

VolunteerMatch Public Use API User Manual

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1. Introduction

The VolunteerMatch API aims at being:

- based on the REST design principles. In particular, the success and error codes returned are standard HTTP response codes.
- based on the JSON exchange format. JSON is less verbose than XML (less bandwidth consumed). In addition, most of the VolunteerMatch users will probably design their client application in a web environment, with capabilities to process JSON directly as opposed to XML requiring a costly parsing process.
- secure. In particular, as little secret as possible should pass unencrypted over the wire and the API should protect itself against replay scenarios. For these reason, the authentication mechanism is based on the WSSE protocol.

Important note

The information provided in this document is case sensitive. For instance, orgname is different from orgName.

2. API Access Keys

As a designer of applications using the VolunteerMatch API v2, you will receive two pieces of information: an account name, and a secret API key. The API key acts as a password. Do not communicate it to people who should not know about it. If you think this secret as been compromised, please contact VolunteerMatch to obtain a new API key.

3. Building an API call

In this tutorial, we will call a helloWorld API call. We will provide an input parameter, and we will get a response based on this parameter from the VolunteerMatch server.

A typical VolunteerMatch API call contains an HTTP header similar to this one:

```
GET /api/call?action=helloWorld&query=... HTTP/1.1
Host: www.volunteermatch.org
Accept-Charset: UTF-8
Content-Type: application/json
Authorization: WSSE profile="UsernameToken"
```

```
X-WSSE:UsernameToken Username="acme",
PasswordDigest="quR/EWLAV4xLf9Zqyw4pDmfV9OY=", Nonce=
"d36e316282959a9ed4c89851497a717f", Created="2003-12-15T14:43:07-0700"
```

VolunteerMatch API calls fall under 2 categories : GET calls and POST calls.

A call requires 2 parameters:

- action : a string representing the name of the API call called. Consult your documentation to see the list of API calls available to you.
- query: a JSON structure that contains the input required by the API call.

Content-Type would typically requests application/json as a response format

The last 2 header parameters deal with security.

Authorization must specified WSSE profile="UsernameToken"

When the VolunteerMatch server detects this authorization method, it expects a X-WSSE parameter that contains the following value:

```
UsernameToken Username="acme", PasswordDigest="quR/EWLAV4xLf9Zqyw4pDmfV9OY=", Nonce=
"d36e316282959a9ed4c89851497a717f", Created="2003-12-15T14:43:07-0700"
```

UsernameToken tells the server that it expects a pair of values to perform the authentication, a username and a password digest.

Username contains the name of your account.

Nonce is a randomly generated nonce. A Base64 encoded 20 bytes SHA1 nonce should provide a strong level of security (the purpose of this nonce is to be random enough to protect against guessing what the next nonce will be).

Created contains the date at when the authentication credentials were generated by the user.

Any new credentials received by the VolunteerMatch server that were generated more than 5 minutes ago will be rejected. The format of the creation date is:

```
yyyy-MM-dd'T'HH:mm:ssZ
```

The PasswordDigest is calculated based on the Nonce, the creation time and the secret API key.

In order to create a password digest, the nonce, the creation time and the API key are first concatenated. The resulting string is then encrypted with SHA256. The resulting string is then Base64 encoded.

To sum it up:

```
PasswordDigest = Base64 ( SHA256 ( nonce + creation time + API key) )
```

If the VolunteerMatch server acknowledges the validity of those credentials, they will be stored for a while on the server side. You can keep those credentials and reuse them during your entire session, without the need to regenerate a new set of credentials for every call.

If however, your session is inactive for more than 10 minutes, the credentials will expire and you will have to provide new ones.

In order to call the helloWorld API, the query parameter mentioned previously must contain a JSON structure with a name.

