

## Re: Missing a step in new(er) Remote gdb/kdb setup?

*Source:* <http://unix.derkeiler.com/Mailing-Lists/FreeBSD/current/2005-08/0513.html>

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**From:** Lonnie VanZandt (*lonnie.vanzandt\_at\_ngc.com*)

**Date:** 08/11/05

To: freebsd-current@freebsd.org

Date: Thu, 11 Aug 2005 10:24:13 -0600

In case this info might be a clue:

```
lonnie@aperiodic$ ident /usr/bin/kgdb
```

```
/usr/bin/kgdb:
```

```
  $FreeBSD: src/lib/csu/i386-elf/crti.S,v 1.6 2002/05/15 04:19:49 obrien
```

```
Exp $
```

```
  $FreeBSD: src/usr.bin/yacc/skeleton.c,v 1.37 2003/02/12 18:03:55 davide
```

```
Exp $
```

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  $FreeBSD: src/usr.bin/yacc/skeleton.c,v 1.37 2003/02/12 18:03:55 davide
```

```
Exp $
```

```
  $FreeBSD: src/lib/csu/i386-elf/crti.S,v 1.5 2002/05/15 04:19:49 obrien
```

```
Exp $
```

```
  $FreeBSD: src/lib/csu/common/crtbrand.c,v 1.4 2003/10/17 15:43:13 peter
```

```
Exp $
```

```
  $FreeBSD: src/lib/csu/i386-elf/crt1.c,v 1.13 2004/08/15 16:18:51 dfr Exp
```

```
$
```

```
  $FreeBSD: src/gnu/usr.bin/gdb/kgdb/kthr.c,v 1.1.2.1 2005/03/01 20:35:14
```

```
obrien Exp $
```

```
  $FreeBSD: src/gnu/usr.bin/gdb/kgdb/main.c,v 1.2.2.4 2005/03/14 20:49:04
```

```
marcel Exp $
```

```
  $FreeBSD: src/gnu/usr.bin/gdb/kgdb/trgt.c,v 1.1.2.1 2005/03/01 20:35:14
```

```
obrien Exp $
```

```
  $FreeBSD: src/gnu/usr.bin/gdb/kgdb/trgt_i386.c,v 1.1.2.1 2005/03/01
```

```
20:35:14 obrien Exp $
```

On Thursday 11 August 2005 10:09 am, Lonnie VanZandt wrote:

> *Marcel,*

freebsd-current: Re: Missing a step in new(er) Remote gdb/kdb setup?

>  
> *The protocol sync issue is now gone – but the host side kgdb core dumps*  
> *immediately after reporting the current break point of the target:*  
>  
> *lonnie@aperiodic\$ kgdb -r /dev/cuaa0 /tmp/kernel.debug*  
> *[GDB will not be able to debug user-mode threads: /usr/lib/libthread\_db.so:*  
> *Undefined symbol "ps\_pglobal\_lookup"]*  
> *GNU gdb 6.1.1 [FreeBSD]*  
> *Copyright 2004 Free Software Foundation, Inc.*  
> *GDB is free software, covered by the GNU General Public License, and you*  
> *are welcome to change it and/or distribute copies of it under certain*  
> *conditions. Type "show copying" to see the conditions.*  
> *There is absolutely no warranty for GDB. Type "show warranty" for details.*  
> *This GDB was configured as "i386-marcel-freebsd".*  
> *(no debugging symbols found)...Switching to remote protocol*  
> *0xc0634d14 in kdb\_enter ()*  
> *Segmentation fault (core dumped)*  
>  
> *If I run gdb on the kgdb.core file, it shows a corrupted – or at least*  
> *massive – stack frame with no symbolic information.*  
>  
> *Is there a kgdb patch/update for 5.4 release p3 that I should apply? Or*  
> *perhaps some permission/resource issue on the host that needs to be*  
> *corrected?*  
>  
> *On Thursday 04 August 2005 06:10 pm, Marcel Moolenaar wrote:*  
> > *On Aug 4, 2005, at 9:27 AM, Lonnie VanZandt wrote:*  
> > > *Ok, so I infer that the startup sequence should be:*  
> > >  
> > > *1. enter kdb on target*  
> > > *2. type gdb on target*  
> > > *3. type s on target*  
> > > *4. start kgdb on host with -r option*  
> > > *5. wait for good connection*  
> > > *6. load symbol table files on host*  
> > > *7. get on with the debugging*  
> > >  
> > > *Is this correct?*  
> >  
> > *Yes.*  
> >  
> > > *(There was not this requirement for strict ordering in the*  
> > > *prior version of the remote protocol – or else it was at least more*  
> > > *tolerant)*  
> >  
> > > *I think the problem is that on the one hand the kernel sends a packet to*  
> > > *inform GDB that it has stopped and on the other hand GDB sends various*  
> > > *packets to figure out what the target is capable of. When this happens*  
> > > *at the same time, GDB gets confused. There has not been a change in KDB*  
> > > *and the GDB backend that makes this worse than before. It's all because*  
> > > *of a new version of GDB.*

Re: Missing a step in new(er) Remote gdb/kdb setup?

freebsd-current: Re: Missing a step in new(er) Remote gdb/kdb setup?

> >

> > *FYI,*

>

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> \_\_\_\_\_  
> *freebsd-current@freebsd.org mailing list*

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> *To unsubscribe, send any mail to "freebsd-current-unsubscribe@freebsd.org"*

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