Tails - Feature #15281
Stack one single SquashFS diff when upgrading

02/05/2018 03:45 PM - anonym

Status: Resolved
Priority: High
Assignee: segfault
Category: Installation
Target version: Tails_4.2
Type of work: Code
Blueprint: https://tails.boum.org/blueprint/Endless_upgrades/#single-squashfs-diff

Description
That is, address a number of UX problems in our upgrade process with an hopefully cheap and temporary solution.

Subtasks:
- Feature # 15279: Refresh Tails signing key before each upgrade check
- Feature # 15282: Add a prompt right before applying an IUK
- Feature # 15283: Implement the "one single SquashFS diff" scheme in Tails Upgrader
  - Feature # 6876: Have the incremental upgrade process use less RAM
  - Feature # 17152: Port tails-iuk to a more lightweight set of dependencies
- Feature # 15284: Adapt release process for the "one single SquashFS diff" upgrade scheme
- Feature # 15285: Adapt incremental upgrade manual test for the "one single SquashFS diff..."
- Feature # 15286: Adapt automated test suite for the "one single SquashFS diff" upgrade ...
- Feature # 15290: Reduce IUK size
- Bug # 15407: Prevent system user uid:s and gid:s from changing between releases

Related issues:
- Related to Tails - Feature #11131: Endless automatic upgrades
- Related to Tails - Feature #15291: Remove less popular packages that users co...
- Related to Tails - Feature #15277: Update our survey of non-NIH system upgrad...
- Related to Tails - Feature #11679: Rethink the installation process and upgra...
- Related to Tails - Feature #7499: Extend the upgrader to allow full (self) up...
- Related to Tails - Feature #15287: Make it possible to reproducibly generate ... 
- Related to Tails - Feature #15288: Document tricks for power users vs. bigger... 
- Related to Tails - Bug #17398: Follow-up to "Stack one single SquashFS diff w... 

Associated revisions
Revision 7ddb1dae - 02/07/2018 09:47 PM - anonym

Patch tails-iuk and tails-perl5lib adding the "one single SquashFS diff" feature.

It imports the changes in the feature/15281-single-squashfs-diff branch in the tails-iuk and tails-perl5lib repos.

Refs: #15281
Revision 690c9ebb - 02/16/2018 10:00 AM - anonym
Import new snapshot of tails-iuk for #15281.

Now it imports the 'feature/15281-single-squashfs-diff' branch to commit bc36507314773db64a8f404f0b424e65a77e18, meaning that old SquashFS diff files now should be cleaned up.
Refs: #15281

Revision a3537f89 - 02/23/2018 12:47 PM - anonym
Import new snapshot of tails-iuk for #15281 and #15282.

For #15281 we should now not remove kernel+initrd from ./live, and the prompt for #15282 has been added.
Refs: #15281, #15282

Revision ef629160 - 11/24/2019 04:29 PM - intrigeri
Endless upgrades: draft deployment plan (refs: #15281)

Revision 70b434d4 - 12/22/2019 09:33 PM - intrigeri
WIP: adjust to perl5lib being imported into tails.git (refs: #7036)

This also updates the iuk.git snapshot (refs: #15281) with patches come from iuk.git:feature/15281-single-squashfs-diff at commit 38ee60cc71761a5b6024e81a52e1c36be051c1ec.

Revision 415ef146 - 12/22/2019 09:37 PM - intrigeri
Adjust to perl5lib being imported into tails.git (refs: #7036)

This also updates the iuk.git snapshot (refs: #15281) with patches come from iuk.git:feature/15281-single-squashfs-diff at commit 38ee60cc71761a5b6024e81a52e1c36be051c1ec.

Revision e5e98537 - 01/05/2020 04:02 PM - segfault
Merge branch 'feature/15281-single-squashfs-diff' into stable (Closes: #15281, #15279, #15283, #15286)

History
#1 - 02/05/2018 03:46 PM - anonym
- Related to Feature #11131: Endless automatic upgrades added

#2 - 02/05/2018 03:47 PM - anonym
- Related to Feature #8415: Migrate from aufs to overlayfs added
#3 - 02/05/2018 03:48 PM - anonym
- Target version set to Tails_3.6

We might be able to pull this off in time for Tails 3.6. Let's see!

