

Making Livepatching Infrastructure Better

Livepatching Miniconf - Linux Plumbers 2019

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Testing Live patching – What more can we do ?

Kernel

samples/livepatch
lib/livepatch

Unit test cases

Kernel Patch
- Corner Cases
- CVE(s)

Random Kernel Patch

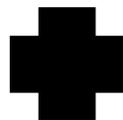


In-built

re-building

Kpatch

snow patch



Jenkins



Combinations

K + T

UK + T

UK + UT

K = Distro Kernel
T = Distro Tool Chain
UK = Upstream Kernel
UT = Upstream Tool Chain



Ideas?

- Failure test cases
- Contribute to test projects
- Ask the kernel build people to run livepatch enabled
Publish the results

Project K-Bot

This build requires parameters:

buildmachine

Select a type machine... ▾

* Choose the machine you want build or test on

kernel_git_repo

* Enter kernel source repo link http/git

kernel_git_repo_branch

master

* Enter kernel git branch name example:master

buildonly

Yes
Source code build

avtest

korg_pvm
 korg_mv
 korg
 korg_p8pvm
 korg_stress
 -

[Optional] Chose avocado tests to run

configfile

Browse...

No file selected.

[Optional] Upload the config file

inputfile

Browse...

No file selected.

[Optional] Config contains parameter to be passed to avocado tests
inputfile format :

```
[testsuite1]  
key1 = value1  
key2 = value2
```

```
[testsuite2]  
key1 = value1  
key2 = value2
```

patchfile

Browse...

No file selected.

[Optional] Upload the patch file

bootdisk

None

[Optional] Enter the disk id of BOOT partition. Disk id can be fetched from the output of `ls -l /dev/disk/by-
id/scsi-3500039348114000` for baremetal
'U8408.E8E.10A7A3V-V12-C112-T1-L810000000000000' for PowerVM

sid

None

[OPTIONAL] Only used for CI runs

Build

<https://github.com/avocado-framework-tests/avocado-misc-tests/blob/master/kernel/livepatch.py>

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Thank you