

## Soft Link and Hard Links

### Example:

Create two files:

```
$ touch blah1
```

```
$ touch blah2
```

Enter some data into them:

```
$ echo "Cat" > blah1
```

```
$ echo "Dog" > blah2
```

And as expected:

```
$cat blah1; cat blah2
```

```
Cat
```

```
Dog
```

Let's create hard and soft links:

```
$ ln blah1 blah1-hard
```

```
$ ln -s blah2 blah2-soft
```

Let's see what just happened:

```
$ ls -l
```

```
blah1
```

```
blah1-hard
```

```
blah2
```

```
blah2-soft -> blah2
```

Changing the name of blah1 does not matter:

```
$ mv blah1 blah1-new
```

```
$ cat blah1-hard
```

```
Cat
```

blah1-hard points to the inode, the contents, of the file - that wasn't changed.

```
$ mv blah2 blah2-new
```

```
$ ls blah2-soft
```

```
blah2-soft
```

```
$ cat blah2-soft
```

cat: blah2-soft: No such file or directory

The contents of the file could not be found because the soft link points to the name, that was changed, and not to the contents.

Similarly, If blah1 is deleted, blah1-hard still holds the contents; if blah2 is deleted, blah2-soft is just a link to a non-existing file.