

Abroad Office API Manual

Application Programming Interface

version 29.10.2016

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Change log

- 14.04.2014
 - GET Program terms filter added
- 23.08.2013
 - GET All programs method added
- 01.11.2013
 - GET Program-countries method added
- 28.10.2016
 - Test with Postman

Authentication

In order to use the API you need an API USER and an API KEY;
Each resource can handle one or more of the following HTTP methods : GET, PUT, DELETE, POST.

There are several required HTTP headers :

- Date in RFC 2822 format - for example: Wed, 02 May 2012 12:00:00 +0000
(please see <http://www.ietf.org/rfc/rfc2822.txt> for details on this format)
- X-AOAPI-User - for example: zitec
- X-AOAPI-Accept - it can take 2 values: xml or json
- X-AOAPI-Auth - for example: of+LxjLsAGY4x0ob8sbGKVo2FiQ=

The value of X-AOAPI-Auth header is used for authentication of the request. See below the way this header is constructed:

step 1 : signature_string = concatenate strings (HTTP verb , Query String , X-AOAPI-User header value , Date header value);

Note: Query String must have no starting "/", and must be separated by a single "/" from the X-AOAPI-User string.

E.g: if the request is GET /students/?search=johnson, the signature_string will look like below:
GETstudents/?search=johnson/X-AOAPI-UserThu, 11 Jul 2013 14:23:08 +0000
(where instead of X-AOAPI-User will be used the real API client name).

step 2 : X-AOAPI-Auth header value = HMAC-SHA1 (API KEY, signature_string)
The HMAC-SHA1 algorithm is explained in detail here <http://en.wikipedia.org/wiki/HMAC#Implementation>

Possible authentication errors

- AuthHeaderMissing - this means that the X-AOAPI-Auth header was not detected in your request
- AuthTimeDifference - this means that the time difference between the request time and our server time is greater than allowed time. Please read the important note below.
- ClientHeaderMissing - this means that the X-AOAPI-Client header was not detected in your request
- DateHeaderMissing - this means that the Date header was not detected in your request
- InvalidClient - the supplied API USER is not registered with our system
- InvalidSignature - the supplied signature in X-AOAPI-Auth header is wrong. Possible reasons are: the signature_string was not properly computed, the HMAC algorithm was not properly calculated, the API KEY is wrong or not valid

Important: because the signature string relies on a timestamp it is very important to have your server/system time synchronized with a NTP server.

The web service allows 60 seconds time differences between the request date and server date

API Reference

The following terminology will be used along the documentation:

- Sample Request - indicates a sample HTTP request sent to web service
- Sample Response - indicates a sample HTTP response returned by the web service
- Exception - the possible errors that the specific method can return
- Currently the web service supports XML and JSON.

Students

Get All

Notes:

- returns a list of students

- method signature GET /students/

Parameters:

?page={page_number} - [optional] - used to paginate results - default value is 1; if present, has to be less than the total pages available (indicated in the results through 'total_pages' attribute)
?search={search_term} - [optional] - used to narrow the results by indicated term; the search is done against the first name, last name or email address.

Sample request

```
GET /students/?search=super HTTP/1.1
Host: api.abroadoffice.net
Date: Thu, 03 May 2012 09:55:54 GMT
X-AOAPI-User: zitec
X-AOAPI-Accept: xml
X-AOAPI-Auth: 90a6d325e982f764f86a7e248edf6a660d4ee833
```

Sample response:

```
HTTP/1.1 200 OK
```

```
Date: Thu, 03 May 2012 09:55:54 GMT
Server: api.abroadoffice.net
Content-Length: 795
Connection: close
Content-Type: text/xml
```

```
<students>
  <current_page>1</current_page>
  <total_pages>1</total_pages>
  <records_per_page>10</records_per_page>
  <student>
    <id>2</id>
    <first_name>All</first_name>
    <last_name>Access</last_name>
    <email>superadmin@abroadoffice.com</email>
    <phone_number>1233456</phone_number>
    <country>1</country>
    <current_status>8</current_status>
    <major>0</major>
    <term/>
```

```
</student>
...
</students>
```

Error codes:

A list with available HTTP status codes that this method can return:

- 500 Internal Service Error - The service encountered an unexpected condition which prevented it from fulfilling the request
- 500 Search query is empty Error - If the search parameter is present but has no value this error will be thrown
- 500 Page number is not valid Error - When the value of the page number parameter is negative or not numeric this error will be thrown
- 500 Page number out of range Error - When the value of the page number parameter is not less than or equal with the maximum page number value indicated in the results

Get Info

Notes:

- returns student by id
- method signature GET /students/{student_id}

Sample request

```
GET /students/2 HTTP/1.1
Host: api.abroadoffice.net
Date: Thu, 03 May 2012 10:09:50 GMT
X-AOAPI-User: zitec
X-AOAPI-Accept: xml
X-AOAPI-Auth: 90a6d325e982f764f86a7e248edf6a660d4ee833
```

Sample response:

```
HTTP/1.1 200 OK

Date: Thu, 03 May 2012 10:09:50 GMT
Server: api.abroadoffice.net
```

Content-Length: 795
Connection: close
Content-Type: text/xml

```
<student>  
  <id>2</id>  
  <first_name>All</first_name>  
  <last_name>Access</last_name>  
  <email>superadmin@abroadoffice.com</email>  
  <phone_number>1233456</phone_number>  
  <country>1</country>  
  <current_status>8</current_status>  
  <major>0</major>  
  <term/>  
</student>
```

Error codes:

A list with available HTTP status codes that this method can return:

- 404 Not Found - Student id not found
- 500 Internal Service Error - The service encountered an unexpected condition which prevented it from fulfilling the request

Create

Notes:

- register a new student
- method signature POST /students/

Parameters:

The following list of parameters has to be sent through POST HTTP method:

first_name={value} - the first name of the student

last_name={value} - the last name of the student

email={value} - the email address of the student; has to be in the format "local-part@hostname"

phone_number={value} - the telephone number of the student; length between 7 and 15 characters

country={country_id} - the id of the country for the student; it has to be one of the valid ids returned by the "/countries" API method

current_status={status_id} - the id of the status for the student; it has to be one of the valid ids

returned by the “/college-statuses” API method

major={major_id} - the id of the student’s major; it has to be one of the valid ids returned by the “/majors” API method

term={term_id} - the id of the term for the student; it has to be one of the valid ids returned by the “/program-terms” API method

password={value} - student’s password; minimum length is 6 characters

Sample request (SUCCESS)

```
POST /students HTTP/1.1
Host: api.abroadoffice.net
Content-Type: application/x-www-form-urlencoded
Date: Thu, 03 May 2012 10:31:51 GMT
X-AOAPI-User: zitec
X-AOAPI-Accept: xml
X-AOAPI-Auth: 90a6d325e982f764f86a7e248edf6a660d4ee833

first_name=test&last_name=test&email=test%40example.com&phone_number=
1234567890&country=1&current_status=1&major=15&term=101&password=1234
512345
```

Sample response (SUCCESS):

```
HTTP/1.1 201 Created
```

Sample request (ERROR)

```
POST /students HTTP/1.1
Host: api.abroadoffice.net
Content-Type: application/x-www-form-urlencoded
Date: Thu, 03 May 2012 10:31:51 GMT
X-AOAPI-User: zitec
X-AOAPI-Accept: xml
X-AOAPI-Auth: 90a6d325e982f764f86a7e248edf6a660d4ee833

first_name=&last_name=&email=axasdf&phone_number=&country=&current_st
atus=&major=&term=&password=
```

Sample response (ERROR):

HTTP/1.1 400 Bad Request

Date: Thu, 03 May 2012 10:31:52 GMT

Server: api.abroadoffice.net

Content-Length: 795

Connection: close

Content-Type: text/xml

```
<error>
  <code>error</code>
  <message>
    <first_name>
      <isEmpty>Value is required and can't be empty</isEmpty>
    </first_name>
    <last_name>
      <isEmpty>Value is required and can't be empty</isEmpty>
    </last_name>
    <email>
      <emailAddressInvalidFormat>'axasdf' is no valid email
      address in the basic format local-part@hostname
      </emailAddressInvalidFormat>
    </email>
    <phone_number>
      <isEmpty>Value is required and can't be empty</isEmpty>
    </phone_number>
    <country><isEmpty>Value is required and can't be
    empty</isEmpty>
    </country>
    <current_status>
      <isEmpty>Value is required and can't be empty</isEmpty>
    </current_status>
    <major>
      <isEmpty>Value is required and can't be empty</isEmpty>
    </major>
    <term><isEmpty>Value is required and can't be
    empty</isEmpty>
    </term>
    <password>
      <stringLengthTooShort>'*****' is less than 6 characters
      long</stringLengthTooShort>
    </password>
  </message>
</error>
```


Error codes:

A list with available HTTP status codes that this method can return:

- 400 Bad Request Error - The POST request doesn't accomplish all the required fields or there are fields whose values do not meet the requirements. In this case a message with all the errors found will be returned.

