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OpenClass Vocabulary

OpenClass uses some different vocabulary in its services. So it's important to understand the semantic differences to make transition easier.

Institution: a top-level organization that offers courses to users.

Enrollment: a user who is associated with an institution. To create an enrollment is to create a new user within an institution—with a given role. “A user is *enrolled* in an institution.”

Course Section: A course instance.

Registration: Associates an enrollment to a course section. “A user is *registered* for a course.”

Lookup Institution (by 'slug')

The 'slug' is assigned on the user interface when the institution is created.

Remember the “id” (highlighted below in the example response) as it's used later to create users (which means to create an *enrollment* in OpenClass).

```
curl -i "https://api.openclasslabs.com/v1/campus/institutions/{INST_SLUG}.json?  
apiKey={APIGEE_KEY}&token={TOKEN}"
```

Example Response:

```
{"code":200,"status":"success","data":{"name":"Pearson  
Playground","slug":"pearsonplayground","description":"","approximateNumUsers":515,"billable":false  
,"censusTimeframe":0,"id":"4e20885deabfa3a2586b5fb1","createdAt":"2011-07-  
15T18:35:09.433Z","updatedAt":"2012-09-10T16:25:34.481Z"}}
```

Lookup Institution Roles (Cacheable)

These roles (via their 'id') are associated with an enrollment, when a user is created (enrolled in an institution).

For OpenClass, a user is enrolled in an institution and given one or more roles of, 'instructor', 'student', or 'admin' (administrator).

These items do not change and can be safely cached. Additional roles may be created in the future.

```
curl -i "https://api.openclasslabs.com/v1/campus/institutionroles.json?  
apiKey={APIGEE_KEY}&token={TOKEN}"
```

Example Response:

```
{"code":200,"status":"success","data":  
[{"name":"Student","slug":"student","id":"4e1f694e1c93e55ef1d4d5e9","createdAt":"2011-07-  
14T22:10:22.140Z","updatedAt":"2011-07-14T22:10:22.140Z"},  
{"name":"Instructor","slug":"instructor","id":"4e1f694e1c93e55ef2d4d5e9","createdAt":"2011-07-
```

```
14T22:10:22.166Z","updatedAt":"2011-07-14T22:10:22.166Z"},
{"name":"Admin","slug":"admin","id":"4e1f694e1c93e55ef3d4d5e9","createdAt":"2011-07-14T22:10:22.177Z","updatedAt":"2011-07-14T22:10:22.177Z"}]}
```

Lookup Course Roles (Cacheable)

Like institution roles, these roles (via their 'id') are associated with a Registration, when a user (enrollment) is registered for a course.

These items do not change and can be safely cached. Additional roles may be created in the future.

```
curl -i "https://api.openclasslabs.com/v1/campus/courseroles.json?
apiKey={APIGEE_KEY}&token={TOKEN}"
```

Example Response:

```
{"code":200,"status":"success","data":
[{"name":"Instructor","slug":"instructor","id":"4e1f694e1c93e55ef4d4d5e9","createdAt":"2011-07-14T22:10:22.190Z","updatedAt":"2011-07-14T22:10:22.190Z"},
{"name":"Student","slug":"student","id":"4e1f694e1c93e55ef5d4d5e9","createdAt":"2011-07-14T22:10:22.202Z","updatedAt":"2011-07-14T22:10:22.202Z"},{"name":"Teaching Assistant","slug":"ta","id":"4e1f694e1c93e55ef6d4d5e9","createdAt":"2011-07-14T22:10:22.214Z","updatedAt":"2011-07-14T22:10:22.214Z"}]}
```

Create an Enrollment (User)

This creates a 'user' in the system with the given institution role. Note the use of the institution role id and the institution id in the POST body along with the institution 'slug' in the URL.