For instance:

```
query="{\"name\":\"john\"}"
```

If the call is successful, the response will contain the following JSON structure:

```
{
    "name": "john",
    "result": "Hello john!"
}
```

4. Methods

Important note

Each API call expects 2 parameters:

• action : the name of the API call

• query: the payload of the API call, in JSON format

The list of calls available to you through the VolunteerMatch Public Use API Program is the following:

- getKeyStatus : obtain information about your account
- getMetaData: obtain the metadata information in order to properly use the API service
- getServiceStatus : obtain some high level information about VolunteerMatch's network of volunteering opportunities
- helloWorld: test the connectivity between your application and the VolunteerMatch API service
- searchOpportunities: search for opportunities based on a set of criteria
- searchOrganizations : search for organizations based on a set of criteria

getKeyStatus

Description

Retrieve key-specific information, including available methods and limitations.

Supported Method

GET

URL

http://www.volunteermatch.org/api/call?action=getKeyStatus

Role Limitations

NONE

Parameters

NONE

Results

The response payload will be of the form

```
"20.0"
    ],
    [
        "location.mandatory.for.search.opps",
        "false"
    ],
    [
        "max.create.or.update.members",
        "20"
    ],
    [
        "max.create.or.update.referrals",
        "20"
    ],
        "max.forward.opportunity.recipients",
        "20"
    ],
        "max.members.details.results",
        "20"
    ],
    [
        "max.members.returned",
        "20"
    ],
    [
        "max.opportunities.returned",
        "20"
    ],
        "max.organization.reviews.returned",
        "20"
    ],
        "max.organizations.returned",
        "20"
    ],
        "max.referrals.returned",
        "20"
],
"contactEmailAddress": "john.doe@acme.com",
```

The apiKeyConstraints value returns the list of constraints that apply to your API key.

The following table shows the list of constraints:

Name	Туре	Meaning
default.radius	Floating point value	Default radius used in searchOpportunities and searchOrganizations. Accepts floating point values
max.bandwidth.per.period	Integer or "unlimited"	Maximum bandwidth allowed (in bytes) per period. If this value is set, period.duration should also be set
max.calls.per.period	Integer or "unlimited"	Maximum number of API calls per period. If this value is set, period.duration should also be set
max.opportunities.returned	integer	Maximum number of opportunities returned by a searchOpportunities call
max.organization.returned	integer	Maximum number of organizations returned by a searchOrganizations call.
period.duration	integer	Duration of a period (on which max.calls.per.period and max.bandwidth.per.period are based) in seconds

The values will always be returned as String but can be Integer, Long, Double, String or Boolean.

1 Important Note

As a client of VolunteerMatch Public Use API Program, your account is limited to

- 500 MB of data per 7 days
- or 20 000 calls per 7 days,

whichever threshold is reached first.

getMetaData

Description

Get metadata, including Partners and Categories. If using a client key, also retrieve custom registration questions. Generally, this information will be used to provide search interfaces.

0

Important Note

The information returned by this method is essentially static, changing very rarely. Please – if you use this method to populate lists or interface elements, retrieve this data and cache it locally.

An optional version parameter can be passed to check if the metadata have changed.

If the version provided by the user matches the current version of the metadata provided by VolunteerMatch.org, then no metadata is returned.

Providing no version parameter will always retrieve the full metadata but will consume some bandwidth.

Supported Method

GET

URL

http://www.volunteermatch.org/api/call?action=getMetadata

Role Limitations

Client-specific information is only available when using a client key.

Parameters

Name	Format	Frequency	Description
version	Integer	0 or 1	current version of the meta data used by the client