Update

Notes:

- update student info
- method signature POST /students/{student_id}

Parameters:

The following list of parameters has to be sent through POST HTTP method:

first_name={value} - the first name of the student

last_name={value} - the last name of the student

phone_number={value} - the telephone number of the student; length between 7 and 15 characters

country={country_id} - the id of the country for the student; it has to be one of the valid ids returned by the "/countries" API method

current_status={status_id} - the id of the status for the student; it has to be one of the valid ids returned by the "/college-statuses" API method

major={major_id} - the id of the student's major; it has to be one of the valid ids returned by the "/majors" API method

term={term_id} - the id of the term for the student; it has to be one of the valid ids returned by the "/program-terms" API method

password={value} - student's password; minimum length is 6 characters

Sample request (SUCCESS)

```
POST /students/2 HTTP/1.1
Host: api.abroadoffice.net
Content-Type: application/x-www-form-urlencoded
Date: Thu, 03 May 2012 10:59:51 GMT
X-AOAPI-User: zitec
```

X-AOAPI-Accept: xml

X-AOAPI-Auth: 90a6d325e982f764f86a7e248edf6a660d4ee833

first_name=test&last_name=test&phone_number=1234567890&country=1¤t_status=1&major=15&term=101&password=1234512345

Sample response (SUCCESS):

HTTP/1.1 204 No Content

Sample request (ERROR)

POST /students/2 HTTP/1.1

Host: api.abroadoffice.net

Content-Type: application/x-www-form-urlencoded

Date: Thu, 03 May 2012 11:00:51 GMT

X-AOAPI-User: zitec

X-AOAPI-Accept: xml

X-AOAPI-Auth: 90a6d325e982f764f86a7e248edf6a660d4ee833

first_name=&last_name=&phone_number=&country=¤t_status=&major=&term=&password=

Sample response (ERROR):

HTTP/1.1 400 Bad Request

Date: Thu, 03 May 2012 10:31:52 GMT

Server: api.abroadoffice.net

Content-Length: 795

Connection: close

Content-Type: text/xml

<error>

 <code>error</code>

 <message>

 <first_name>

 <isEmpty>Value is required and can't be empty</isEmpty>

 </first_name>

 <last_name>

 <isEmpty>Value is required and can't be empty</isEmpty>

```
    </last_name>
    <phone_number>
    <isEmpty>Value is required and can't be empty</isEmpty>
    </phone_number>
    <country><isEmpty>Value is required and can't be
    empty</isEmpty>
    </country>
    <current_status>
    <isEmpty>Value is required and can't be empty</isEmpty>
    </current_status>
    <major>
    <isEmpty>Value is required and can't be empty</isEmpty>
    </major>
    <term><isEmpty>Value is required and can't be
    empty</isEmpty>
    </term>
    <password>
    <stringLengthTooShort>'*****' is less than 6 characters
    long</stringLengthTooShort>
    </password>
  </message>
</error>
```

Error codes:

A list with available HTTP status codes that this method can return:

- 400 Bad Request Error - The POST request doesn't accomplish all the required fields or there are fields whose values do not meet the requirements. In this case a message with all the errors found will be returned.

College Statuses

Get All

Notes:

- returns a list of college statuses
- method signature GET /college-statuses/

Sample request

```
GET /college-statuses/ HTTP/1.1
Host: api.abroadoffice.net
Date: Thu, 03 May 2012 11:05:51 GMT
X-AOAPI-User: zitec
X-AOAPI-Accept: xml
X-AOAPI-Auth: 90a6d325e982f764f86a7e248edf6a660d4ee833
```

Sample response:

```
HTTP/1.1 200 OK
```

```
Date: Thu, 03 May 2012 11:05:52 GMT
Server: api.abroadoffice.net
Content-Length: 795
Connection: close
Content-Type: text/xml
```

```
<college_statuses>
  <college_status>
    <id>1</id>
    <name>College-Freshman</name>
  </college_status>
  <college_status>
    <id>2</id>
    <name>College-Sophomore</name>
  </college_status>
  ...
</college_statuses>
```

