internals at <http://www.sysinternals.com/>)
- Decode utility (provided by PIKA Technical Support)

Instructions

1. Obtain the debug version of the MonteCarlo driver PikaOctal.sys from PIKA Technical Support. Replace the release version of the driver with the debug version. The file is located in folder *c:\winnt\system32\driver*.
2. Start Windows Registry Editor. Add a DWORD Value "DebugFlags" for HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\PikaOctal\Parameters\Device0. Set the value to 0x00000003. Save modification to the registry.
3. Stop the PikaOctal device in Control Panel -> Devices. Select the START button to restart this device.

NOTE: Before restarting the device, close all of the programs related to Pika driver, such as MCSetup or MCTest.

4. Start a debug tool that can capture the messages sent to debug output. For example, Debug View. To obtain a copy, please contact PIKA Technical Support or visit the System Internals website to download a free copy at:

<http://www.sysinternals.com/ntw2k/freeware/debugview.shtml>

5. Run the utility MCTest in folder *c:\Montecarlo\Bin*. Make a call with MCTest by using the following command: “ m <chan>[-<chan>] <dialString> “. It will be helpful to record each step of the call from generation to tear down.

NOTE: The call should originate from the switch side.

6. You will see a lot of messages being displayed in the Debug View Window. Save them to a file and send it to Pika Support. The generated *.log file is readable but contains a lot of messages unrelated to ISDN.

NOTE: Steps 7 and 8 are typically carried out by PIKA Technical Support.

7. Run the **Decode** utility to parse the call information from the ISDN messages. A new trace file will be created. Run **Decode** in the same directory as the log file generated by **Debug View**. For example:

```
decode infile > outfile  
or  
decode -a infile > outfile
```

8. Verify the ISDN messages are correct. It will be easier for us to verify the messages if the trace file at the switch side is also examined.