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Open Cloud Computing Interface - RESTful HTTP Rendering applied to the platform

Status of this Document

Draft - In progress work.

Abstract

This document provides a listing of some request examples of the OCCI HTTP rendering applied to our defined platform resources.

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1 Operations on Resource instances

1.1 Create an OCCI platform resource instance

Table 1.

REST Method	POST
Request	<pre>> POST /resourceCategory/ HTTP/1.1 > [...] > > Category: resourceCategory; scheme= resourceScheme class=resourceClass; > [...] < HTTP/1.1 201 OK < [...] < Location: resourceLocation</pre>
Status Code	201 if OK, the error code otherwise.

Example: Create an Apache Axis container instance.

```
> POST /Container/ HTTP/1.1
> [...]
>
> Category: Container; scheme="http://schemas.ogf.org/occi/paas#"; class=resource;
> X-OCCI-Attribute: occi.container.name= "Axis1"
> X-OCCI-Attribute: occi.compute.version="1.4"
> X-OCCI-Attribute: occi.compute.architecture="x64"

< HTTP/1.1 201 OK
< [...]
< Location: http://example.com/Axis1
```

1.2 Retrieving an OCCI platform resource instance

Table 2.

REST Method	GET
Request	<pre>> GET resourceLocation HTTP/1.1 > [...] < HTTP/1.1 200 OK < [...] < Category: resourceCategory; scheme= resourceScheme; class=resourceClass; < [...] < Link: [...]</pre>
Status Code	200 if OK, the error code otherwise.

Example: Retrieving the /example/database1 OCCI instance.

```
> GET /example/database1 HTTP/1.1
> [...]
< HTTP/1.1 200 OK
< [...]
< Category: database; scheme="http://schemas.ogf.org/occi/paas#"; class="kind";
< X-OCCI-Attribute: occi.database.name="database1"
```

```

< X-OCXI-Attribute: occi.database.version="4.2"
< X-OCXI-Attribute: occi.database.architecture="X32"

< Link: [...]

```

1.3 Updating partially an OCXI platform resource instance

Table 3.

REST Method	POST
Request	<pre> > POST resourceLocation HTTP/1.1 > [...] > [...] < HTTP/1.1 200 OK < [...] </pre>
Status Code	200 if OK, the error code otherwise.

Example: Updating a Database instance name.

```

> POST /example/database1 HTTP/1.1
> [...]
>
> X-OCXI-Attribute: occi.database.name=database2
> [...]
< HTTP/1.1 200 OK
< [...]

```

1.4 Updating fully an OCXI platform resource instance

Table 4.

REST Method	PUT
Request	<pre> > PUT resourceLocation HTTP/1.1 > [...] > [...] < HTTP/1.1 200 OK < [...] </pre>
Status Code	200 if OK, the error code otherwise.

Example: Updating a Database instance name. **TODO:** Update the example.

```

> POST /example/database1 HTTP/1.1
> [...]
>
> X-OCXI-Attribute: occi.database.name=database2
> [...]
< HTTP/1.1 200 OK
< [...]

```

1.5 Deleting an OCXI platform resource instance

Example: Deleting the router1 instance.

Table 5.

REST Method	DELETE
Request	<pre>> DELETE resourceLocation HTTP/1.1 > [...] < HTTP/1.1 200 OK < [...]</pre>
Status Code	200 if OK, the error code otherwise.

```
> DELETE /example/router1 HTTP/1.1
> [...]
< HTTP/1.1 200 OK
< [...]
```

1.6 Triggering an Action on a platform resource instance

Table 6.

REST Method	POST
Request	<pre>> POST resourceLocation?action=actionVerb HTTP/1.1 > [...] > Category:Category; scheme=schema; class=class; > [...] < HTTP/1.1 200 OK < [...]</pre>
Status Code	200 if OK, the error code otherwise.

Example: Shutdown a database instance.

```
> POST /example/database1?action=stop HTTP/1.1
> [...]
> Category: stop; scheme="[...]"; class="action";
> X-OCCEI-Attribute: method="stopDB"
< HTTP/1.1 200 OK
< [...]
```

2 Operations on Link instances

2.1 Link resource instance creation

Table 7.

REST Method	POST
Request	<pre>> POST LinkCategory HTTP/1.1 > [...] > Category: LinkCategory;scheme="..." class= LinkClass; > [...] < HTTP/1.1 200 OK < [...] < Location:LinkLocation</pre>
Status Code	200 if OK, the error code otherwise.

Example: Create a Database Link between Axis1 container instance and Database1 instance.

```

> POST /link/databaseLink/ HTTP/1.1
> [...]
>
> Category: databaseLink;
scheme="http://schemas.ogf.org/occi/paas#";
class="kind";
> X-OCCT-Attribute: occi.core.source="http://example.com/Axis1"
> X-OCCT-Attribute: occi.core.target="http://example.com/Database1"
> [...]
< HTTP/1.1 200 OK
< [...]
< Location: http://example.com/link/databaseLink1

```

2.2 Retrieval of a Link resource instance

Table 8.

REST Method	GET
Request	<pre> > GET LinkLocation HTTP/1.1 > [...] < HTTP/1.1 200 OK < [...] < Category: LinkCategory; scheme="..." class= LinkClass; < [...] </pre>
Status Code	200 if OK, the error code otherwise.

Example: Retrieving the databaseLink1 instance.

```

> GET http://example.com/link/databaseLink1 HTTP/1.1
> [...]
< HTTP/1.1 200 OK
< [...]
< Category: databaseLink; scheme="http://schemas.ogf.org/occi/paas#"; class="kind";
< X-OCCT-Attribute: occi.databaseslink.state="active";

```

2.3 Inline Creation of a Link Instance

2.4 Retrieving Resource instances With Defined Links

3 Contributors

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Name	Affiliation	Contact
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