

Mount Injection API in LXC

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Problem

Inability to {u}mount a resource into a running container without restart (for the example with restart look here [1]) – basically, what we call ‘mount injection’.

[1]

<https://s3hh.wordpress.com/2011/09/22/sharing-mounts-with-a-container/>

Workarounds? :)



Manual mount

- Host mount namespace gets polluted
- LXC implementation details used
- May fail anyway 🤪
 - If rootfs mounted with MS_PRIVATE

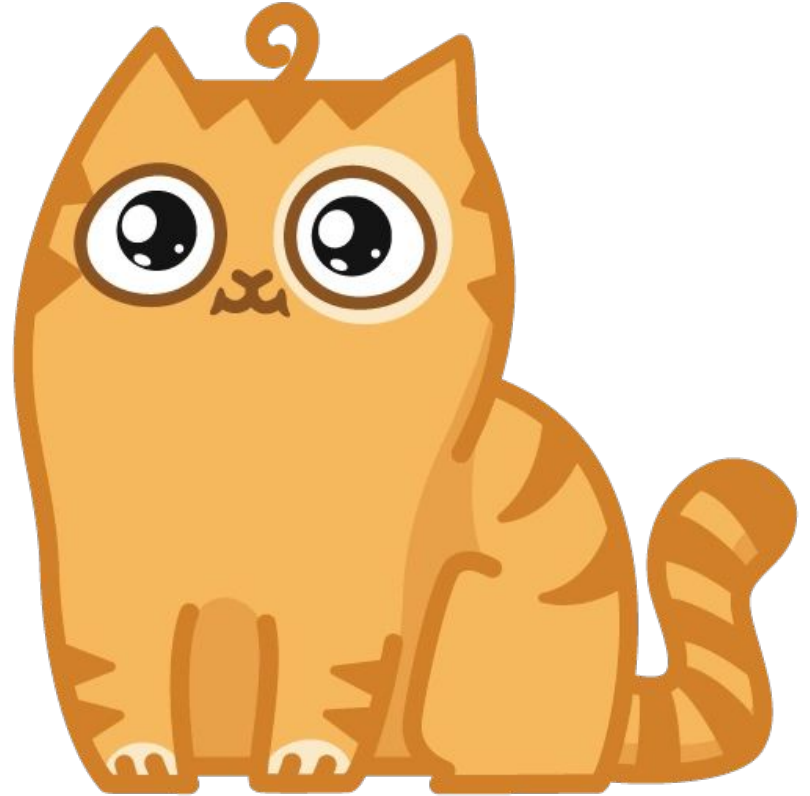
Using LXD

```
lxc config device add <container> <name> \  
<type> [key=value]...
```

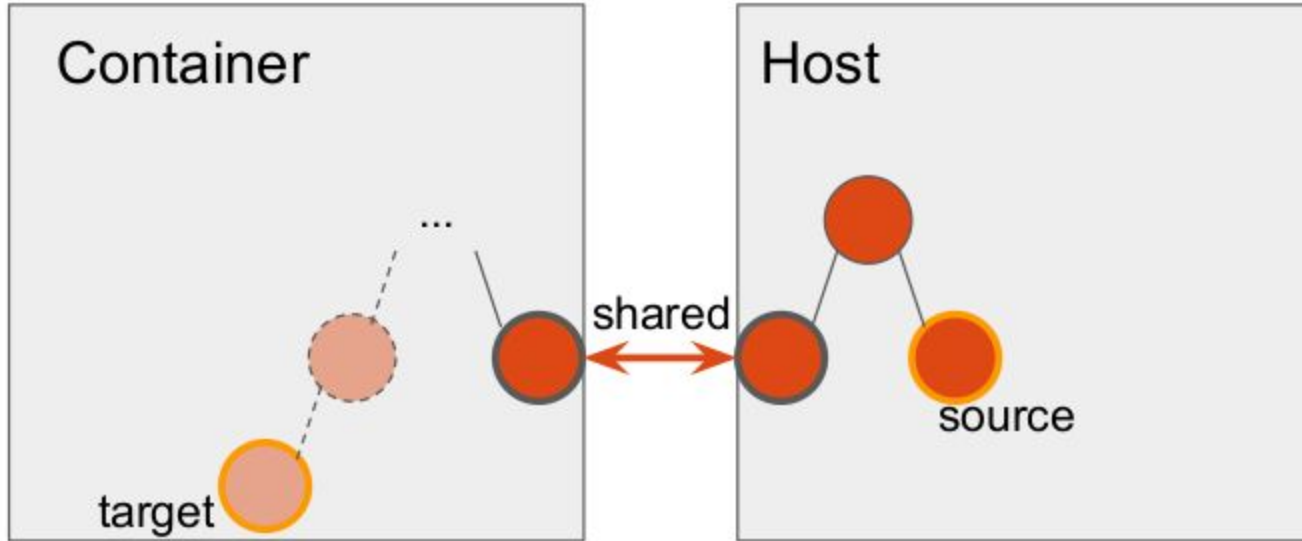
```
lxc config device remove <container> <name> \  
<type> [key=value]...
```

