

PiBox - Action Item #231

kernel config cleanup

14 Oct 2013 14:16 - Hammel

Status:	In Progress	Start date:	14 Oct 2013
Priority:	Normal	Due date:	
Assignee:	Hammel	% Done:	10%
Category:	03 - Linux Kernel	Estimated time:	0.00 hour
Target version:	2.0 - Harkonnen		
Severity:	03 - Medium		
Description			
To improve boot time, the kernel config should be examined for which drivers could be made modules and loaded at boot time. Module loading could be done by specific init scripts as needed or by a specialized init process that parallelizes the init scripts (without using scripts to reduce fork/exec overhead).			

Associated revisions

Revision c8416928 - 11 Mar 2014 18:33 - Hammel

RM #291: Changed local kernel config name so it doesn't include git id.

RM #287: Disabled NFS in the kernel and rootfs.

RM #231: Disabled all unused filesystems.

History

#1 - 18 Oct 2013 09:14 - Hammel

- Category set to 03 - Linux Kernel
- Assignee set to Hammel
- Target version set to 2.0 - Harkonnen

#2 - 04 Jan 2014 18:13 - Hammel

When I get around to this I should have a method of building just the Media Server kernel since this would be a stripped down version of the PiBox Development Platform, which should have nearly everything in it.

#3 - 30 Mar 2014 21:19 - Hammel

- Status changed from New to In Progress
- % Done changed from 0 to 10

Looking through dmesg to see boot times I found the following things:

1. A bunch of eth drivers are compiled in. Only smsc95xx needs to be enabled and even that could be a loadable module.
2. bcm2708_spi takes 3.5 seconds to load
3. sda1 (ext4) takes 9 seconds to load
4. wlan0 takes 8 seconds to load
5. X (and the fbft) takes 17 seconds to load