Learning Linux

Creating a Fedora Remix

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Fedora Remix Creation Quickstart

This quickstart will provide a quick method to download a pre-built Fedora Remix as well as creating your own Fedora Remix Building system. The https://github.com/tmichett/Fedora_Remix has been created with Ansible playbooks that will setup a Fedora Remix Building system using the Fedora Remix installed from the liveCD provided (https://drive.google.com/drive/folders/1UAT07AJIrTdMk3ke_QE6S6vz-qn6qGtR). The requirements are relatively simply to build and the system has Fedora Remix customization scripts and self-launching menu to assist with the initial setup.

Building your own Fedora Remix - Overview

1. Download the Fedora Remix ISO and install locally to hard drive

    a. Setup a local user and ensure it is in the SUDOERS file

    b. Run some the Fedora Remix customize scripts to create SSH keys and SUDO with no password

2. Clone https://github.com/tmichett/Fedora_Remix

3. Run the Ansible playbooks with the "sudo" command

    a. Prepare_Web_Files.yml

    b. Prepare_Fedora_Remix_Build.yml

4. Modify the Kickstart files in **/livecd-creator/FedoraRemix**

    a. FedoraRemix.ks - To control various setup components and run commands

    b. FedoraRemixPackages.ks - To control RPM packages that are installed as part of your Remix

5. Run the **Remix_Build_Script.sh**

Quickstart

This quickstart provides detailed information on how to download, install, and create your custom Fedora Remix. It depends first on having the Fedora Remix installed locally and access to the Github repository and playbooks contained withing the repository.

1. Preparing a Build System

1.1. Getting Started

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Initial Configuration

- **User for Ansible**: ansible

- **Password for Ansible User**: ansiblepassword

- User in sudoers.d file to become root without prompting for password

Listing 1. /etc/sudoers.d/ansible File

1.1.1. Preparing Environment

In order to prepare the environment, you will need a system running with Fedora already installed from the LiveCD and it will also need to have sufficient disk space to download REPO files, create the repository, and house the DVD ISO that is being created.

Required Items for Build Environment

- Same version of Fedora as Remix

- Same system architecture as Remix

- SELinux in **permissive** Mode

- Packages

  - livecd-tools

  - spin-kickstarts

- Lots of disk space

Default Kickstart files

The default kickstart files are installed in **/usr/share/spin-kickstarts**.

Listing 2. Initial Kickstart Files

```
fedora-cinnamon-common.ks          fedora-live-kde-base.ks
fedora-cloud-base-gcp.ks           fedora-live-kde.ks
fedora-cloud-base.ks               fedora-live-lxde.ks
fedora-cloud-base-vagrant.ks       fedora-live-lxqt.ks
fedora-comp-neuro-common.ks        fedora-live-mate_compiz.ks
fedora-container-base.ks           fedora-live-minimization.ks
```

```
fedora-container-base-minimal.ks    fedora-live-python-classroom.ks
fedora-container-common.ks          fedora-live-robotics.ks
fedora-design-suite-common.ks       fedora-live-scientific_kde.ks
fedora-disk-base.ks                 fedora-live-security.ks
fedora-disk-kde.ks                  fedora-live-soas.ks
fedora-disk-minimal.ks              fedora-live-workstation.ks
fedora-disk-python-classroom.ks     fedora-live-xfce.ks
fedora-disk-server.ks               fedora-lxde-common.ks
fedora-disk-soas.ks                 fedora-lxqt-common.ks
fedora-disk-workstation.ks          fedora-mate-common.ks
fedora-disk-xbase.ks                fedora-minimal-common.ks
fedora-disk-xfce.ks                 fedora-modular-arm-server.ks
fedora-eln-container-base.ks        fedora-modular-disk-minimal.ks
fedora-eln-guest.ks                 fedora-neuro-gnome-common.ks
fedora-i3-common.ks                 fedora-python-classroom-common.ks
fedora-iot.ks                       fedora-python-classroom-gnome-common.ks
fedora-kde-common.ks                fedora-python-classroom-vagrant.ks
fedora-kde-minimization.ks          fedora-repo.ks
fedora-live-astronomy_kde.ks        fedora-repo-not-rawhide.ks
fedora-live-base.ks                 fedora-repo-rawhide.ks
fedora-live-cinnamon.ks             fedora-scientific-common.ks
fedora-live-comp_neuro.ks           fedora-scientific-vagrant.ks
fedora-live-design_suite.ks         fedora-soas-common.ks
fedora-live-games.ks                fedora-workstation-common.ks
fedora-live-i3.ks                   fedora-xfce-common.ks
fedora-live-jam_kde.ks              snippets
```

The one Fedora starts with is **fedora-live-base.ks**.

1.1.2. Create Build and Package Cache Directories and Copy Kickstarts

A build and cache directory should be created and you should copy kickstart files to your build directory.

Listing 3. Create Build Directory

```
mkdir -p /livecd-creator/{FedoraRemix,package-cache}
```

Listing 4. Copy the Base KS and the Desired Custom KS to the FedoraRemix directory

```
cp /usr/share/spin-kickstarts/fedora-live-base.ks /livecd-creator/FedoraRemix/

cp /usr/share/spin-kickstarts/fedora-repo.ks /livecd-creator/FedoraRemix/

cp /usr/share/spin-kickstarts/fedora-workstation-common.ks /livecd-creator/FedoraRemix/
```

```
cp /usr/share/spin-kickstarts/fedora-repo-not-rawhide.ks /livecd-creator/FedoraRemix/

cp /usr/share/spin-kickstarts/fedora-live-workstation.ks /livecd-creator/FedoraRemix/FedoraRemix.ks
```

Customizing Repositories

Modify and update the *** with the correct repositories to use. Comment out the *RAWHIDE** and use the repos for the version of Fedora you are Remixing.

2. Preparing a Build System

2.1. Getting Started

2.1.1. Preparing Environment

Appendix A: Fedora Remix