- Go's multithreaded runtime (hi, **setns()**!)
- Logically inappropriate

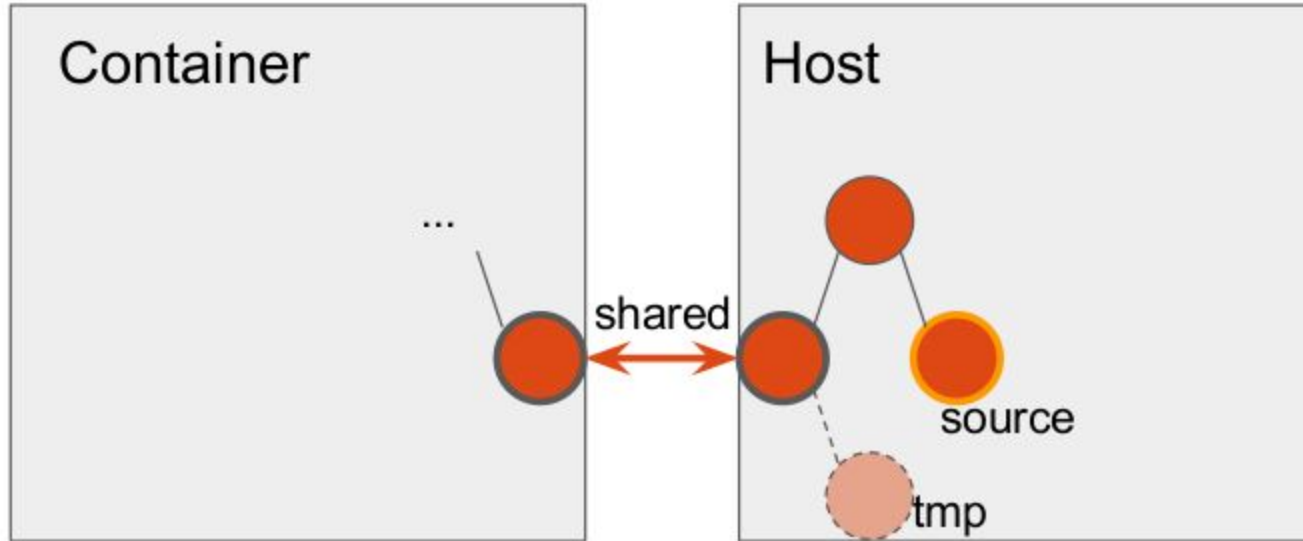
Now what?



