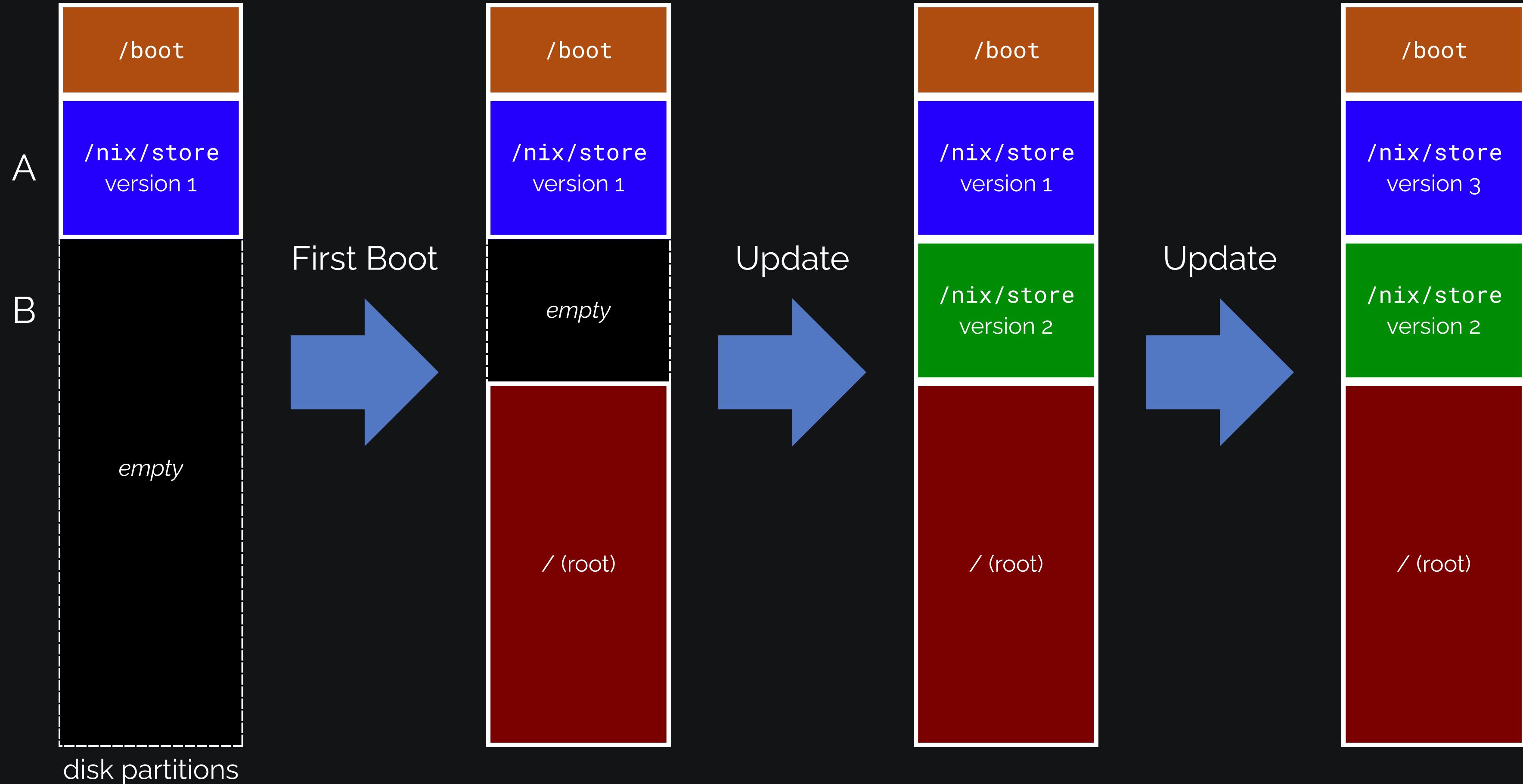




NixOS
+ systemd-repart
+ systemd-sysupdate
= ❤️ OTA updates

A quick look into the latest upstreamed facilities in NixOS for
automatic system updates with immutable A/B system partitions

systemd-repart & systemd-sysupdate in action



systemd-repart Images

NixOS config:

```
{ modulesPath, ... }:
{
  imports = [ (modulesPath + "/image/repart.nix") ];

  image.repart = {
    # image definition here
  };
}
```

defines ➔ config.system.build.image

systemd-sysupdate

configurable systemd unit and timer.
automatic background update & reboot.

NixOS config:

```
{ modulesPath, ... }:

{
  systemd.sysupdate = {
    enable = true;
    transfers = {
      "10-nix-store" = {
        Source = { ... };
        Target = { ... };
      };
      # ...
    };
  };
}
```

Minimize NixOS

NixOS config:

```
{ modulesPath, ... }:
{
  imports = [
    (modulesPath + "/profiles/image-based-appliance.nix")
    (modulesPath + "/profiles/perlless.nix")
  ];

  # good start
}
```

👉 No Nix, Perl, docs, etc.



And Now?

- Signed system updates
- Enrolling hardware security tokens and devices at first boot
- Verity Partitions
- Automatic Boot Assessment
- System Hardening



Thank You



repo +
video



github.com/applicative-systems/nixos-appliance-ota-update