Also, note that 'sourceKey' is the SIS identifier for the user. And 'sourceType' must be 'batch_upload'.

```
curl -i -X POST -d '{"firstName":"Todd","lastName":"Foo2","sourceKey":"todd-foo2","email":"todd.foo2@esomething.com","institutionRoleId":"4e1f694e1c93e55ef1d4d5e9","sourceType":"batch_upload","institutionId":"4e20885deabfa3a2586b5fb1"}'
"https://api.openclasslabs.com/v1/campus/institutions/pearsonplayground/enrollments.json?
apiKey={APIGEE_KEY}&token={TOKEN}"
```

Example Response:

HTTP/1.1 201 Created

Date: Tue, 11 Sep 2012 20:09:50 GMT

Content-Length: 967

Content-Type: application/json; charset=UTF-8

Location: /enrollment/504f9a8f5ee5a5239eb8150e.json

```
{"code":201,"status":"success","data":
```

```
{
  "personId": "504f9a8f5ee5a5239eb8150d",
  "institutionId": "4e20885deabfa3a2586b5fb1",
  "institutionRoleId": "4e1f694e1c93e55ef1d4d5e9",
  "firstName": "Todd",
  "lastName": "Foo2",
  "email": "todd.foo2@esomething.com",
  "isPending": true,
  "isActive": true,
  "sourceType": "batch_upload",
  "sourceKey": "todd-foo2",
  "xlinks": {
    "institutionId": {
      "name": "Pearson Playground",
      "slug": "pearsonplayground",
      "description": "",
      "approximateNumUsers": 516,
      "id": "4e20885deabfa3a2586b5fb1",
      "rel": "institution",
      "href": "/institution/4e20885deabfa3a2586b5fb1.json"
    },
    "institutionRoleId": {
      "id": "4e1f694e1c93e55ef1d4d5e9",
      "rel": "institutionRole",
      "href": "/institution/role/4e1f694e1c93e55ef1d4d5e9.json",
      "name": "Student"
    },
    "personId": {
      "identityId": "504f9a8f52adc1ed55674a21",
      "id": "504f9a8f5ee5a5239eb8150d",
      "rel": "person",
      "href": "/person/504f9a8f5ee5a5239eb8150d.json"
    }
  },
  "id": "504f9a8f5ee5a5239eb8150e",
  "createdAt": "2012-09-11T20:09:51.626Z",
  "updatedAt": "2012-09-11T20:09:51.626Z"
}
```

Lookup an Enrollment by Source Key (SIS Identifier)

This is essentially a user lookup by SIS identifier. This is to find the enrollment ID for use when registering this user in a course. The query-string parameter 'sourceKey' is set to the SIS identifier of the user. The 'sourceType' query-string parameter is always set to 'batch_upload'.

The highlighted ID node in the URL below is the Institution ID acquired per above.

curl -i

“https://api.openclasslabs.com/v1/campus/institutions/4e20885deabfa3a2586b5fb1/enrollments/bysourcekey.json?apiKey={APIGEE_KEY}&token={TOKEN}&sourceKey=todd-foo2&sourceType=batch_upload}”

Example Response:

```
{
  "code": 200,
  "status": "success",
  "data": {
    "personId": "504f9a8f5ee5a5239eb8150d",
    "institutionId": "4e20885deabfa3a2586b5fb1",
    "institutionRoleId": "4e1f694e1c93e55ef1d4d5e9",
    "firstName": "Todd",
    "lastName": "Foo2",
    "email": "todd.foo2@esomething.com",
    "isPending": true,
    "isActive": true,
    "sourceType": "batch_upload",
    "sourceKey": "todd-foo2",
    "xlinks": {
      "institutionId": {
        "name": "Pearson Playground",
        "slug": "pearsonplayground",
        "description": "",
        "approximateNumUsers": 516,
        "id": "4e20885deabfa3a2586b5fb1",
        "rel": "institution",
        "href": "/institution/4e20885deabfa3a2586b5fb1.json"
      },
      "institutionRoleId": {
        "id": "4e1f694e1c93e55ef1d4d5e9",
        "rel": "institutionRole",
        "href": "/institution/role/4e1f694e1c93e55ef1d4d5e9.json",
        "name": "Student"
      },
      "personId": {
        "identityId": "504f9a8f52adc1ed55674a21",
        "id": "504f9a8f5ee5a5239eb8150d",
        "rel": "person",
        "href": "/person/504f9a8f5ee5a5239eb8150d.json"
      }
    },
    "id": "504f9a8f5ee5a5239eb8150e",
    "createdAt": "2012-09-11T20:09:51.626Z",
    "updatedAt": "2012-09-11T20:09:51.626Z"
  }
}
```

Update an Enrollment (User)

It's good form to lookup the enrollment first, make your changes, then to perform a PUT using the

entire enrollment object payload.

