ZeroConf and OSC

(Or things to do with OSC when you are bored in Santa Barbara)
What is ZeroConf?
OSC and Rendezvous

```python
OSCServices.knownServices;

[ OSCService(SuperCollider, 10.0.2.1, 57110), OSCService(Occam, 10.0.2.1, 57117) ]

OSCServices.knownServices.at(0).netAddr.sendMsg("/s_new", "ping", 1002, 0, 0, \freq, 120);
```
Use Scenario
Publishing

- Type — _osc._udp. (or _osc._tcp.)
- Name — SuperCollider
- Port — 57110
- Domain — local.
Rendezvous Code

CFStringRef serviceType = 0;
switch (protocol)
{
    case kSCRendezvous_UDP:
        serviceType = CFSTR("_osc._udp.".constant
        break;
    case kSCRendezvous_TCP:
        serviceType = CFSTR("_osc._tcp.".constant
        break;
}

CFNetServiceRef netServiceRef =
    CFNetServiceCreate(NULL, // use default allocator
        CFSTR(""), // use default domain
        serviceType,
        CFSTR("SuperCollider"),
        portNum);

CFNetServiceRegister(netServiceRef, NULL); // don't care about the error
Discovering

- request services of type `_osc._udp`.
- as needed, resolve the service
- once necessary information is received, stop resolving the service (but remember the info)
Demo — SC & Occam

Occam

Port 57117
MIDI Source Occam
Status Running
URLs

• http://www.zeroconf.org/
• http://www.ietf.org/html.charters/zeroconf-charter.html
• http://www.porchdogsoft.com/products/howl/
• http://www.dns-sd.org/