PiBox - Bug #246
Add support for dynamic loading of modules at boot time

19 Nov 2013 09:28 - Hammel

Status:	Closed		**Start date:**	19 Nov 2013
Priority:	Immediate		**Due date:**	
Assignee:	Hammel		**% Done:**	100%
Category:	04 - Root File System		**Estimated time:**	0.00 hour
Target version:	0.7.0			
Severity:	04 - Low			

Description

mdev doesn't auto-load modules though it might using /etc/modules.conf or similar (more research is needed to verify this).
There are alternative methods.

- rc.modules
- Extended mdev.conf or the one from snafu
- Hotplug replacement

A quick test shows the rc.modules doesn't work as expected. It would need some cleanup. The second option, specifically snafu's, seems the most promising as it also supports automounting.

Associated revisions

Revision 3d825391 - 21 Nov 2013 08:42 - Hammel

RM #246: Add support for boot-time loading of modules using the new rc.modules and /etc/modules.conf.

History

#1 - 19 Nov 2013 22:47 - Hammel

- % Done changed from 10 to 20

Tried the rc.modules script and suprisingly it mostly works. The only serious flaw was the use of -b -a which are not supported in the Busybox version of modprobe. I haven't tried this on the RPi with the hy28a attached so it's not clear if this is going to solve the problem for that board. It also doesn't load any sound modules. So this may not solve my problem.

#2 - 20 Nov 2013 18:59 - Hammel

- % Done changed from 20 to 30

None of these methods worked for me. Since this is a targeted platform, meant specifically for the Raspberry Pi, I can fall back to an rc.modules script that just reads /etc/modules.conf and loads what it finds there. It should also test that the driver exists though that might not be necessary if modprobe can just ignore errors.
Modules I know should be loaded:

1. snd-bcm2835
2. fbtft_device name=hy28a, but only if the tft display is connected. How can I test that? Maybe I'll just have to make the fbtft drivers an opkg and load them manually with an init script.

#3 - 20 Nov 2013 20:53 - Hammel

- % Done changed from 30 to 50

I created an rc.modules that reads and loads modules from /etc/modules.conf, then called it from S00dev. This seems to work. The sound modules were loaded, though it will take some testing to see if they loaded correctly. But the process of loading modules works.

I'll check these in and push upstream. They should work for the core platform as they are.

#4 - 21 Nov 2013 08:45 - Hammel

- Status changed from In Progress to Closed

- % Done changed from 50 to 100

Added new files to git and checked in updates. All pushed upstream.

Current modules list includes only the sound and fbtft drivers.

This issue can be closed.