To update an enrollment (user), the internal enrollment id is required in the URL.

```
Curl -i -X PUT -d "{<json data here>}" "https://api.openclasslabs.com/v1/campus/enrollments/{id}.  
{format}?apiKey={APIGEE_KEY}&token={TOKEN}"
```

Example Response:

```
{"code":200,"status":"success"}
```

Create a Course Section

In OpenClass, a CourseSection equates to a course. The 'id' property is used to associate an enrollment with a course during the creation of a registration.

The CourseSection JSON request body contains an array of strings in the property, **callNumbers**, which represent the SIS identifiers for the course. We'll be looking up a CourseSection by call number next.

```
curl -i -X POST -d "{<json data here>}"  
"https://api.openclasslabs.com/v1/campus/coursesections.json?  
apiKey={APIGEE_KEY}&token={TOKEN}"
```

Example Response:

HTTP/1.1 201 Created

Content-Type: application/json; charset=UTF-8

Content-Length: 336

Location: /coursesection/504e22d45ee5e0e76f5bc5e1 .json

```
{"code":201,"status":"success","data":  
[{"institutionId":"4e20885deabfa3a2586b5fb1","institutionName":"Pearson  
Playground","courseTitle":"TF Test Course 1 (updated)","callNumbers":  
["tftc1ccn1","tftc1ccn2"],"studentCount":1,"id":"504e22d45ee5e0e76f5bc5e1","createdAt":"2012-09-  
10T17:26:44.605Z","updatedAt":"2012-09-11T19:10:23.421Z"}]}
```

Look Up a Course Section by Course Call Number (SIS Identifier)

The query-string parameter 'callNumbers' contains a comma-delimited string of course call numbers. The example below only returns a single course. If it contains more-than one course call number, the results will contain more-than one course.

```
curl -i  
"https://api.openclasslabs.com/v1/campus/institutions/4e20885deabfa3a2586b5fb1/coursesections.json?  
?apiKey={APIGEE_KEY}&token={TOKEN}&matchAllCallNumbers=false&callNumbers=tftc1ccn1"
```

Example Response:

```
{"code":200,"status":"success","data":
[{"institutionId":"4e20885deabfa3a2586b5fb1","institutionName":"Pearson
Playground","courseTitle":"TF Test Course 1 (updated)","callNumbers":
["tftc1ccn1","tftc1ccn2"],"studentCount":1,"id":"504e22d45ee5e0e76f5bc5e1","createdAt":"2012-09-
10T17:26:44.605Z","updatedAt":"2012-09-11T19:10:23.421Z"}]}
```

Note that the results above, 'data' is a JSON array.

Update a Course Section

Again, it's good form to lookup the course section, modify it, then update it via a PUT call to the URL below.

The course section id is required in the URL and is found in the body of the looked-up course section.

Curl -i -X PUT -d “{<json data here>}” “https://api.openclasslabs.com/v1/campus/coursesections/{course section id}.json?apiKey={APIGEE_KEY}&token={TOKEN}”

Example Response:

```
{"code":200,"status":"success"}
```

Copy Course Content

For this operation, we have to first create a destination course shell (see Create a Course Section, above). Then we need to acquire the source course section ID, presumably via lookup (see Look Up a Course by Course Call Number (SIS Identifier), above).

curl -i -X PUT “https://api.openclasslabs.com/v1/campus/coursesections/{targetId}/copycontentfrom/{sourceId}.json?apiKey={APIGEE_KEY}&token={TOKEN}”

In this operation, the PUT request body is empty.

Example Response:

```
{"code":200,"status":"success"}
```

Register a User in a Course

To create a registration, we need the institution id, the enrollment id and the course section id, as well as the course role id that the user will play in the course. Once those IDs are acquired, creating the registration is easy...

Note that a single enrollment can be registered for a course in several course roles.

curl -i -X POST -d “{” “https://api.openclasslabs.com/v1/campus/coursesections/{id}/registrations.json?apiKey={APIGEE_KEY}&token={TOKEN}”

Example Response:

HTTP/1.1 201 Created

Content-Type: application/json; charset=UTF-8

Content-Length: 907

Location: /courseregistration/4dc7fdb2a1dbdc8df2cd790f.json

```
{
  "code":200,
  "status":"success",
  "data":{
    "enrollmentId":"4dc7fdaba1dbdc8d8dcd790f",
    "courseSectionId":"4dc7fdb1a1dbdc8debcd790f",
    "roleId":"4dc2d61e61464c3e496e9431",
    "xlinks":{
      "courseSectionId":{
        "courseTitle":"Intermediate Algebra",
        "courseCode":"MAT 106",
        "sectionCode":"1",
        "instructorNames":"Medy, Myes",
        "startDate":"2011-01-10T00:00:00.000Z",
        "endDate":"2011-04-22T23:59:59.999Z",
        "id":"4dc7fdb1a1dbdc8debcd790f",
        "rel":"courseSection",
        "href":"/coursesection/4dc7fdb1a1dbdc8debcd790f.json",
        "name":"Intermediate Algebra"
      },
      "enrollmentId":{
        "firstName":"Lucas",
        "lastName":"Jackson",
        "email":"coolhand@floridastatepen.noop",
        "lastActive":"2011-05-09T14:43:55.808Z",
        "id":"4dc7fdaba1dbdc8d8dcd790f",
```

```

    "rel": "enrollment",
    "href": "/enrollment/4dc7fdaba1dbdc8d8dcd790f.json",
    "name": "coolhand@floridastatepen.noop"
  },
  "roleId": {
    "name": "Student",
    "slug": "student",
    "id": "4dc2d61e61464c3e496e9431",
    "rel": "courseRole",
    "href": "/courserole/4dc2d61e61464c3e496e9431.json"
  }
},
"courseSectionId": "4dc7fdb2a1dbdc8df2cd790f",
"createdAt": "2011-05-09T14:44:02.124Z",
"updatedAt": "2011-05-09T14:44:02.124Z"
}
}

```

Lookup a Registration

To retrieve a registration, we need the course section id as well as the enrollment id (see the appropriate lookup sections above to retrieve each by SIS identifier). Note that the creation use cases return those IDs also, in the Location HTTP header, as well as the body content.

```

curl -i "https://api.openclasslabs.com/v1/campus/coursesections/
{courseSectionId}/courseregistrations/enrollments/{enrollmentId}.json?
apiKey={APIGEE_KEY}&token={TOKEN}"

```

Example Response:

```

{
  "code": 200,
  "status": "success",
  "data": {
    "enrollmentId": "4dc7fdaba1dbdc8d8dcd790f",
    "courseSectionId": "4dc7fdb1a1dbdc8debcd790f",
  }
}

```



```

"roleId":"4dc2d61e61464c3e496e9431",
"xlinks":{
  "courseSectionId":{
    "courseTitle":"Intermediate Algebra",
    "courseCode":"MAT 106",
    "sectionCode":"1",
    "instructorNames":"Medy, Myes",
    "startDate":"2011-01-10T00:00:00.000Z",
    "endDate":"2011-04-22T23:59:59.999Z",
    "id":"4dc7fdb1a1dbdc8debcd790f",
    "rel":"courseSection",
    "href":"/coursesection/4dc7fdb1a1dbdc8debcd790f.json",
    "name":"Intermediate Algebra"
  },
  "enrollmentId":{
    "firstName":"Lucas",
    "lastName":"Jackson",
    "email":"coolhand@floridastatepen.noop",
    "lastActive":"2011-05-09T14:43:55.808Z",
    "id":"4dc7fdaba1dbdc8d8dcd790f",
    "rel":"enrollment",
    "href":"/enrollment/4dc7fdaba1dbdc8d8dcd790f.json",
    "name":"coolhand@floridastatepen.noop"
  },
  "roleId":{
    "name":"Student",
    "slug":"student",
    "id":"4dc2d61e61464c3e496e9431",
    "rel":"courseRole",
    "href":"/courserole/4dc2d61e61464c3e496e9431.json"
  }
}

```

```
    },  
    "id": "4dc7fdb2a1dbdc8df2cd790f",  
    "createdAt": "2011-05-09T14:44:02.124Z",  
    "updatedAt": "2011-05-09T14:44:02.124Z"  
  }  
}
```

Update a Registration

Curl -i -X PUT -d “{<json data here>}” “http://api.openclasslabs.com/v1/campus/registrations/{registration id}.json?apiKey={APIGEE_KEY}&token={TOKEN}”

Example Response:

```
{"code":200,"status":"success"}
```

Drop a Registration

Curl -i -X DELETE “http://api.openclasslabs.com/v1/campus/registrations/{registration id}.json?apiKey={APIGEE_KEY}&token={TOKEN}”

Example Response:

```
{"code":200,"status":"success"}
```