

Plone3 and increasing memory usage

Classic List Threaded 10 Messages Options

Steven H Oct 06, 2008, 01:09pm [Re: Plone3 and increasing memory usage](#) [Reply](#) | [Threaded](#) | [More](#)

To revisit a short thread from 28th March...

The recommendation then was that ZOPE processes be restarted regularly to keep memory usage under control. This didn't seem very satisfactory - though it would cause only brief unavailability. Is there a better option?

We recently migrated from 2.5 to 3.1 and now seem unable to limit the memory usage. ZOPE processes run happily with ~300Mb of memory, but continue to grow over a few days to 1.4Gb at which point the host machine is starting to swap and performance suffers. Reducing the object cache size doesn't seem to make any difference (by accident we ran one at 20,000 objects and the other at 60,000 - memory usage was roughly equal)

The host machine has 4Gb RAM

We're running twin ZEO clients with 2 threads each and ZOPE cache sizes of 40,000 objects. Data.fs is ~5Gb containing about a million objects. Total requests per day received by Plone > 100,000 split equally between the clients. (Apache and Squid see 3 to 4 times more.)

Should we expect to use > 1.4Gb per ZEO client?
Is there any configuration we can adjust to limit memory usage?

Thanks

Steven

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Andreas Jung - 5 Oct 06, 2008, 01:27pm [Re: Plone3 and increasing memory usage](#) [Reply](#) | [Threaded](#) | [More](#)

Am 06.10.2008 14:09 Uhr, Steven H schrieb:
> To revisit a short thread from 28th March...
>
> The recommendation then was that ZOPE processes be restarted regularly
> to keep memory usage under control. This didn't seem very satisfactory
> - though it would cause only brief unavailability.

Restarting usually works fast - especially the HTTP part will be re-opened fast - users might see a delay - possibly not an error. With a front-end proxy and restarting at night...there should not be much issues. If you have multiple ZEO clients: restart one after the other

-> Is there a better option?

The solution is good enough.

> We recently migrated from 2.5 to 3.1 and now seem unable to limit the
> memory usage. ZOPE processes run happily with ~300Mb of memory, but
> continue to grow over a few days to 1.4Gb at which point the host
> machine is starting to swap and performance suffers. Reducing the
> object cache size doesn't seem to make any difference (by accident we
> ran one at 20,000 objects and the other at 60,000 - memory usage was
> roughly equal)
>
> The host machine has 4Gb RAM
... [show rest of quote]
Nobody can tell you what you would expect. Memory consumption can be caused by crappy products causing leaks, huge ZODB caches...much more factors. Our ZEO clients (not Plone often have bigger process sizes)...so restarting from time to time is the solution - except you can reduce your cache sizes without performance loss or if you have memory leaks: fix'em.

-oJ

--
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E-Publishing, Python, Zope & Plone development, Consulting

[Lists.vcf]

```
begin:vcf
fn:Andreas Jung
n:Jung;Andreas
org:ZOPYX Ltd. & Co. KG
adr:quoted-printable:::Charlottenstr. 37/1;T=C3=B4bingen;;72070;Germany
email;internet:info@...
title:CEO
tel;work:+49-7071-793376
tel;fax:+49-7071-7936840
tel;home:+49-7071-793257
x-mozilla-html:FALSE
url:www.zopyx.com
version:2.1
end:vcf
```

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Wilda, Jet Oct 06, 2008, 01:30pm [Re: Plone3 and increasing memory usage](#) [Reply](#) | [Threaded](#) | [More](#)

In reply to this post by Steven H

What products are you running? We have a plone 3.1.5.1 instance that has been up and running since Sep08 and it is only consuming about

684.1 MB + 4.2 MB = 688.3 MB python (6)

--Jet

-----Original Message-----
From: Steven H [<mailto:steven.hayles@...>]
Sent: Monday, October 06, 2008 8:09 AM
To: plone-users@...
Subject: [Plone-Users] Plone3 and increasing memory usage

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Alexander Limi Oct 06, 2008, 08:02pm [Re: Plone3 and increasing memory usage](#) [Reply](#) | [Threaded](#) | [More](#)

In reply to this post by Steven H

On Mon, 06 Oct 2008 08:09:16 -0400, Steven H <steven.hayles@...> wrote:

> The recommendation then was that ZOPE processes be restarted regularly
> to keep memory usage under control. This didn't seem very satisfactory
> - though it would cause only brief unavailability. Is there a better
> option?

