

# Build Your Own Remix

**CAUTION: DO NOT TRY DOING THIS FROM A SOAS USB STICK. A MINIMUM OF 8GB IS REQUIRED TO BUILD A CUSTOM-REMIX.ISO**

A 8GB USB is a minimum requirement.

It is usually Cheaper to buy a 120GB or larger external USB Hard Drive and install fedora on it.

**A Gnome Desktop install seems to work best.**

**THIS SHOULD BE LOOKED AT FIRST:**

<http://download.sugarlabs.org/soas/docs/customization-guide>

**NOTE: also look at SugarClone:**

(SugarClone duplicates a customized live USB to 2nd USB.)

Sugar Clone, [http://wiki.sugarlabs.org/go/Sugar\\_on\\_a\\_Stick/Sugar\\_Clone](http://wiki.sugarlabs.org/go/Sugar_on_a_Stick/Sugar_Clone), is a short-cut method to customize a SoaS installation that works with a single-word command. It would probably serve the targeted-project, special-focus case.

**The following is Modified/Adapted from:**

[https://fedoraproject.org/wiki/Talk:How\\_to\\_create\\_and\\_use\\_a\\_Live\\_CD](https://fedoraproject.org/wiki/Talk:How_to_create_and_use_a_Live_CD)

## Introduction

**NOTE THAT THESE REMIXES ARE NOT SUPPORTED BY FEDORA**

You may find some volunteer support on IRC freenode #sugar however.

This page explains how to make a custom-content Live CD or DVD on Fedora-based systems including derived distributions such as RHEL, CentOS and others.

If you simply want to burn a pre-made ISO to a disc, visit <http://fedoraproject.org/en/get-fedora>

to download a LiveCD or LiveDVD, then look at:

<http://docs.fedoraproject.org/install-guide/>

[http://docs.fedoraproject.org/en-US/Fedora/13/html/Burning\\_ISO\\_images\\_to\\_disc/](http://docs.fedoraproject.org/en-US/Fedora/13/html/Burning_ISO_images_to_disc/)

for further instructions.

## Instructions

The basic work-flow for creating a remix is:

1. Create / *Modify* a kickstart file that specifies the packages you want installed on your remix, along with special settings you want to tweak.
2. Run that kickstart file through `livecd-creator`, which will pull in the packages and compose an `.iso`, which you can then burn to CD.

...that's it! We will walk you through these steps below.

### Install the necessary software

To create a live image, the **livecd-creator** tool is used. Super user privileges are needed. The tool is more or less self-documenting, use the `--help` option to see options.

The **livecd-creator** tool is part of the `livecd-tools` package. If it is not installed on your system, add it with:

```
su -c 'yum install livecd-tools spin-kickstarts'
```

If you are interested in localized live cd files, install also **l10n-kickstarts**.

```
su -c 'yum install l10n-kickstarts'
```

### Note the spin-kickstart files that download are specific for the version of fedora you are using

The version of sugar created will also be different for each version of fedora:

f12 0.86.-

f13 0.88.-

f14 (rawhide) 0.89.- (0.90.-?)

### Set up your environment

Now we'll set up the place you'll be building your remix's image file in. We assume you're running a recent version of Fedora.

We will use the `/home/(user*)/Desktop` to do our builds

Note: If you use the Kickstart files in the default installed location in `/usr/share/spin-kickstarts` you will have permission problems editing the files.

- Set SELinux in permissive mode:

```
su -c 'setenforce 0'
```

- Copy the kickstart files you've Downloaded to your Desktop:

(user\*)= your user name

```
mkdir /home/(user*)/Desktop/spin-kickstarts  
cp /usr/share/spin-kickstarts/*.ks /home/(user*)/Desktop/spin-kickstarts/  
cd /home/(user*)/Desktop/spin-kickstarts/
```

- Edit one of the .ks files you just copied to your Desktop/spin-kickstarts directory

```
gedit
```

### Create/Modify the kickstart file

1. Open the kickstart file you chose from the spin-kickstart folder you copied to your Desktop in the editor of your choice.:
2. Create the package manifest section and add your favorite packages:

```
%packages
foo
baz
bar
%end
```

### [More Information

- `%packages`

Add and or remove programs

Any Program with a minus sign (-) will be removed; any program without a minus will be added

- `%post`

Manipulate files that have been installed

`%post` command are done in *chroot* (the commands are only run against the new file system created for the live CD)

- To change repository: (eg: enable rawhide)

Edit the fedora-live-mini.ks

Put # in front of repos you do not want to use  
(remove # )from The repos you want to use

**EXAMPLE:** `repo --name=rawhide --mirrorlist=http://mirrors.fedoraproject.org/mirrorlist?repo=rawhide&arch=\$basearch`

- Look at this .ks for usage examples:<http://people.sugarlabs.org/Tgillard/Mirabelle-Remix-plain.ks>
- **Congrats -- you're done!**

## Example Terminal Command to Build .iso

**You must be connected to a fast Internet connection for this to work**

## build system using fedora-livecd-soas.ks

(This example works with a f13 Build System)

