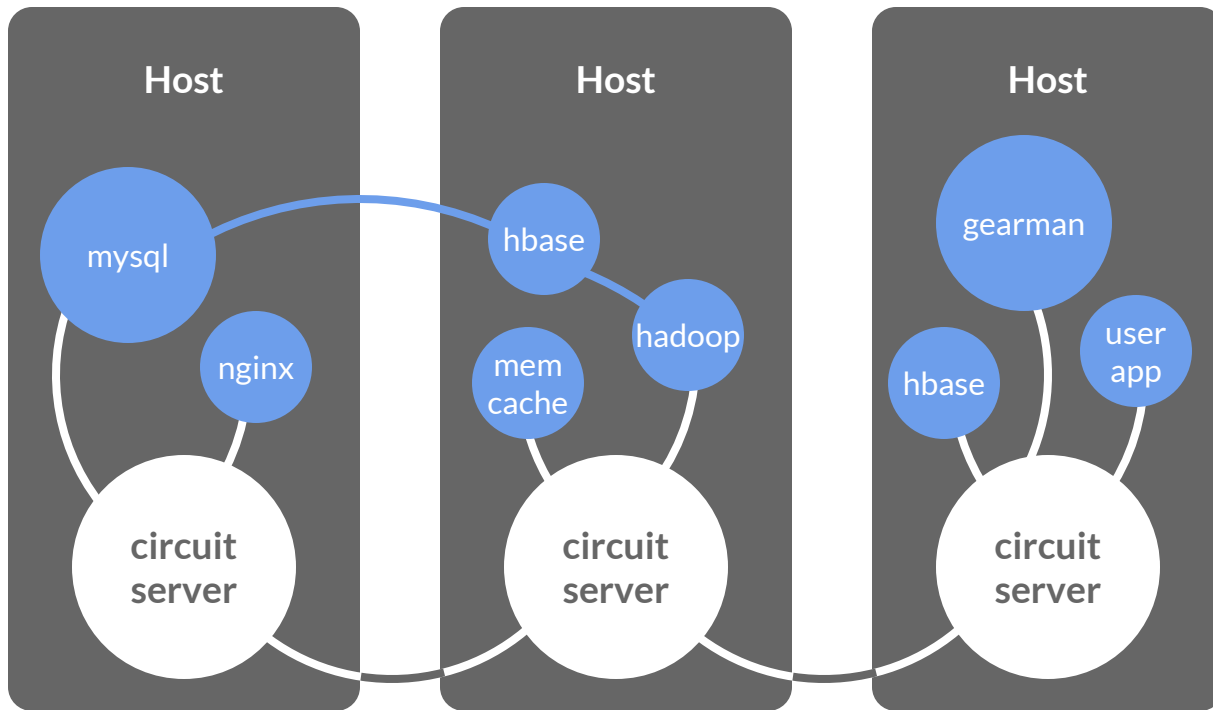


Building clouds with Circuit & Escher

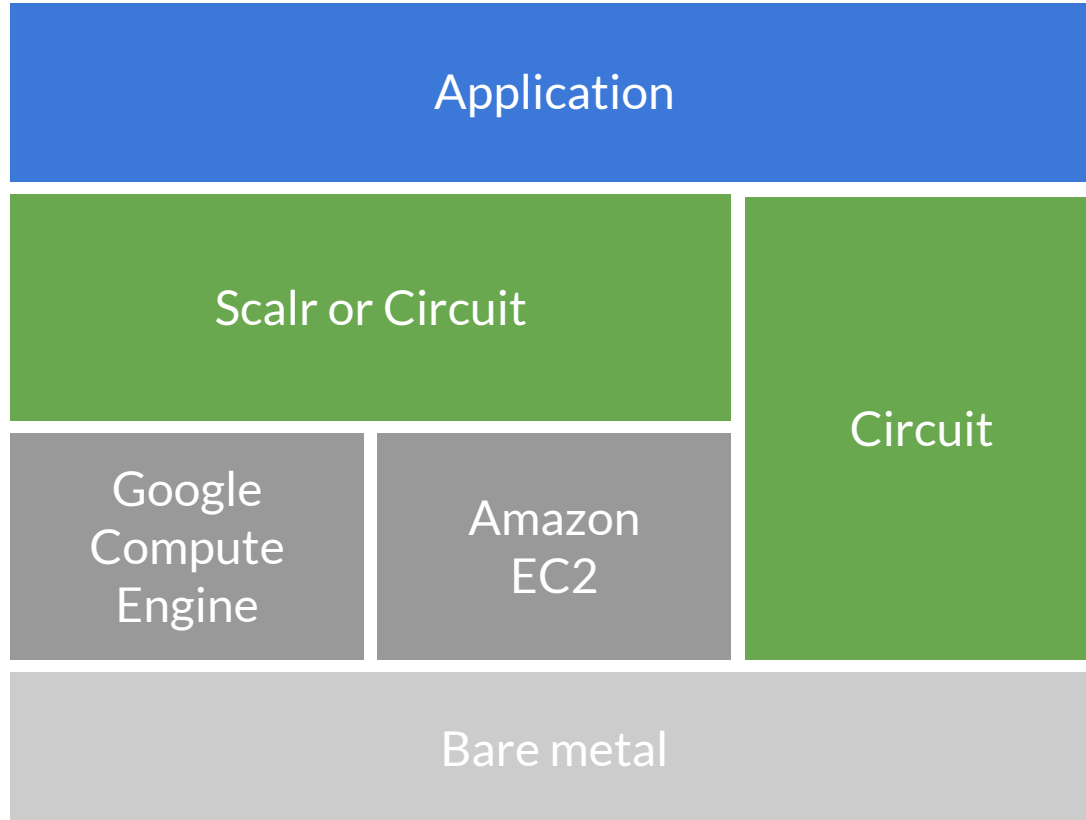
Petar Maymounkov
gocircuit.org
escher.io
2015