Debugging memory usage, which can be complex.

> Should we expect to use > 1.4Gb per ZEO client?

The answer is, as always "it depends". It seems a bit excessive, but then again I don't know anything about how much content you have, what kind of products you're using, etc.

> Is there any configuration we can adjust to limit memory usage?

You can adjust the cache sizes in the zope.conf file, but this might affect performance.

It's one of those things that isn't straightforward to give a good answer to without much more info on your setup - sorry! :)

--
Alexander Limi - <http://limi.net>

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Alexander Limi - <http://limi.net>

Steven H Oct 07, 2008, 09:15am [Re: Plone3 and increasing memory usage](#) [Reply](#) | [Threaded](#) | [More](#)

In reply to this post by Wilda, Jet

Thanks Jet, Alexander and Andreas,

At least I know I'm not missing something obvious.

I may give LeakFinder a try, but otherwise, regular restarts it is.

FWIW, the list of suspects is as follows:

```
ATFlashMovie 1.0.1
CacheFu 1.2
LDAPMultiPlugins 1.5
LDAPUserFolder 2.8
PloneLDAP 1.0rc3
Plone Survey 1.2.2 (SVN/unreleased)
PloneFormGen 1.2.4
Ploneboard 2.0.1
SimpleBlog 3.0 beta1
ZWiki ZWiki-0-60-0
```

Plus a few of our own crappy products. These are simple enough to be unlikely to cause problems.

This is the same set as we were running on 2.5 without obvious leaks, though we've had to get new versions of most of them.

Thanks again

Steven

On Oct 6, 1:30 pm, "Wilda, Jet" <Jet.Wi...@...> wrote:

> What products are you running? We have a plone 3.1.5.1 instance that
> has been up and running since Sep08 and it is only consuming about
>
> 684.1 MB + 4.2 MB = 688.3 MB python (6)
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> --Jet
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> -----Original Message-----
> From: Steven H [<mailto:steven.hay...@...>]
> ... [show rest of quote]

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Dieter Maurer Oct 11, 2008, 07:57am [Re: Plone3 and increasing memory usage](#) [Reply](#) | [Threaded](#) | [More](#)

In reply to this post by Steven H

Steven H wrote at 2008-10-6 05:09 -0700:

> ...
>>Should we expect to use > 1.4Gb per ZEO client?

It depends -- our clients can grow up to 2.5 GB.

>Is there any configuration we can adjust to limit memory usage?

Others already answered.

As you reported in a different message, you are using movies in your application. Movie objects can be really large and if not handled very carefully can tremendously increase the amount of memory allocated to the process (due to limitations in the "C" memory management APIs, memory allocated at one time usually cannot be given back to the operating system -- just reused in the process).

There are two projects that can be used to understand for what objects memory is used: "pysizer" and "guppy" (or similarly spelled). We got some insight with using "pysizer".

Dieter

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Steven H Oct 15, 2008, 03:46pm [Re: Plone3 and increasing memory usage](#) [Reply](#) | [Threaded](#) | [More](#)

Thanks Dieter

Listing useful tools for the record: LeakFinder <http://wiki.zope.org/zope2/LeakFinder>, PySizer <http://pysizer.8325.org/>, Guppy-PE <http://guppy-pe.sourceforge.net/>

For the moment, I have a nightly restart in place, one ZOPE process at a time.

Steven

On 11 Oct, 07:57, "Dieter Maurer" <ie...@...> wrote:

> Steven H wrote at 2008-10-6 05:09 -0700:
>
> >>Should we expect to use > 1.4Gb per ZEO client?
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Graham Perrin Oct 15, 2008, 08:02pm [Re: Plone3 and increasing memory usage](#) [Reply](#) | [Threaded](#) | [More](#)

This message was accepted by the plone-users@lists.sourceforge.net mailing list.

In reply to this post by Steven H

Steven H wrote:

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It's been a while since I analysed what's in our Data.fs (when I followed the recommended procedure, it was discovered that the routine was bugged, someone in IRC kindly identified the issue and reported to Launchpad for Zope).

For the record, some loose information captured from our G4 PowerPC Xserve with 2 GB RAM, ZEO cluster, two clients, Plone 3.1.6:

```
2008-09-14 <http://pastebin.ca/122805>
2008-10-03 <http://pastebin.ca/122805>
2008-10-15 19:35
```

