Using WinDbg to examine ASP.NET applications

Posted by Will Steele - 10 Feb 2010 - 23:49

I am trying to really study ASP.NET from a variety of levels. I am trying to answer some simple questions, such as, how can I tell how much memory an application uses upon instantiation? How can I tell where (and how much) data is cached? I just need a starting point to look at this from the WinDbg side of things. Once I get an idea of how to get into the relevant process I can go from there. I tried attaching to the appropriate .exe but couldn't cross-reference the worker processes that were user to handle the request. Thanks for the help.

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Re:Using WinDbg to examine ASP.NET applications

Posted by Robert Kuster - 18 Feb 2010 - 16:17

Will, Hi.

The worker process for ASP.NET applications is aspnet_wp.exe which internally heavily relies on mscorwks.dll.

TODOs:Attach WinDbg to aspnet_wp.exeload SOS or SOSEX and examine the process in almost the same way you would any other .NET application
For instance you could use the following WinDbg commands after a successful attach:
> .loadby sos mscorwks
> !eeheap -gc
> ...

Also check out:Production Debugging for .NET Framework Applications. You can download the PDF here. It is a must read for any serious IIS and ASP.NET debugging.IISDebugTools: Among others it contains the iisdbg.dll WinDbg extension which helps to extract additional information from IIS (inteinfo.exe).ADPlus: If often is an invaluable help while troubleshooting IIS or its worker processes.
I hope this helps,
Robert

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Re:Using WinDbg to examine ASP.NET applications

Posted by Will Steele - 18 Feb 2010 - 16:43

Awesome. Thanks for the pointers and the link to the PDF. I had not even seen that one yet. Looking forward to working with it. Again, much appreciated.

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