Circuit = daemon + cloud API

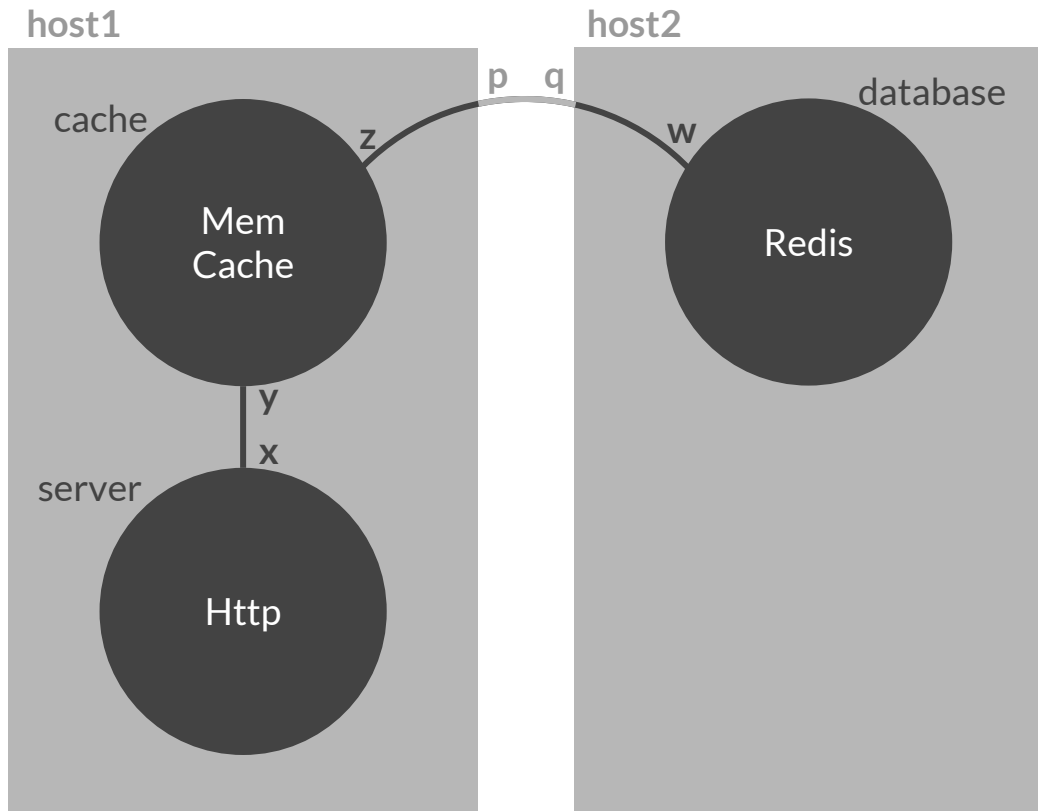
Light alternative to cloud management tools (Goole, Amazon, Scalr)



Comparison to other systems



Escher = formal cloud state syntax



```
{
  host1 {
    cache MemCache
    server Http
    cache:y = server:x
    cache:z = :p
  }
  host2 {
    database Redis
    database:w = :q
  }
  host1:p = host2:q
}
```

Formal circuit differences

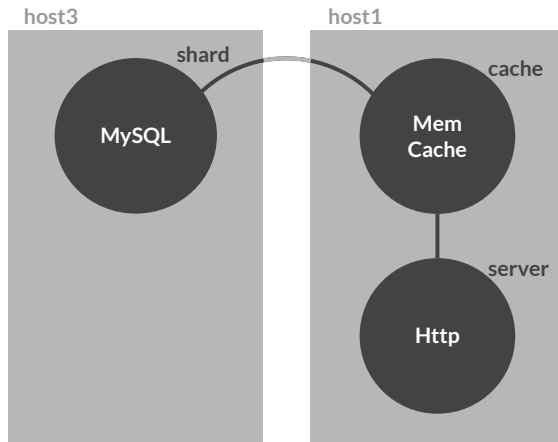
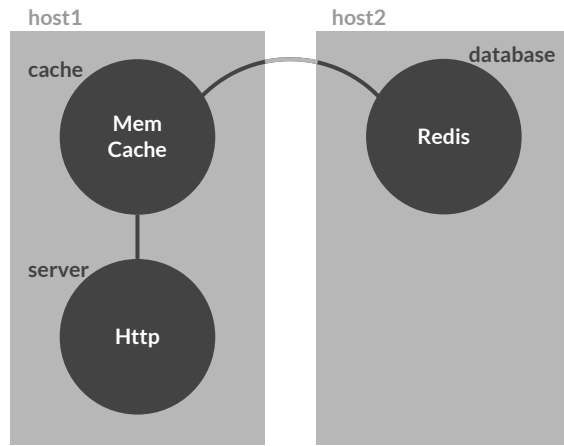
current state

-

desired state

=

necessary change



3-step workflow tool

Any backend (Circuit, Amazon, Google)

```
cloud sense > current.circuit
```

```
cloud diff desired.circuit current.circuit > diff.circuit
```

```
cloud materialize diff.circuit
```

Compiler for composing circuits

