automount

The Kernel–assisted Automounter

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Theory of Operation

- Access to path under automounter–controlled directory is flagged by kernel.
- Kernel notifies automounter.
- Automounter looks up filesystem (map) using name of path and mounts it.
- Automounter returns success code to kernel.
- After inactivity, automounter unmounts fs.

Known Map Sources and Maps

- Map file
- NIS
- hesiod

Map formats understood by autofs

- Hesiod (filsys) entries
- Sun automounter map format

Sample Sun Maps

```
kernel     -fstype=nfs,ro       ftp.kernel.org:/pub
linux      -fstype=afs,ro       :/afs/eos/project/linux
wfw        -fstype=smbfs,ro     ://smbserver/share
hda1       -fstype=ext2,rw      :/dev/hda1
```

Internal Code Organization

- Lookup module
  looks up map using its own source, then calls
- Parser module
  extracts generic mounting information from
  map, then calls
- Mounter module
  does the work of mounting the filesystem
- Unmounting handled by automounter.

Where to get it.

- Red Hat 5.0
- ftp://ftp.kernel.org/pub/Linux/daemons