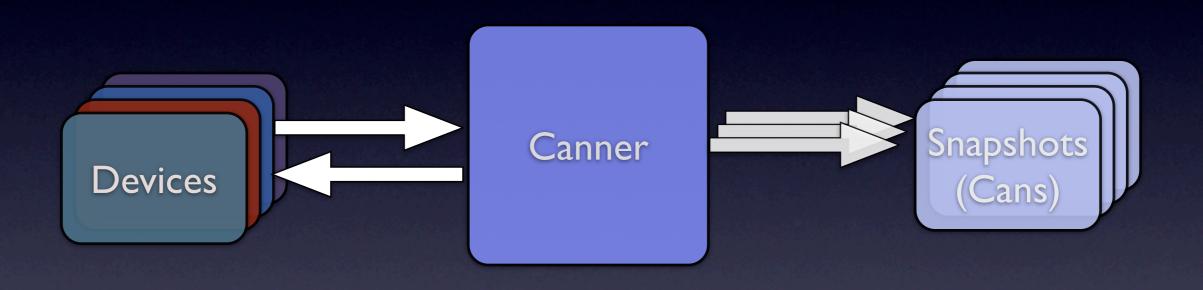
### Canner Architecture

February 2008 http://canner.bangj.com

#### Cans

- Snapshot of a device
- Contains:
  - Configuration Files (running.cfg, juniper.conf)
  - Output of 'show commands'
  - Log files of command interaction

## 10,000 Foot View



# Tags

- Format: kind--name
- Kind 'name server' or 'BGP peer'
- Only Tags of the same kind are comparable
- Contexts allow Tags to have relationships
  - IPv4 subnet--192.0.2.0/24 in context IPv4 address--192.0.2.1
  - routing protocol--OSPFv2 in context OSPF Area--0.0.0.0
- Also Sort Name, Display Name

## Taggers

- Extract properties from config files or 'show commands'
- Written in any programming language
  - We provide Python classes for you
- Triggers can be kind or kind--name
  - chain dependencies using directories
  - Example: if os--ios exists, run tagger for file--running.cfg

- Taggers are run when matching tags found
- Taggers passed environment variables
  - SESSION\_DEVICE, TRIGGER\_FILENAME, etc.
- Output Tags to stdout in JSON (RFC 4627)

```
{
    "location": "foo.txt:100",
    "tag": "IPv4 subnet--24.1.2.0/28",
    "sort_name": "18010200/28",
    "display_name": "24.1.2/28",
},
{
    "location": "foo.txt:100",
    "tag": "IPv4 address--24.1.2.3",
    "sort_name": "18010203"
    "implies": "IPv4 subnet--24.1.2.0/28"
}
```

### Canner Architecture

