

FreeNAS - Bug #40428

Pull in some recent FreeBSD fixes for ISO boot issues on legacy systems

08/01/2018 08:52 PM - Tony Scicchitano

| | |
|--|--|
| Status: Done | |
| Priority: No priority | |
| Assignee: Ryan Moeller | |
| Category: OS | |
| Target version: 11.2-BETA3 | |
| Seen in: 11.2-BETA2 | Needs Merging: No |
| Severity: Low Medium | Needs Automation: No |
| Reason for Closing: | Support Suite Ticket: n/a |
| Reason for Blocked: | Hardware Configuration: M5A78L-M LX PLUS AMD FX-6300 16 GB DDR3 (ECC) 5 x 2TB SATA internal drives in raidz2 pool 1 x 4TB external USB drive 16GB USB system drive |
| Needs QA: No | ChangeLog Required: No |
| Needs Doc: No | |
| Description Tried a GUI upgrade from 11.1-U5 to 11.2-BETA2 and ended up with an unbootable system. Tried using the ISO and boot loader on installer seems to get stuck on a white screen with the following text: BTX Version is 1.02 Consoles: internal video/kernel I've tried multiple boot devices, and multiple install devices (verified SHA256 on download) and I'm always stuck on the same screen. I'm not sure what to do next. | |
| Related issues: | |
| Related to FreeNAS - Bug #43273: While installing using a USB stick the insta... | Closed |
| Has duplicate FreeNAS - Bug #39308: Unable to install from usb disk to usb disk. | Closed |

History

#1 - 08/01/2018 08:52 PM - Tony Scicchitano

- File deleted (8D254945-0698-4F85-8407-E127DEF87BD8.jpeg)

#2 - 08/01/2018 08:54 PM - Tony Scicchitano

- Severity changed from Medium to New

#3 - 08/02/2018 09:50 AM - Dru Lavigne

- Private changed from No to Yes

- Reason for Blocked set to Need additional information from Author

Is the BIOS updated to its latest version? If it is, or if updating does not resolve the issue, please reboot into your previous boot environment, create a debug (System -> Advanced -> Save debug) and attach it to this ticket.

#4 - 08/02/2018 04:44 PM - Tony Scicchitano

- File debug-iserve-20180802182909.tgz added

BIOS is the latest version, so I'm attaching the debug.

Thx

#5 - 08/03/2018 05:12 AM - Dru Lavigne

- Assignee changed from Release Council to Alexander Motin
- Reason for Blocked deleted (Need additional information from Author)

#6 - 08/03/2018 01:08 PM - Alexander Motin

- Status changed from Unscreened to Screened

I do't remember I saw exactly the same screenshot before. It must be something new. As I understand you booted in legacy BIOS mode, right? Do you have exactly the same behavior when booting installer and installed (updated via Web) system? Have you tried UEFI on this system?

#7 - 08/03/2018 02:35 PM - Tony Scicchitano

This result is from the 11.2-BETA2 ISO installer itself. I didn't record it but I believe the same screen came up after upgrading via the web/GUI (11.1 installed using legacy BIOS mode).

Is there any value in trying UEFI install of 11.1-U5 and providing a debug?

#8 - 08/05/2018 12:46 PM - Tony Scicchitano

Had some spare time and decided to try UEFI install of 11.1-U5 and it turns out this mobo doesn't support it.

Main issue is I just can't boot 11.2-BETA2 installation media.

#9 - 08/06/2018 12:22 PM - Alexander Motin

- Assignee changed from Alexander Motin to Ryan Moeller

#10 - 08/08/2018 05:44 PM - Ryan Moeller

- Status changed from Screened to In Progress
- Severity changed from New to Low Medium
- Needs QA changed from No to Yes
- Needs Doc changed from No to Yes
- Needs Merging changed from No to Yes

I'm able to reproduce this on one of my test systems (and indeed it is annoying me, too). So far I've traced the hang to the INT 13h probe and am looking into why that is happening.

As a workaround you should be able to boot the installer by unplugging the 4TB external USB drive until the kernel starts booting.