Results

The response payload will be of the form

```
"categories": [
        "id": 23,
        "name": "Advocacy & Human Rights"
    },
    {
        "id": 30,
        "name": "Animals"
    },
        "id": 34,
        "name": "Arts & Culture"
    },
        "id": 38,
        "name": "Board Development"
    },
        "id": 22,
        "name": "Children & Youth"
    },
    {
        "id": 25,
        "name": "Community"
    },
    {
        "id": 37,
        "name": "Computers & Technology"
    },
        "id": 14,
        "name": "Crisis Support"
    },
        "id": 17,
        "name": "Disabled"
    },
        "id": 42,
        "name": "Disaster Relief"
    },
    {
        "id": 15,
```

```
"name": "Education & Literacy"
},
{
    "id": 28,
    "name": "Emergency & Safety"
},
{
    "id": 27,
    "name": "Employment"
},
    "id": 13,
    "name": "Environment"
},
    "id": 31,
    "name": "Gay Lesbian Bi & Trans"
},
    "id": 11,
    "name": "Health & Medicine"
},
{
    "id": 7,
    "name": "Homeless & Housing"
},
{
    "id": 39,
    "name": "Hunger"
},
    "id": 41,
    "name": "Immigrants & Refugees"
},
    "id": 29,
    "name": "International"
},
    "id": 5,
    "name": "Justice & Legal"
},
{
    "id": 40,
```

```
"name": "Media & Broadcasting"
        },
        {
            "id": 6,
            "name": "Politics"
        },
        {
            "id": 33,
            "name": "Race & Ethnicity"
        },
            "id": 36,
            "name": "Religion"
        } ,
            "id": 12,
            "name": "Seniors"
        },
            "id": 19,
            "name": "Sports & Recreation"
        },
        {
            "id": 43,
            "name": "Veterans & Military Families"
        },
            "id": 3,
            "name": "Women"
    ],
    "grantFields": null,
    "hoursTrackingFields": [
            "choices": [
                "Yes",
                "No"
            ],
            "id": 12239,
              "label": "Did this project leverage your skills from your current
professional career? ",
            "required": true,
            "type": "singlechoice"
        },
```

```
"choices": [
                "Yes",
                "No"
            ],
            "id": 12240,
                "label": "Did this project leverage your skills from any past
professional careers?",
            "required": true,
            "type": "singlechoice"
        },
            "choices": [
                "Yes",
                "No",
                "Kinda"
            ],
            "id": 14502,
            "label": "Did you enjoy your experience?",
            "required": true,
            "type": "singlechoice"
        },
            "choices": null,
            "id": 12241,
             "label": "If you answered \"yes\" to either of the above questions,
please elaborate on what skills were used during this project that you use in a
professional-capacity.",
            "required": false,
            "type": "multiline"
        }
    ],
    "memberFields": [
            "choices": null,
            "id": 421,
            "label": "Employee ID",
            "required": false,
            "type": "singleline"
        },
            "choices": [
                "Emerald",
                "Aqua",
                "Poppy",
                "Chartreuse",
```

```
"Amethyst",
        "Slate"
    ],
    "id": 13245,
    "label": "Favorite Color",
    "required": true,
    "type": "singlechoice"
},
    "choices": [
        "yes",
        "no"
    ],
    "id": 1772,
    "label": "Have you volunteered before?",
    "required": true,
    "type": "multichoice"
},
    "choices": [
        "Small",
        "Medium",
        "Large",
        "X-Large"
    ],
    "id": 17363,
    "label": "What is your T-shirt question?",
    "required": true,
    "type": "singlechoice"
},
    "choices": null,
    "id": 432,
    "label": "Office Phone",
    "required": false,
    "type": "singleline"
},
    "choices": null,
    "id": 416,
    "label": "Location",
    "required": false,
    "type": "singleline"
},
```

```
"choices": null,
        "id": 430,
        "label": "Office Zip/Postal Code",
        "required": false,
        "type": "singleline"
    },
        "choices": null,
        "id": 417,
        "label": "Department",
        "required": false,
        "type": "singleline"
   }
],
"partners": [
    {
        "id": 55,
        "name": "Ronald McDonald House Charities"
    },
    {
        "id": 52,
        "name": "Kids In Need"
    },
        "id": 56,
        "name": "Arthritis Foundation"
    },
        "id": 57,
        "name": "American Cancer Society"
    },
    {
        "id": 58,
        "name": "SCORE"
    },
        "id": 59,
        "name": "Goodwill"
    },
        "id": 5,
        "name": "Feeding America (America's Second Harvest)"
    },
```

```
{
        "id": 1,
        "name": "American Red Cross"
    },
        "id": 39,
        "name": "American Red Cross Blood Services"
    } ,
    {
        "id": 7,
        "name": "National CASA"
    },
    {
        "id": 41,
        "name": "National MS Society"
    },
        "id": 47,
        "name": "Easter Seals"
    },
    {
        "id": 50,
        "name": "Girl Scouts"
    }
],
"radii": [
    "city",
    "subregion",
    "msa",
    "region",
    "country",
    "all"
],
"referralFields": null,
"usCorps": [
   {
        "id": 2,
        "name": "AmeriCorps"
    },
        "id": 4,
        "name": "Citizen Corps"
    },
```

getServiceStatus

Description

Retrieve service-related data, such as the number of public opportunities, organizations, and referrals.

