

ALE Overview (Lightweight)

To put ALE on a target device. You will probably need to create at least an initial ramdisk image. This initial ramdisk image (initrd created by 'mkaleinitrd'), may be sufficient in a purely ram disk setup (where the linux system sits only on the target device ram). Ofcourse if you decide to run only on ram, then changes to the file system will be lost b/w reboots.

To make the changes persistent b/w reboots, ALE makes use of a loopback filesystem, that is loaded from a writable device area, like a USB Thumbdrive partition, or a Writable rom area (like flash eprom). Theoretically a loopback root image (created by 'mkalelooproot' or 'mkalelooproot_inet') is really not different from an initrd image, but practically, the initrd images are MOST OF THE TIME only used to do some pre-boot setup, b4 a real root partition is mounted. ALE defines its initrd image with this traditional concept at the moment (for simplicity).

This means that for a full ram disk based system, you will use 'mkalelooproot' or 'mkalelooproot_inet' and use the resulting image as an initrd image. If you just need to do some pre boot config to your kernel, 'mkaleinitrd' will suffice. This process of reating the images is termed 'Brewing'. After 'brewing', ALE now prepares the target for deployment. This depends on an ALE script being available for the target device. For instance ALE supports the USB Thumb Drive with the 'mkalebootdisk' script. Other targets will become available as I study and implement them or as other contributors make them available.