



Cloning Linux Images on VM

David Boyes

Sine Nomine Associates (SIN)

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Preparatory Steps

- ✦ Step A: Divide filesystems by major hierarchy on separate minidisks (eg, /usr, /bin, /lib, etc on separate disks)
- ✦ Move writable files to /var/config/<original location> and symlink to original location.
 - ✦ Note: must be symlink as hard links cannot cross partitions
- ✦ Step B: Generate statically linked /etc/mount and /etc/ifconfig.
- ✦ Step C: Recode startup rc scripts to explicitly call static version of utilities when necessary.

Build the New Machine...

☀ Process:

- ☀ Generate CP directory entry linking /usr, /bin, /lib, /etc as RO links to master copy
- ☀ Add RW minidisks for root, swap, and /var
- ☀ DDR initial root and swap from master copy to RW minidisks and IPL Linux.

Configure...

- Populate /var using initial tar file unpacked from /usr/setup/files to configure system as 192.168.1.2
- Allocate IP address and write CMS NAMES format file on configuration disk using a DVM
 - Hostname
 - IP address
 - Netmask
 - Default GW
 - Root password
 - Disk list.
- Export disk with CMS NFS to 192.168.1.2
- Shutdown/reipl of Linux

Final Configuration

- ✦ Mount configuration minidisk via NFS
- ✦ Modify `/etc/rc.0` to look for `/etc/rc.runonce`
 - ✦ Uses `hcp` command to identify virtual machine.
 - ✦ Read config file written by DVM and deposit items accordingly in Linux config files.
 - ✦ Shutdown `-r now`

Next?

- ☀ Preconfigured pools of ids

- ☀ Halt at 2nd reboot allows them to be created and then allocated at need with single write of CP directory and completion of the config file.
- ☀ Use of a pooled id generates a CMS Batch job to create a new id in the background.
- ☀ Cuts creation time to < 10 secs.