Supported Method

GET

URL

http://www.volunteermatch.org/api/call?action=getServiceStatus

Role Limitations

NONE

Parameters

NONE

Results

The response payload will be of the form

```
"publicMembers": 1499000,
    "publicOpportunities": 17852,
    "publicOrganizations": 72750,
    "publicOrganizationsWithOpportunities": 5797,
    "publicReferrals": 3651355,
    "timestamp": "2010-10-07T17:34:01-0700",
    "uptime": 37530
}
```

helloWorld

Description

The helloWorld call is used to test the connectivity of a client application with the API service.

Supported Method(s)

GET

URL

http://www.volunteermatch.org/api/call?action=helloWorld

Role Limitations

None

Parameters

Name	Format	Frequency	Description
Name	String	1	Any string

Example

```
{
    "name": "john"
}
```

Results

The response payload will be of the form

```
{
    "name": "john",
    "result": "Hello john!"
}
```

Errors

HTTP Status	Message	Meaning
400	Missing 'query' parameter	The service cannot find the parameter named query in your API call
400	Cannot read the 'query' parameter	The service can find the parameter named query in your API call but cannot make sense of it within the context of the current API call.

searchOpportunities

Description

Search for matching Opportunities. By default, all active Opportunities available to the key will be searched.

Supported Method(s)

GET

URL

http://www.volunteermatch.org/api/call?action=searchOpportunities

Role Limitations

Only opportunities visible by the API account are considered.

Parameters

All parameters that can be provided more than once expand results; for example, by requesting both "public" opportunities and "private" opportunities

```
"opportunityTypes":["public","private"]
```

you will receive both.

Every distinct parameter provided limits results; for example, by requesting "public" opportunities and virtual opportunities

```
"virtual":true,
"opportunityTypes":["public"]
```

you will receive only opportunities that are both public and virtual.

Required Parameters

One of virtual or location are required.

Name	Format	Frequency	Description	Example
categoryIds	Array of integers	0 or 1	Limit results to opportunities in the particular categories (see getMetaData)	"categoryIds" : [11,17]
dateRanges	Array of DateRange	0 or 1	If several date ranges are provided, the result shows opportunities that match any of those date ranges (not each of them)	
descriptions	Array of string	0 or 1	Limit results to opportunities with matching descriptions	"descriptions":["bird watching"]
fieldsToDisplay	Array of strings	0 or 1	List of fields to return (1)	"fieldsToDisplay": ["title", "location","vmUrl"]
keywords	Array of strings	0 or 1	Limit results to opportunities with matching keywords. Keywords search titles, organization name, description, skills and categories	"keywords" : ["children"]
location	String	0 or 1	Search for opportunities in a specific area	"location": "san francisco"
numberOfResults	Integer	0 or 1	The number of results to return; defaults to 20	
opportunityTypes	Array of strings	0 or 1	Limit results to opportunities of the particular types. Valid types are featured, private, public, project.	
orgNames	Array of strings	0 or 1	Limit results to opportunities with matching organization name	"orgNames" :["red cross"]
pageNumber	Integer	0 or 1	The page of results to return	
partners	Array of integers	0 or 1	Limit results to opportunities sponsored by particular partners (see getMetaData)	
radius	Floating number (as a string) or one of city, subregion (county), msa or region(state)	0 or 1	Specifies the radius of the search (in km or political boundaries). "radius": "city "radius": "34.	
skills	Array of strings	0 or 1	Limit results to opportunities with matching skills	
sortCriteria	string	0 or 1	Sorting criteria. One of distance, update, eventdate or orgname	
sortOrder	string	0 or 1	The sort order, asc or desc	
usCorps	Array of integers	0 or 1	Limit results to opportunities for the particular corp(USA Freedom Corps identifies, see getMetaData	
virtual	boolean	0 or 1	Search for matching virtual opportunities	"virtual": true