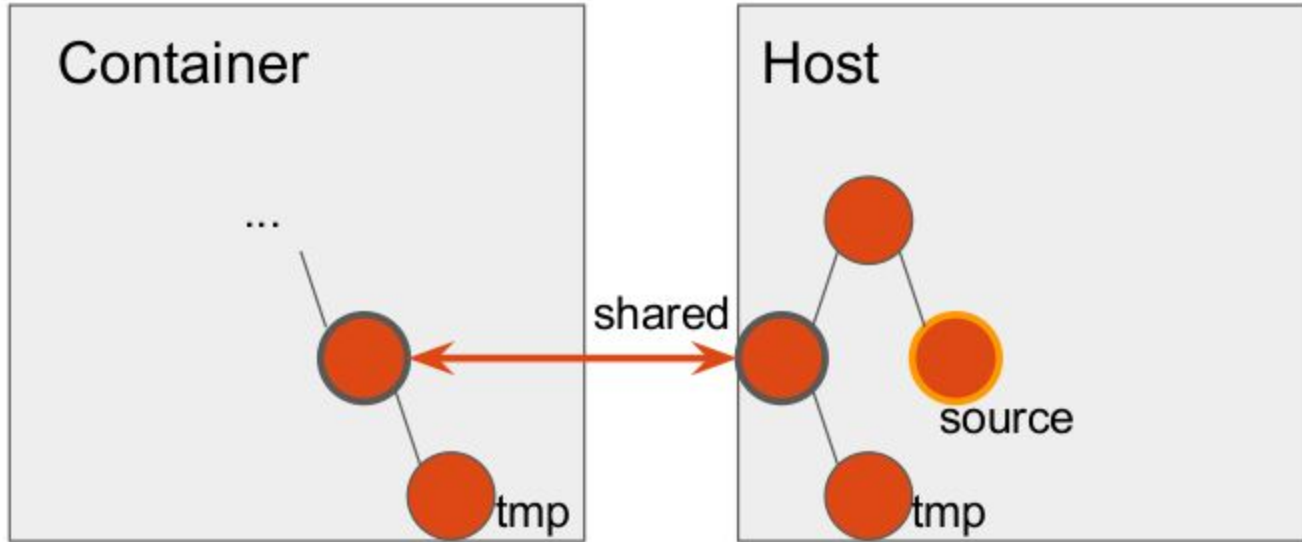
What we want is this



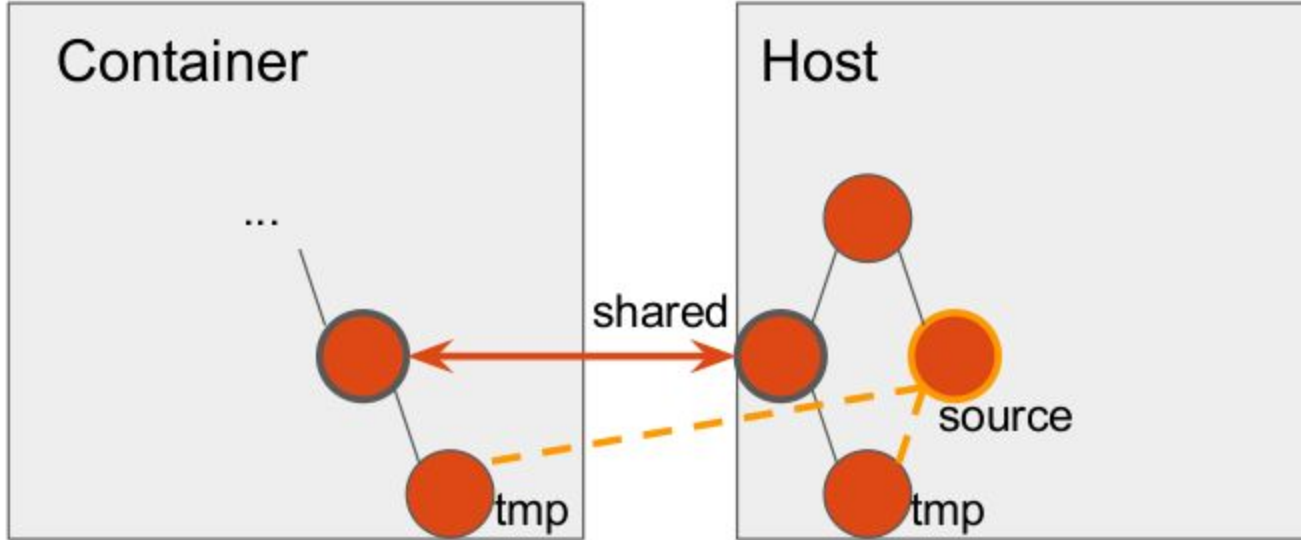
What we *do* is this:



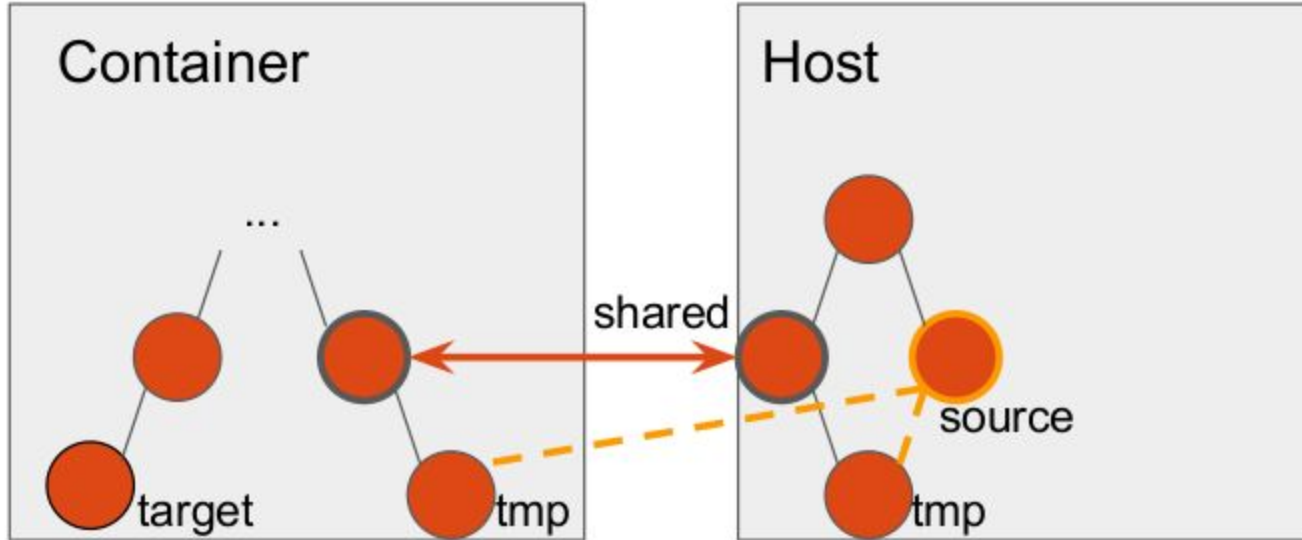
What we *do* is this:



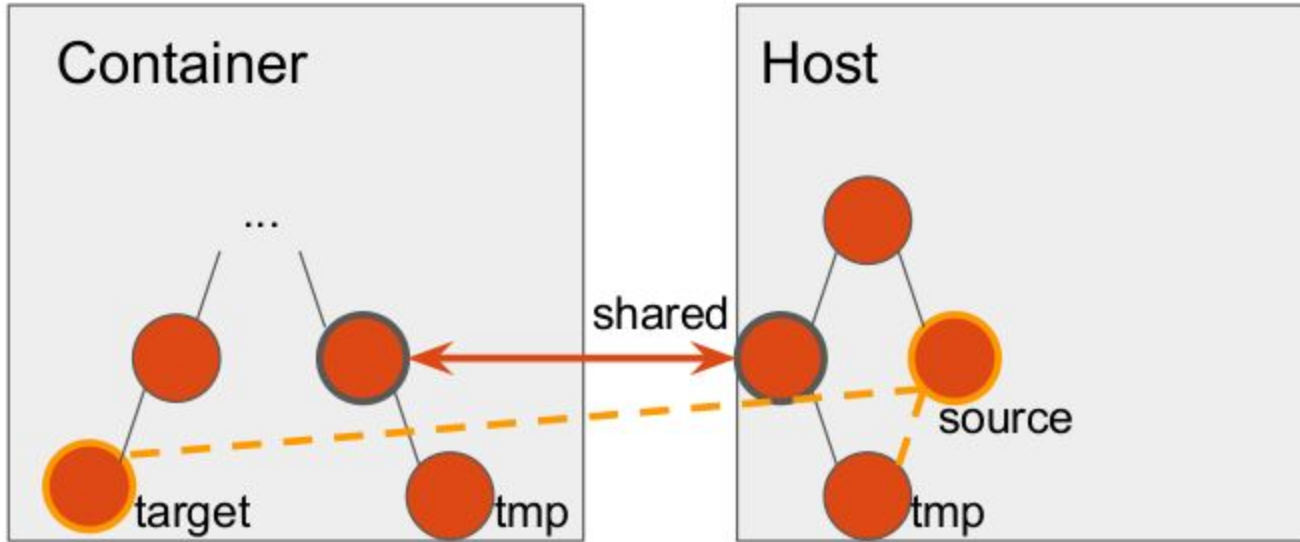
What we *do* is this:



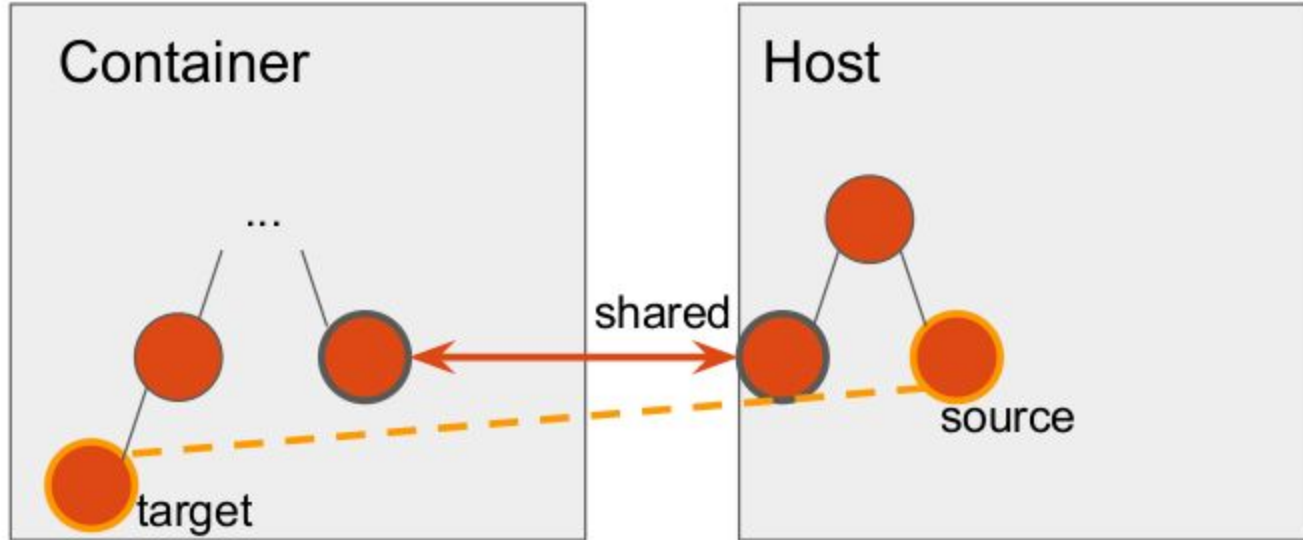
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Profit

- Pure C in holy LXC
- The mount point is shared and does not rely on the container's root propagation type



Thanks!

Questions?

