OCCI & CAMP?

Introduction to OCCI

Thijs Metsch, Intel, @befreax
Andy Edmonds, ZHAW, @dizz
What is OCCI?

"Protocol and API for Management Of Cloud Service Resources."

"It's just a CGI-script, init?"
What has OCCI achieved?

**Implementations**
- CompatibleOne
- OpenNebula.org
- Amazon Web Services
- OpenStack

**Recommendations**
- NIST
- Siena
- EGI
- Cabinet Office
OCCI & Services

CO: http://compatibleone.org
OCCI to Provision PaaS Service

One example of OCCI and PaaS

Notes concepts of:

- SLAs in cloud setups
- On-Demand Data-Aware Provisioning of Services
- Use of OCCI for a Simple Key-Value Store

Using OCCI & Services...

Python

```python
comp = client.create_vm(token, [
    'tiny; scheme="http://schemas.openstack.org/template/resource#"',
    'mongodb; scheme="http://schemas.mongodb.org/template/db#"'])
```

Ruby

```ruby
cmpt = client.get_resource "compute"
cmpt.mixins << client.find_mixin 'hadoop_service', 'os_tpl'
    << client.find_mixin 'tiny', 'resource_tpl'

client.create cmpt
```

On-the-wire

```plaintext
> POST /service/ HTTP/1.1
> User-Agent: occi-client/1.1 (linux) libcurl/7.19.4 OCCI/1.1
> Host: localhost:8888
> Accept: text/plain
> Content-type: text/plain
>
> Category: compute; scheme="http://schemas.ogf.org/occi/infrastructure#"
> Category: mongodb; scheme="http://example.com/templates/os#"
> Category: tiny; scheme="http://example.com/templates/compute#"
```
Positioning OCCI with CAMP

User

CAMP

Platform Service Management

OCCI  CDMI  Other

Broker e.g. CO

WebService

Storage Service

Firewalls

Data Service

Runtime containers (Node.js, Java)
One Possibility...

- Discovery capabilities
- VMs could compose a PaaS service
- User may want direct access to manipulate if provider allows
  - CAMP should provide this means
  - Should be API agnostic e.g. how CDMI does it
Thank you

- is a living specification.
- Implements OCI Principles
- *does* provide proven interoperability.

Come join and test (facilities are available!)
Backup
Building Platform logic with OCCI

if paas_mgt_platform requires VMs
    and receive new request:
        occi.create.vm()
        occi.create.service_endpoint()