#4 - 02/05/2018 03:56 PM - anonym
- Blocked by Feature #15282: Add a prompt right before applying an IUK

#5 - 02/05/2018 04:18 PM - anonym
- Blocks Feature #15288: Document tricks for power users vs. bigger downloads for automatic upgrade

#6 - 02/05/2018 04:29 PM - anonym
- Related to Feature #15290: Reduce IUK size

#7 - 02/05/2018 04:33 PM - anonym
- Related to Feature #15291: Remove less popular packages that users could install themselves

#8 - 02/05/2018 06:59 PM - anonym
- Feature Branch changed from https://tails.boum.org/blueprint/Endless_upgrades/ to feature/15281-1bigiuk
- Blueprint set to https://tails.boum.org/blueprint/Endless_upgrades/

#9 - 02/06/2018 03:23 PM - intrigeri
- Description updated

#10 - 02/06/2018 03:30 PM - intrigeri
- Related to Feature #6876: Have the incremental upgrade process use less RAM

#11 - 02/06/2018 03:30 PM - intrigeri
- Related to Feature #15277: Update our survey of non-NIH system upgrade solutions

#12 - 02/06/2018 03:31 PM - intrigeri
- Related to deleted (Feature #8415: Migrate from aufs to overlayfs)

#13 - 02/06/2018 03:31 PM - intrigeri
- Blocks Feature #8415: Migrate from aufs to overlayfs

#14 - 02/06/2018 03:34 PM - intrigeri
- Feature Branch changed from feature/15281-1bigiuk to feature/11131-endless-upgrade, iuk:feature/11131-endless-upgrade, perl5lib:feature/11131-endless-upgrade

#15 - 02/06/2018 03:38 PM - intrigeri
- Blocked by deleted (Feature #15282: Add a prompt right before applying an IUK)

#16 - 02/06/2018 03:53 PM - intrigeri
- Related to Feature #11679: Rethink the installation process and upgrade process

#17 - 02/06/2018 04:19 PM - intrigeri
- Description updated
#18 - 02/06/2018 04:50 PM - intrigeri
- Subject changed from Switch to the 1BigIUK upgrade scheme to Stack one single SquashFS diff when upgrading

#19 - 02/06/2018 04:51 PM - intrigeri

#20 - 02/06/2018 04:52 PM - intrigeri
- Description updated

#21 - 02/07/2018 04:58 PM - anonym

#22 - 02/08/2018 09:49 AM - anonym
- Status changed from Confirmed to In Progress

#23 - 02/24/2018 02:23 PM - intrigeri
Some of the design doc changes on feature/11131-endless-upgrade were relevant but are not on the new branch.

#24 - 03/02/2018 08:23 AM - intrigeri
- Target version changed from Tails_3.6 to Tails_3.7

#25 - 03/28/2018 09:22 AM - intrigeri
- Target version changed from Tails_3.7 to Tails_3.8

#26 - 03/28/2018 09:23 AM - intrigeri
- Blocks Feature #15139: Core work 2018Q2: Foundations Team added

#27 - 05/25/2018 01:28 PM - intrigeri
- Target version changed from Tails_3.8 to Tails_3.10.1

#28 - 06/28/2018 02:00 PM - intrigeri
- Blocks deleted (Feature #15139: Core work 2018Q2: Foundations Team)

#29 - 06/28/2018 02:00 PM - intrigeri
- Blocks Feature #15334: Core work 2018Q3: Foundations Team added

#30 - 06/28/2018 08:55 PM - intrigeri
- Target version changed from Tails_3.10.1 to Tails_3.11

#31 - 06/28/2018 08:59 PM - intrigeri
- Blocks deleted (Feature #15334: Core work 2018Q3: Foundations Team)

#32 - 06/28/2018 09:00 PM - intrigeri
- Blocks Feature #15506: Core work 2018Q4: Foundations Team added
segfault, I've taken over most subtasks. I expect some of them can be reassigned to you (depending on how much of #8415 you take) but I have to take a look at the current status first.

intrigeri wrote:

Some of the design doc changes on feature/11131-endless-upgrade were relevant but are not on the new branch.

I've salvaged these changes except those that are about the IUK format v2, which I'll salvage later as part of #6876.
I could definitely use some help on the non-Perl subtasks, but since most of the work is on my plate, I want to have the parent ticket clearly on my radar.

Most of this has to be completed in January 2020, as per contract.

Hi @segfault! As a heads up:

- I'm done with the bulk of the work here (see subtasks).
- The corresponding automated tests pass locally already.
- I'm only waiting for Jenkins results before sending onto your plate for review.
- You can now start your review whenever you have time for it. The deadline for merging in Jan 5.
- I'll try to implement the testing strategy that anonym & I came up with on #15283, if time allows.

(I've moved out of this ticket the subtasks that don't necessarily have to be done in time for 4.2, so it's easier to track here what the blockers are for 4.2 and merging.)

Applied in changeset tails|e5e98537e7415b7c6a2c5e7ab1beb4f656333814.
Note that I did not review:

- The commits by anonym from February 2018, because I assumed that intrigeri already reviewed those.
- The code in config/chroot_local-includes/usr/src that was imported from iuk.git and perl5lib.git.

I will create a follow-up ticket for the few remarks I have.

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- Related to Bug #17398: Follow-up to “Stack one single SquashFS diff when upgrading” added