Error codes:

A list with available HTTP status codes that this method can return:

- 500 Internal Service Error - The service encountered an unexpected condition which prevented it from fulfilling the request

Get Info

Notes:

- returns college status info by id
- method signature GET /college-statuses/{college_status_id}

Sample request

```
GET /college-statuses/1 HTTP/1.1
Host: api.abroadoffice.net
Date: Thu, 03 May 2012 11:15:52 GMT
X-AOAPI-User: zitec
X-AOAPI-Accept: xml
X-AOAPI-Auth: 90a6d325e982f764f86a7e248edf6a660d4ee833
```

Sample response:

```
HTTP/1.1 200 OK

Date: Thu, 03 May 2012 11:15:52 GMT
Server: api.abroadoffice.net
Content-Length: 795
Connection: close
Content-Type: text/xml
<college_status>
  <id>1</id>
  <name>College-Freshman</name>
</college_status>
```

Error codes:

A list with available HTTP status codes that this method can return:

- 404 Not Found - College status id not found
- 500 Internal Service Error - The service encountered an unexpected condition which prevented it from fulfilling the request

Countries

Get All

Notes:

- returns a list of countries
- method signature GET /countries/

Sample request

```
GET /countries/ HTTP/1.1
Host: api.abroadoffice.net
Date: Thu, 03 May 2012 11:25:51 GMT
X-AOAPI-User: zitec
X-AOAPI-Accept: xml
X-AOAPI-Auth: 90a6d325e982f764f86a7e248edf6a660d4ee833
```

Sample response:

```
HTTP/1.1 200 OK
```

```
Date: Thu, 03 May 2012 11:25:52 GMT
Server: api.abroadoffice.net
Content-Length: 795
Connection: close
Content-Type: text/xml
```

```
<countries>
  <country>
    <id>3</id>
    <name>Afghanistan</name>
  </country>
  <country>
    <id>4</id>
    <name>Albania</name>
  </country>
  <country>
    <id>5</id>
    <name>Algeria</name>
  </country>
  ...
</countries>
```

Error codes:

A list with available HTTP status codes that this method can return:

- 500 Internal Service Error - The service encountered an unexpected condition which prevented it from fulfilling the request

Get Info

Notes:

- returns country info by id
- method signature GET /countries/{country_id}

Sample request

```
GET /countries/1 HTTP/1.1
Host: api.abroadoffice.net
Date: Thu, 03 May 2012 11:26:51 GMT
X-AOAPI-User: zitec
X-AOAPI-Accept: xml
X-AOAPI-Auth: 90a6d325e982f764f86a7e248edf6a660d4ee833
```

Sample response:

```
HTTP/1.1 200 OK

Date: Thu, 03 May 2012 11:26:52 GMT
Server: api.abroadoffice.net
Content-Length: 795
Connection: close
Content-Type: text/xml
<country>
  <id>1</id>
  <name>United States</name>
</country>
```

Error codes:

A list with available HTTP status codes that this method can return:

- 404 Not Found - Country id not found

- 500 Internal Service Error - The service encountered an unexpected condition which prevented it from fulfilling the request

Majors

Get All

Notes:

- returns a list of majors
- method signature GET /majors/

Sample request

```
GET /majors/ HTTP/1.1
Host: api.abroadoffice.net
Date: Thu, 03 May 2012 11:30:51 GMT
X-AOAPI-User: zitec
X-AOAPI-Accept: xml
X-AOAPI-Auth: 90a6d325e982f764f86a7e248edf6a660d4ee833
```

Sample response:

```
HTTP/1.1 200 OK
```

```
Date: Thu, 03 May 2012 11:30:52 GMT
Server: api.abroadoffice.net
Content-Length: 795
Connection: close
Content-Type: text/xml
```

```
<majors>
  <major>
    <id>3</id>
    <name>Anthropology & Archeology</name>
  </major>
  <major>
    <id>5</id>
    <name>Art Fine & Studio</name>
```



```
    </major>
    <major>
      <id>6</id>
      <name>Art History, Criticism, Preservation</name>
    </major>
    ...
  </majors>
```

Error codes:

