Tails - Bug #16960
Make our CI feedback loop shorter
08/09/2019 05:01 PM - intrigeri

Status: Confirmed
Priority: Normal
Assignee: intrigeri
Category: Continuous Integration
Target version: 2020
Feature Branch:
Type of work: Sysadmin
Blueprint: https://tails.boum.org/blueprint/hardware_for_automated_tests_take3/

Description
This is about the follow-up work to #15501 that we want to do in 2019-2020, i.e.:

1. Get in touch with ProfitBricks, that donate crazy amounts of VM "hardware" to the Reproducible Builds project. If they're happy to give us some, this would be, by far, the simplest and cheapest option. AFAIK that's a simple "here's a VM, you're root" setup so it does not have the drawbacks of more powerful & complex cloud systems, apart of course the fact we don't run the hardware ourselves.
2. Decide between ProfitBricks and the "hacker option".
3. Implement the chosen solution.

Subtasks:
Feature # 17387: Consider disabling CPU vulnerabilities mitigation features in our Cl b... Confirmed
Bug # 17439: Enable the cachewebsite build option by default, including on our Cl Needs Validation

Related issues:
Related to Tails - Bug #17216: Make the test suite clean up after itself even... Confirmed
Related to Tails - Bug #17361: Streamline our release process Confirmed
Related to Tails - Bug #16959: Gather usability data about our current CI In Progress
Blocks Tails - Feature #13284: Core work: Sysadmin (Adapt our infrastructure) Confirmed 06/30/2017
Follows Tails - Feature #15501: Server hardware (2017-2019 edition): evaluate... Resolved 04/08/2018

History
#1 - 08/09/2019 05:02 PM - intrigeri
- Blocks Feature #13284: Core work: Sysadmin (Adapt our infrastructure) added

#2 - 08/09/2019 05:02 PM - intrigeri
- Due date set to 04/09/2018
- Start date set to 04/09/2018
- Follows Feature #15501: Server hardware (2017-2019 edition): evaluate some of the options added

#3 - 08/09/2019 05:02 PM - intrigeri
- Related to Bug #11680: Upgrade server hardware (2017-2019 edition) added

#4 - 08/09/2019 05:04 PM - intrigeri
- Description updated
- Due date deleted (04/09/2018)
- Start date deleted (04/09/2018)

#5 - 11/09/2019 10:59 AM - intrigeri
Hi @groente,

since we had to cancel our last meeting on this topic, I've taken some steps to keep the ball rolling.

I've updated the blueprint: specs, cost estimates (based on the work we did together on a pad last month), pros & cons.

First, as a baseline, the total budget estimate we had for this project was 8250€. But our more recent estimates (sticking with the hacker option™) are around 10.5k€.

I'm increasingly convinced that the hacker option™, while a very cool idea, has 2 major drawbacks IMO:

- It would eat lots of our limited time, and:
  - That time would be better put in places that require human brains that can't be replaced by $€¥.
  - The whole thing will get postponed to whenever we have that time available, i.e. not any time soon, I bet. Meanwhile, developers and release managers suffer from our slow CI, and the general atmosphere in turn suffers.
- It would be another instance of static resources allocation (in this case, between 4 nodes). My not-so-secret plan is to make our CI work in a different way at some point: that would not require 1 dedicated VM per Jenkins node, but instead run all CI stuff in one single VM, and it would thus benefit from dynamically allocated resources, i.e. when only one job is running at a given time, it is much faster; and if there are more jobs running concurrently, well, they share resources (but likely they don't need the exact same kind of resources all at the same time). It would make me sad to purchase hardware that commits us to the current static resources allocation scheme for the next 5+ years.

I'm under the impression that you felt the same way during our meeting last month wrt. the "eat lots of our limited time" aspect. So perhaps it's time to officially ditch the hacker option™, and focus on the other ones?

Furthermore, it is my understanding that we already ditched the cloud option: nobody on our team is knowledgeable nor super excited about this sort of stuff at this point, and here again, it would take a while until we learn.

Assuming we agree on this, the 2 remaining options are:

- Free VMs at ProfitBricks: I understand you were not overly excited at the idea of running stuff on hardware we don't control, hosted by a for-profit company; I'm not either. But it has the potential to save us 15k€ + 50€/month, and if instead we have to pay these costs, well, we'll have to find the corresponding money somehow, and it might not come from sources we find super great either. That's why I find it hard to justify dismissing the idea entirely. I propose I tentatively ask ProfitBricks, so we know if this option is actually on the table; and then, we can talk (either within the sysadmin team, or in the broader Tails community, because it's in great part a political decision). Would this work for you?
- Bare metal server dedicated to CI: a few more thousand more € than planned, but it's mostly business as usual and requires rather little work. IMO that's the way we should go if for some reason, free VMs are not an option. That hardware expense would be significantly larger than budgeted so this would take a discussion on -summit@.

What do you think?

If you prefer to discuss this in a synchronous matter, let me know, and we'll schedule a meeting :)