#11 - 08/11/2018 06:29 AM - Tony Scicchitano

I still can't boot the installer using the workaround. Stuck on the same screen.

#12 - 08/21/2018 08:11 AM - Dru Lavigne

- File deleted (debug-iserve-20180802182909.tgz)

#13 - 08/21/2018 08:12 AM - Dru Lavigne

- Target version changed from Backlog to 11.2-BETA3
- Private changed from Yes to No

os/11-stable PR: <https://github.com/freenas/os/pull/140>

#14 - 08/21/2018 11:56 AM - Dru Lavigne

- Subject changed from Can't boot ISO to Pull in some recent FreeBSD fixes for ISO boot issues on legacy systems
- Status changed from In Progress to Ready for Testing
- Needs Doc changed from Yes to No
- Needs Merging changed from Yes to No

#15 - 08/21/2018 11:56 AM - Dru Lavigne

- Has duplicate Bug #39308: Unable to install from usb disk to usb disk. added

#16 - 08/21/2018 12:22 PM - Ryan Moeller

A regression was introduced in isoboot and gptboot which caused the incorrect argument format to be passed to loader, leading to memory corruption in the early boot process.

The regression was fixed upstream and I have cherry-picked the commit into FreeNAS.

Acceptance Criteria

This ticket describes the behavior exhibited by at least some versions of AMI BIOS for AMD processors. The system hangs indefinitely early in the boot process.

The fix should be tested by writing the ISO to a USB stick and booting in an affected system.

The expected behavior is for the system to boot normally without hanging early in the boot process.

The related issue describes booting with legacy BIOS and multiple USB drives. Rather than hanging as described in this ticket, these systems fail to detect the boot drive and drop to a loader prompt.

The fix should be tested by writing the ISO to a USB stick and booting in an affected system while another USB stick is also attached.

The expected behavior is for the system to boot normally without dropping to a loader prompt.

#17 - 08/21/2018 12:29 PM - Tony Scicchitano

With respect to my original screenshot, I just wanted to point out that it's not a prompt on the screen. No text input is possible.

Happy to test a nightly ISO if/when available.

#18 - 08/21/2018 12:38 PM - Ryan Moeller

Tony Scicchitano wrote:

With respect to my original screenshot, I just wanted to point out that it's not a prompt on the screen. No text input is possible.

Happy to test a nightly ISO if/when available.

Thanks, I'll clarify that part of my previous note. I am experiencing the same behavior on my M5A88-V EVO board with an FX-8320, and this has fixed the problem in that system, so I am optimistic that it will help in your case, too. This fix should make it into the next nightly that gets built.

#19 - 08/22/2018 06:13 PM - Tony Scicchitano

Just tried today's nightly and I was able to successfully boot the installer.

Thanks!

#20 - 08/28/2018 01:30 PM - Bonnie Follweiler

- Status changed from Ready for Testing to Passed Testing

- Needs QA changed from Yes to No

Test Passed in FreNAS 11.2 Master-201808280901-ce081fe

#21 - 08/28/2018 01:36 PM - Bonnie Follweiler

- File traceback.jpg added

- Status changed from Passed Testing to Failed Testing

As it started to install it got to the boot screen but before I could select the drive to install, etc it wont install
Screenshot provided:

#22 - 08/28/2018 01:39 PM - Bonnie Follweiler

- Status changed from Failed Testing to Passed Testing

Creating another ticket for the traceback issue since this one did start to install

#23 - 08/28/2018 01:55 PM - Dru Lavigne

- Status changed from Passed Testing to Done

#24 - 08/28/2018 01:55 PM - Dru Lavigne

- Related to Bug #43273: While installing using a USB stick the installation stoped with an error message added

Files

| | | | |
|---|---------|------------|-------------------|
| 3B695EA6-2511-42C4-946B-A5B9004ECE26.jpeg | 7.94 MB | 08/02/2018 | Tony Scicchitano |
| traceback.jpg | 1.47 MB | 08/28/2018 | Bonnie Follweiler |