- In terminal /home/(user)/Desktop:

```
su "#"  
livecd-creator \  
--config=/home/(user)/Desktop/spin-kickstarts/fedora-livecd-soas.ks \  
--fslabel=Soas-v(2-3-4)-ddmmyear-Remix --cache=/var/cache/live --verbose
```

- **KEY**

--fslabel=Soas-v(2-3-4)-ddmmyear-xxxx-Remix = (The name you specify for the CD remix)

Explanation of format for name: (preliminary layout pending approval by Soas)

v(2-3-4)= the sugar version v(2-3-4)

v2= Fedora 12 sugar 0.86-

v3= Fedora 13 sugar 0.88-

v4= Fedora 14 sugar 0.89-0.90

dd/mm/year= The Creation Date

-xxxx = custom name

**Remix is REQUIRED for naming if Soas is used**

--config=/home/(user\*)/Desktop/spin-kickstarts/ \* (path to your Desktop/spin-kickstarts folder and .ks file)

## Build the image

- The build process will take some time, as well as space and bandwidth.

Success is indicated by message:

**"Setting supported flag to 0"**

your new remix CD.iso is located in your Home Folder.

## Credits

Parts of this page were based on Rahul Sundaram's article :

<http://www.linuxforu.com/how-to/roll-out-a-fedora-remix/>

And the References listed below:

# Share your Custom.ks File

- we plan to have a listing of Customized kickstart.files to share on the WIKI

We will list them here so others can try them out and learn from them.

Please send e-mail to:

```
To: soas@lists.sugarlabs.org
Subject: [Custom KS]-{Name of your kickstart file}
*Attach your Custom.ks file*
PLEASE INCLUDE THE FOLLOWING INFORMATION in e-mail:
Sugar Version :
(0.82; 0.86.x; 0.88.x; 0.89.x)
Country / Deployment :
Build system fedora version :
Number of USB's in Deployment :
PC/Netbooks used :
Notes and Any Bug No's submitted :
```



Name	Kickstart.file	Sugar Version	Country / Deployment	Build system fedora version	Number of USB's in Deployment	Used with PC/Netbooks Types	CD.iso (if available), Notes, Comments, Bug No's submitted.
satellit	Mirabelle-remix <a href="#">[7]</a>	Sugar 0.86.3	USA / Testing	f13	Testing	EeePC900; Acer Aspire One	<a href="#">[8]</a> Works fine, CD, liveinst, zyx-liveinstaller, USBscr,dd, Liveusb-creator all work Read(bug) <a href="#">[9]</a>
satellit	soas-v4-0725-Remix <a href="#">[10]</a>	Sugar 0.89.1	USA /Testing	f14(rawhide)	Testing	EeePC900; Acer Aspire One	<a href="#">[11]</a> Works fine, CD, zyx-liveinstaller, USBscr,dd <b>Liveinst Fails on firstboot</b> cannot log on Read(bug) <a href="#">[12]</a>
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## References/Links

### Fedora

- <http://mirrors.ibiblio.org/pub/mirrors/sugar/soas/docs/customization-guide/index.html>
- [https://fedoraproject.org/wiki/Talk:How to create and use a Live CD](https://fedoraproject.org/wiki/Talk:How_to_create_and_use_a_Live_CD)
- [https://fedoraproject.org/wiki/How to create and use a Live CD](https://fedoraproject.org/wiki/How_to_create_and_use_a_Live_CD)
- <http://www.linuxforu.com/how-to/roll-out-a-fedora-remix/>
- <http://www.ibm.com/developerworks/linux/library/l-fedora-livecd/>

### Detailed KS Links

- **NOTE: This Part Under Construction...Info may be out of date or not applicable**
- <http://www.redhat.com/docs/manuals/enterprise/RHEL-4-Manual/sysadmin-guide/index.html>
  - <http://www.redhat.com/docs/manuals/enterprise/RHEL-4-Manual/sysadmin-guide/s1-kickstart2-howuse.html>
  - <http://www.redhat.com/docs/manuals/enterprise/RHEL-4-Manual/sysadmin-guide/s1-kickstart2-file.html>
  - <http://www.redhat.com/docs/manuals/enterprise/RHEL-4-Manual/sysadmin-guide/s1-kickstart2-options.html>
  - <http://www.redhat.com/docs/manuals/enterprise/RHEL-4-Manual/sysadmin-guide/s1-kickstart2-packageselection.html>
  - <http://www.redhat.com/docs/manuals/enterprise/RHEL-4-Manual/sysadmin-guide/s1-kickstart2-postinstallconfig.html>
  - <http://www.ibm.com/developerworks/linux/library/l-fedora-livecd/index.html>
  - <http://forums.fedoraforum.org/showthread.php?t=231281>
  - <http://fedoraproject.org/wiki/FedoraLiveCD>

**Bugs:** <https://bugzilla.redhat.com/buglist.cgi?component=livecd-tools&product=Fedora>