¹⁻ fieldsToDisplay: title, type, location, availability, parentOrg, beneficiary, description, plaintextDescription, skillsNeeded, plaintextSkillsNeeded, volunteersNeeded, spacesAvailable, minimumAge, numReferred, requiresAddress, categoryIds, referralFields, imageUrl, created, updated, allowGroupInvitations, allowGroupReservation, hasWaitList, status, tags, virtual, vmUrl, requirements

Errors

HTTP Status	Message	Meaning
300	Location needs disambiguation	The location parameter is ambiguous. Use the returned array of locations to disambiguate it
400	Missing 'query' parameter	The service cannot find the parameter named query in your API call.
400	Cannot read the 'query' parameter. Please check your documentation.	The service can find the parameter named query in your API call but cannot make sense of it within the context of the current API call.
400	Invalid 'dateRanges' parameter.	The dateRanges parameter cannot be interpreted correctly.
400	Invalid 'numberOfResults' parameter. Maximum is x.	This API call is requested more results than the API key allows.
400	Invalid opportunity type. Please check your documentation.	Your API key doesn't support this type of opportunity.
400	Invalid radius. Please check your documentation.	Cannot make sense of the radius parameter.
400	Missing location.	This API call expects a location parameter when you do not request virtual opportunities.
400	Invalid 'partners' parameter.	The partners parameter cannot be understood.
400	Invalid 'categoryIds' parameter.	The categoryIds parameter cannot be understood.
400	Invalid 'usCorps' parameter.	The usCorps parameter cannot be understood.
404	Location unknown.	Cannot retrieve the given location parameter.

If you receive a 300 error saying 'Location needs disambiguation', this means that the information you passed in the location field is ambiguous and results in several possible locations. As a response, you will receive a list of locations that your user will need to disambiguate. For instance, try searching for opportunities with a location equal to 'Louisville', 'Springfield' or 'Paris'.

searchOrganizations

Description

Search for matching organizations. By default, all active organizations available to the given key will be searched.

Supported Method(s)

GET

URL

http://www.volunteermatch.org/api/call?action=searchOrganizations

Role Limitations

Only organizations visible by the API account are considered.

Parameters

All parameters that can be provided more than once expand results; for example, by requesting both "public" organizations and "private" organizations

```
"organizationType":["public","private"]
```

you will receive both.

Every distinct parameter provided limits results; for example, by requesting "public" organizations and the "Community" category

```
"categories":[25],
"organizationType":["public"]
```

you will receive only organizations that are both public and are tagged as "Community".

Required Parameters

location is required

Name	Format	Frequency	Description	Example
categoryIds	Array of integers	0 or 1	limit results to organizations in the particular categories	
descriptions	Array of strings	0 or 1	limit results to organizations with matching descriptions	"descriptions":["bird watching"]
fieldsToDisplay	array of strings	0 or 1	list of fields to display in the response (1).	"fieldsToDisplay": ["name","avgRating"]
keywords	array of strings	0 or 1	limit results to organizations with matching keywords; keyword searches org name, description, mission, and categories	"keywords": ["children"]
location	string	0 or 1	search for organizations in a specific area	"location":"San Francisco"
mission	array of strings	0 or 1	limit results to organizations with matching mission	"mission": ["administration"]
names	array of strings	0 or 1	limit results to organizations with matching names	
numberOfResults	integer	0 or 1	the number of results to return; defaults to 20.	
pageNumber	integer	0 or 1	the page number of results to return.	
partners	Array of integers	0 or 1	limit results to organizations sponsored by particular partners	
radius	string representing a floating number or one of 'city', 'subregion' (county), 'msa', or 'region' (state)	0 or 1	specifies the radius of the search (in km or political boundaries). Default is 20 miles.	"radius":"city" "radius":"34.5"
sortCriteria	one of 'distance', 'relevance', 'recency', 'update', 'eventdate', or 'name'	0 or 1	sorting criteria	
sortOrder	string	0 or 1	the sort order, asc or desc	
usCorps	Array of integers	0 or 1	limit results to organizations for the particular corps	

