

# # nixos-rebuild

...how to get fancy diffs between generations

## # nixos-rebuild switch

- ❑ Build the new configuration
- ❑ Make it the default configuration for booting
- ❑ Try to realise the configuration in the running system (e.g., by restarting system services)

[NixOS manual: Changing the Configuration](#)

## # nixos-rebuild test

- ❑ Build the new configuration
- ~~❑ Make it the default configuration for booting~~
- ❑ Try to realise the configuration in the running system  
(e.g., by restarting system services)

[NixOS manual: Changing the Configuration](#)

## # nixos-rebuild boot

- ❑ Build the new configuration
- ❑ Make it the default configuration for booting
- ~~❑ Try to realise the configuration in the running system  
(e.g., by restarting system services)~~

[NixOS manual: Changing the Configuration](#)

# # nixos-rebuild build

- ❑ Build the new configuration
- ~~❑ Make it the default configuration for booting~~
- ~~❑ Try to realise the configuration in the running system  
(e.g., by restarting system services)~~

[NixOS manual: Changing the Configuration](#)

```
# nixos-rebuild build  
# cat ./result/activation
```

- ❑ Activation script
- ❑ Bash script called to activate the new configuration
- ❑ Executed on every boot and system switch
- ❑ We can configure it! 🔥

[NixOS manual: Activation script](#)

```
{  
  system.activationScripts = { };  
}
```

- ❑ Set of shell script fragments executed on activation
- ❑ Important that they are idempotent and fast

[search.nixos.org](https://search.nixos.org)

Demo time



# Resources

[NixOS manual: What happens during a system switch?](#)

[nvd - Nix/NixOS package version diff tool](#)

[Nix manual: nix store diff-closure](#)

[Discourse discussion on diff integration](#)

[Open nixpkgs PR to integrate \(help wanted, Perl\)](#)

[Activation script in my NixOS config on GitHub](#)