A list with available HTTP status codes that this method can return:

- 500 Internal Service Error - The service encountered an unexpected condition which prevented it from fulfilling the request

Get Info

Notes:

- returns major info by id
- method signature GET /majors/{major_id}

Sample request

```
GET /majors/15 HTTP/1.1
Host: api.abroadoffice.net
Date: Thu, 03 May 2012 11:33:51 GMT
X-AOAPI-User: zitec
X-AOAPI-Accept: xml
X-AOAPI-Auth: 90a6d325e982f764f86a7e248edf6a660d4ee833
```

Sample response:

```
HTTP/1.1 200 OK

Date: Thu, 03 May 2012 11:33:52 GMT
Server: api.abroadoffice.net
Content-Length: 795
Connection: close
Content-Type: text/xml
<major>
```

```
<id>15</id>
  <name>Science Computer</name>
</major>
```

Error codes:

A list with available HTTP status codes that this method can return:

- 404 Not Found - Major id not found
- 500 Internal Service Error - The service encountered an unexpected condition which prevented it from fulfilling the request

Program terms

Get All

Notes:

- returns a list of program terms
- method signature GET /program-terms/

Parameters:

?have_programs_available={0|1} - [optional] - used to limit the results only to terms that actually have programs associated and can be applied to; default value is 0 and shows all.

Sample request

```
GET /program-terms/have_programs_available=0 HTTP/1.1
Host: api.abroadoffice.net
Date: Thu, 03 May 2012 11:40:51 GMT
X-AOAPI-User: zitec
X-AOAPI-Accept: xml
X-AOAPI-Auth: 90a6d325e982f764f86a7e248edf6a660d4ee833
```

Sample response:

```
HTTP/1.1 200 OK
```

```
Date: Thu, 03 May 2012 11:40:52 GMT
```

Server: api.abroadoffice.net
Content-Length: 795
Connection: close
Content-Type: text/xml

```
<program_terms>
  <program_term>
    <id>95</id>
    <name>Fall 2012</name>
  </program_term>
  <program_term>
    <id>97</id>
    <name>Spring 2012</name>
  </program_term>
  <program_term>
    <id>98</id>
    <name>Summer 2012</name>
  </program_term>
  ...
</program_terms>
```

Error codes:

A list with available HTTP status codes that this method can return:

- 500 Internal Service Error - The service encountered an unexpected condition which prevented it from fulfilling the request

Get Info

Notes:

- returns program term info by id
- method signature GET /program-terms/{program_term_id}

Sample request

```
GET /program-terms/101 HTTP/1.1  
Host: api.abroadoffice.net
```

```
Date: Thu, 03 May 2012 11:43:51 GMT
X-AOAPI-User: zitec
X-AOAPI-Accept: xml
X-AOAPI-Auth: 90a6d325e982f764f86a7e248edf6a660d4ee833
```

Sample response:

```
HTTP/1.1 200 OK
```

```
Date: Thu, 03 May 2012 11:43:52 GMT
Server: api.abroadoffice.net
Content-Length: 795
Connection: close
Content-Type: text/xml
<program_term>
  <id>101</id>
  <name>Winter 2012</name>
</program_term>
```

Error codes:

A list with available HTTP status codes that this method can return:

- 404 Not Found - Program term id not found
- 500 Internal Service Error - The service encountered an unexpected condition which prevented it from fulfilling the request

Programs

Get All

Notes:

- returns programs list
- method signature GET /programs

Parameters:

?page={page_number} - [optional] - used to paginate results - default value is 1; if present, has to be less or equal to the total pages available (indicated in the results by the 'total_pages' element).

?filters[filter_name]={filter_value} - [optional]

- available filter names:
 - name
 - string value representing whole or part of the program name
 - example: semester in amsterdam (must be URL encoded if contains spaces)
 - program_type
 - integer value representing program type
 - example: 1 (internal program), or 2 (external program)
 - country
 - string value representing a country's name or part of it
 - example: china (case insensitive)
 - country_id
 - integer value representing a country's ID (retrieved via GET /program-countries method)
 - example: 25 (i.e Belgium)
 - city
 - string value representing a location's name or part of it
 - example: amsterdam
 - city_id
 - integer value representing a location's ID
 - example: 36 (i.e Amsterdam)
 - provider
 - string value representing the name of a provider or part of it
 - example: Council
 - term
 - string value representing a term's name or part of it
 - example: Summer 2014 (must be URL encoded since contains spaces)
 - term_id
 - integer value representing a term ID (retrieved via GET /program-terms)
 - example: 117 (i.e Summer 2014)
 - major_id
 - integer value representing a major's ID (retrieved via GET /majors)
 - example: 50 (i.e Sociology).

