

Servers - Housekeeping #2865

Improve the status of ARM builder(s)

2020-08-09 07:01 AM - GNUtoo

Status: open	% Done: 0%
Priority: bug	
Assignee:	
Category:	
Description	

History

#1 - 2020-08-09 07:21 AM - GNUtoo

- Subject changed from *Get a better ARM builder* to *Improve the status of ARM builder(s)*

Right now Parabola hackers have access to the following builder:

Device	Olimex Lime 2 A20 eMMC
SOC	Allwinner A20
RAM	1GiB
Hosting	Hosted in GNUtoo's infrastructure on an ADSL link
Storage	Relatively fast 32G MicroSD
Restrictions	* Don't reflash the eMMC or microSD firmware * Don't destroy the hardware * Don't put GNUtoo at legal risk * Everything else should be fine, and there is complete hardware and root access

However it's not very reliable as the hardware is sometimes taken offline to do some testing and the network is sometimes reconfigured for testing too.

Possible improvements:

- Find a way to not have the network downtimes: my home server has 3 NICs, one of them is used for the ADSL modem, another is used for my internal network, and another is used for hosting public machines, untrusted machines, run tests (like remove the network and run tshark to see if a device makes some connections), etc. The Lime2 is on the later, so the network is sometimes reconfigured for testing, which is an issue. If there is a way to isolate the machine within my local network it could work better as it would be more reliable. Note that I cannot add NICs easily as USB ports are also often used for networking smartphones for testing. Finding a solution or another location to host a machine would get rid of these downtimes.
- Using a dedicated computer for that could remove the downtimes due to testing. Note that it's easy to swap the roots by just swapping microSDs, so it's not a big issue for GNUtoo but might be for Parabola hackers needing to build packages on the device if it goes offline at the wrong time.
- The Lime2 has only 1G of RAM. I've a TBS 2910 which is currently configured for my usage which has 2G of RAM. Ideally we need machines with 4G of RAM like the Novena or even more.
- Several devices like the Lime2, the Novena or the TBS2910 accept SSDs. So you put the bootloader on a microSD or the eMMC and then boot from an SSD.
- Adding full support for an ARM64 device would probably enable bigger RAM sizes and faster CPUs if we can find devices that can boot with free software and have bigger RAM sizes and faster CPUs. Right now linux-libre-64 can boot on ARM64 machines but no bootloaders are packaged yet.
- We need to port/build the parabola-hackers package and many other packages used on the Parabola infrastructure to ARM to enable seamless integration with the current Parabola infrastructure.

#2 - 2020-08-30 01:59 AM - bill-auger

- Status changed from *unconfirmed* to *open*

- Tracker changed from *Bug* to *Housekeeping*