

Re: IIS Template Cache and Script Engine Cache

Source:

<http://www.tech-archive.net/Archive/Internet-Server/microsoft.public.inetserver.iis/2004-03/2665.html>

From: Peter Conlan (*anonymous_at_discussions.microsoft.com*)

Date: 03/23/04

Date: Tue, 23 Mar 2004 06:36:05 -0800

Thanks David, that is great information.

The only thing I am not 100% clear on is the part about the templates in the template cache containing "other parsed info from the HTML portions of the ASP page".

By this do you mean that the HTML that is in the asp page is in the template also, or only certain items? Given that you said the Script Engines can directly interpret the template to produce the output, it would seem like the template would contain the HTML from the asp page as well. I just want to be sure I understand correctly.

Thanks again.

Pete

>-----Original Message-----

>Ok, I went and asked the ASP Dev about it, so I will share what I've

>understood. Hopefully, more explanations will be blogged by the dev sometime

>soon. At a glance, what I'm going to say does not seem to match anything

>that you've asked.

>

>The two concepts you are asking about is the "Template Cache" and "Script Engine Cache".

>

>The "Template Cache" is a cache of the intermediate form of the particular

>ASP page which has all necessary script code (including include files) and

>other parsed info from the HTML portions of the ASP page. This template can

>be directly interpreted by a Script Engine to produce

the ASP page's output.

- >It is *NOT* a response cache (i.e. cache of script execution). Treat the
- >templates as an intermediate form of an ASP page that has not been
- >interpreted.
- >
- >ASP has an option to either not use Templates (this is merely a perf issue
- >and does not affect functionality), cache all Templates in memory, or cache
- >a portion in memory and the rest on disk inside the configurable "ASP
- >Compiled Templates" directory.
- >
- >The "Script Engine Cache" refers to a cache of the actual Script Engine
- >objects that are used to interpret scripts. These objects are expensive to
- >create/tear-down per ASP request (sort of like how Processes are expensive
- >to create/tear-down), so what ASP does is create a pool of Script Engine
- >objects (you get to control the number of such objects in the pool), and
- >everytime ASP needs to execute a template to produce output, it uses a free
- >Script Engine from the pool.
- >
- >
- >Thus, you can see that "Script Engine Cache" is a direct measure of "how
- >many scripts can be theoretically executed concurrently by ASP". This
- >measure of concurrent execution is further bounded by the max number of
- >worker threads feeding templates into the Script Engines, so it does not
- >make sense to have this value be very large nor very small (if very large,
- >you're just wasting memory/resources on Engines that barely get used; if
- >very small, you end up bottlenecking the concurrency of script execution
- >because you have more worker threads feeding in templates than there are
- >available Script Engines to execute them).
- >
- >The "Template Cache" is basically storing all the necessary pre-processing
- >of an ASP page prior to actual generation of dynamic

response by a Script

>Engine from the "Script Engine Cache".

>

>Neither of these caches are the "Response Cache" that you alluded to.

>

>---

>//David

>IIS

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>//

>"Peter Conlan" <anonymous@discussions.microsoft.com> wrote in message

>news:10a9601c40ed3\$19a04a40\$a301280a@phx.gbl...

>I have done some reading of various posts and websites

>trying to get an understanding of these caches. I have

>some questions.

>

>What I have read says that when an asp page is first

>requested, a text copy (with all includes inserted into

>the text) of it is stored in the Template Cache. This

>text copy is the "Template". My questions are:

>

>Does this template contain the HTML code also, or just

>the script code?

>

>Is it really just a copy of the entire asp page?

>

>If I understand things so far, none of script has been

>executed at this point. This is just a copy of the asp

>page the server can use later (assuming it is still in

>the cache) rather than going to disk to get it. Correct?

>

>My understanding of the Script Engine Cache is that after

>a page has been put into the template cache, the asp

>script is interpreted and stored in the template cache.

>If requested later, the server can use the previously

>interpreted cache version rather than spending time

>interpreting it again. My questions on this are:

>

>Does the Script Engine Cache contain only script

>associated with a templates in the template cache? In

>other words, is it ONLY asp script and no HTML? If there

>is no HTML, does it get the HTML from it's associated

>Template?

>

>Again, I am assuming that the cached Script Engines are

>script that has not been executed, meaning the results of

>of running the script are not in the cache. The cached

>Script Engine could be executed multiple times with

>*different results depending on the values (from a*
>*querystring, or record set, etc.) supplied to it. Is*
>*this correct?*
>
>*I support a large asp site, so I am just trying to get a*
>*better understanding of how things work.*
>
>*Thanks,*
>
>*Pete Conlan*
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>
>
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