Sample request

```
GET /programs?filters[term]=spring%202014 HTTP/1.1
Host: api.abroadoffice.net
Date: Thu, 03 May 2012 11:43:51 GMT
X-AOAPI-User: zitec
X-AOAPI-Accept: xml
```

X-AOAPI-Auth: 90a6d325e982f764f86a7e248edf6a660d4ee833

Sample response:

HTTP/1.1 200 OK

Date: Thu, 03 May 2012 11:43:52 GMT

Server: api.abroadoffice.net

Content-Length: 795

Connection: close

Content-Type: text/xml

```
<programs>
  <current_page>1</current_page>
  <total_pages>1</total_pages>
  <records_per_page>10</records_per_page>
  <program>
    <id>59196</id>
    <name>Oldenburg University</name>
    <term>Spring 2014</term>
    <provider></provider>
    <deadline>2013-08-31</deadline>
    <start_date>2014-01-05</start_date>
    <end_date>2014-05-01</end_date>
    <majors>
      <id>147</id>
      <name>Foreign Language / Literature German</name>
    </majors>
    <program_type>Internal</program_type>
    <type>Exchange</type>
    <countries>Germany</countries>
    <locations>Oldenburg</locations>
    <description><b>Program Information</b>#13;
#13;
    OldenburgThe Carl von Ossietzky Universität Oldenburg is
one of the youngest universities in Germany. Founded in 1973, it grew
out the city's 200-year-old teacher training college. Today, the
University includes Social Sciences, Arts and Humanities, Education,
Economics, Languages, Business Studies, Mathematics, Natural Sciences
and Computer Science departments. Since 1973, enrollment has
increased from 2,500 to more than 13,000.#13;
    </description>
  </program_link></program_link>
```

```

    <provider_link></provider_link>
    <category>One-Country</category>
    <contact>
      <name>Professor Christopher R. Clason</name>
      <email>clason@oakland.edu</email>
      <phone>2483702063</phone>
    </contact>
    <links>
      <link>http://www.uni-oldenburg.de/en/profile/</link>
    </links>
    <host_website></host_website>
    <whats_included></whats_included>
    <whats_not_included></whats_not_included>
    <estimated_costs></estimated_costs>
  </program>
  <program>
    <id>65849</id>
    <name>Japan Center</name>
    <term>Spring 2014</term>
    <provider>JapanCenter for Michigan Universities</provider>
    <deadline>2013-09-16</deadline>
    <start_date></start_date>
    <end_date></end_date>
    <majors>
      <id>151</id>
      <name>Foreign Language / Literature Japanese</name>
    </majors>
    <program_type>External</program_type>
    <type></type>
    <countries>Japan</countries>
    <locations>Hikone</locations>
    <description></description>
    <program_link>http://jcmu.isp.msu.edu/</program_link>

  <provider_link>http://www.isp.msu.edu/JCMU/students/programs/</provid
er_link>
    <category>One-Country</category>
  </program>
</programs>

```

Error codes:

A list with available HTTP status codes that this method can return:

- 500 Internal Service Error - The service encountered an unexpected condition which prevented it from fulfilling the request
- 400 Invalid filter value Error - If one of the filters has an invalid value (e.g filter value not set, major_id not a valid numer, etc) this error will be thrown
- 400 Page number is not valid Error - When the value of the page number parameter is negative or not numeric this error will be thrown
- 400 Page number out of range Error - When the value of the page number parameter is not less than or equal with the maximum page number value indicated in the results

Program countries

Get All

Notes:

- returns program countries list
- method signature GET /program-countries

Parameters:

?have_programs={0|1} - [optional] - used to limit the results to countries that do have programs - default value is 0.

