

The REFLINK Operation in OCFS2

Joel Becker
Tao Ma
Oracle

Problem

Virtual Machines want:

- Snapshots
- Clones
- Space savings

The REFLINK Operation

```
int reflink(const char *oldpath,  
           const char *newpath);
```

`reflink()` has the same calling semantics as `link(2)`, but creates a new file that shares all the data extents of the source file.

Using REFLINK

Snapshots:

```
# umask 333 && reflink host1.img \  
host1.img.snap
```

Restore:

```
# unlink host1.img  
# reflink host1.img.snap host1.img
```

Clones:

```
# reflink os-base.img host1.img  
# create-vm --name host1 host1.img
```

Discuss!

Questions?

Thank you for having us here.
Joel & Tao