Sample request

```
GET /program-countries?have_programs=1 HTTP/1.1
Host: api.abroadoffice.net
Date: Thu, 03 May 2012 11:43:51 GMT
X-AOAPI-User: zitec
X-AOAPI-Accept: xml
X-AOAPI-Auth: 90a6d325e982f764f86a7e248edf6a660d4ee833
```

Sample response:

```
HTTP/1.1 200 OK

Date: Thu, 03 May 2012 11:43:52 GMT
Server: api.abroadoffice.net
Content-Length: 1265
Connection: close
Content-Type: text/xml
```



```
<?xml version="1.0" encoding="UTF-8"?>
<program_countries>
  <program_country>
    <id>92</id>
    <name>Ghana</name>
  </program_country>
  <program_country>
    <id>119</id>
    <name>Israel</name>
  </program_country>
  <program_country>
    <id>50</id>
    <name>China</name>
  </program_country>
  <program_country>
    <id>207</id>
    <name>Senegal</name>
  </program_country>
  <program_country>
    <id>64</id>
    <name>Cyprus</name>
  </program_country>
</program_countries>
```

Error codes:

A list with available HTTP status codes that this method can return:


- 500 Internal Service Error - The service encountered an unexpected condition which prevented it from fulfilling the request
- 400 Invalid have_programs parameter value - If have_programs has an invalid value (e.g a non-numeric value, like "a"), this error will be thrown.

Test API with Postman

<https://www.getpostman.com/apps>

Prerequisites

1. Install Postman app

2. Open Postman
3. Manage Environments and import environment from below
4. Import AO API requests collection from below
5. Set Interceptor to On (if you are using the Chrome app)
 - a. Install Postman Interceptor from [here](#)
 - b. Click the interceptor icon to start 

Postman environment for AO API (example)

```
{
  "id": "c3967225-5778-f333-e595-16f06939373d",
  "name": "oakland_ao_api",
  "values": [
    {
      "key": "Client",
      "type": "text",
      "value": "api_user",
      "enabled": true
    },
    {
      "key": "api_key",
      "type": "text",
      "value": "api_key_for_api_user",
      "enabled": true
    }
  ],
  "timestamp": 1477697511285,
  "_postman_variable_scope": "environment",
  "_postman_exported_at": "2016-10-28T23:31:57.971Z",
  "_postman_exported_using": "Postman/4.8.1"
}
```

- Replace api_user with the user for your API
- Replace api_key_for_api_user with your API key
- Save the above json snippet as [environment_title].postman_environment.json
- Import json file to Postman Environments

Postman collection for AO API (example)

```
{
  "id": "23aa1fc6-8797-a860-748b-0ba10a0bf118",
```

```

"name": "AO API",
"description": "",
"order": [
    "4bf8673b-e3a7-8b99-64df-395f3139b7c2"
],
"folders": [],
"timestamp": 1477694584830,
"owner": 0,
"public": false,
"requests": [
    {
        "id": "4bf8673b-e3a7-8b99-64df-395f3139b7c2",
        "headers": "Date: {{Date}}\nX-AOAPI-User: {{Client}}\nX-AOAPI-Auth:
{{authHeader}}\nX-AOAPI-Accept: xml\n",
        "url": "https://api.abroadoffice.net/college-statuses",
        "preRequestScript": "var today = new Date(); \nvar d =
today.toUTCString().slice(0,100).split(' '); \nvar date = d[0] + '-' + d[1] + '-' + d[2] + '-' + d[3] + '-' +
d[4] + '-' + '0000'; \npostman.setEnvironmentVariable('Date', date); \n\nvar url =
request.url.replace(/http:\\\\|https:\\\\/, '\\'); \nurl.split('\\'); \nurl.shift(); \nvar client =
postman.getEnvironmentVariable('Client'); \nvar api_key =
postman.getEnvironmentVariable('api_key'); \nvar message = request.method + url.join('\\') +
'/' + client + date; \n\npostman.setEnvironmentVariable('authHeader',
CryptoJS.HmacSHA1(message, api_key).toString(CryptoJS.enc.Base64));",
        "pathVariables": {},
        "method": "GET",
        "data": null,
        "dataMode": "params",
        "version": 2,
        "tests": null,
        "currentHelper": "normal",
        "helperAttributes": {},
        "time": 1477698132361,
        "name": "GLS AO API test students",
        "description": "Test AO API Get /students method",
        "collectionId": "23aa1fc6-8797-a860-748b-0ba10a0bf118",
        "responses": []
    }
]
}

```

- Save the above json snippet as [collection_name].postman_collection.json
- Import the json file to Postman