 $^{1-\} fields To Display:\ name,\ url,\ location,\ description,\ plaintext Description,\ mission,\ plaintext Mission,\ image Url,\ created,\ updated,\ num Reviews,\ avg Rating,\ contact,\ category Ids,\ vm Url,\ type$

Errors

HTTP Status	Message	Meaning
300	Location needs disambiguation	The location parameter is ambiguous. Use the returned array of locations to disambiguate it
400	Missing 'query' parameter	The service cannot find the parameter named query in your API call.
400	Cannot read the 'query' parameter. Please check your documentation.	The service can find the parameter named query in your API call but cannot make sense of it within the context of the current API call.
400	Invalid 'numberOfResults' parameter. Maximum is x.	This API call is requested more results than the API key allows.
400	Invalid radius. Please check your documentation.	Cannot make sense of the radius parameter.
400	Missing location.	This API call expects a location parameter.
400	Invalid 'partners' parameter.	The partners parameter cannot be understood.
400	Invalid 'categoryIds' parameter.	The categoryIds parameter cannot be understood.
400	Invalid 'usCorps' parameter.	The usCorps parameter cannot be understood.
404	Location unknown.	Cannot retrieve the given location parameter.

Examples

Search for 10 records on page 3 of organizations around the 94108 zip code whose name matches "red cross". Specifically ask for the name and location fields.

Request

```
"location" : "94108",
   "nbOfResults": 10,
   "pageNumber": 3,
   "fieldsToDisplay": [ "name", "location" ],
   "names" : [ "red cross" ]
}
```

Response

```
"region": "CA"
},
    "name": "American Red Cross Blood Services of Northern California"
},
{
    "location": {
        "city": "San Francisco",
        "country": "US",
        "postalCode": "94105",
        "region": "CA",
    },
    "name": "American Red Cross Bay Area"
}
],
    "resultsSize": 2
```

Appendices

A. Schemas

Availability

Availability structure

Name	Format	Frequency	Description
ongoing	boolean	0 or 1	true if the opportunity is ongoing
singleDayOpportunity	boolean	1	true if the opportunity happens in a single day
startDate	date as string	1	start date
startTime	time as string	1	start time
endDate	date as string	1	end date
endTime	time as string	1	end time

Example

Availability, as part of a searchOpportunities search result

```
{
    availability": {
        "endDate": "2011-05-31",
        "endTime": "15:00:00",
        "ongoing": false,
        "singleDayOpportunity": false,
        "startDate": "2010-07-21",
        "startTime": "13:00:00"
    }
}
```

DateRange

DateRange structure

Name	Format	Frequency	Description
ongoing	boolean	0 or 1	true if the date range should match ongoing opportunities
singleDayOpps	boolean	0 or 1	true if the date range should match single day opportunities
startDate	date as string	0 or 1	start date
endDate	date as string	0 or 1	end date

Relevant date ranges

Be careful about the combination of parameters in your date ranges:

- singleDayOpps alone will not be evaluated : it requires startDate and / or endDate
- ongoing is specified alone and means that the date range matches opportunities that are continuously ongoing.

Example

Date range matching matching single day opportunities between 2 dates

```
{
    "singleDayOpps" : true,
    "startDate" : "2010-06-01",
    "endDate": "2010-11-01"
}
```

Date range matching ongoing opportunities

```
{
   "ongoing" : true
}
```

Location

Location structure

Name	Format	Frequency	Description
city	string	0 or 1	city name
country	string	0 or 1	country code
postalCode	string	0 or 1	postal code
region	string	0 or 1	administrative region (in the US : state code)

Example

```
"city": "san francisco",
   "country": "us",
   "postalCode": "94108",
   "region": "ca"
}
```

Opportunity

Opportunity structure

Name	Format	Frequency	Description	
availability	Availability	0 or 1	start date and time, end date and time of the opportunity	
beneficiary		0 or 1	the beneficiary organization for the opportunity	
categoryIds	Array of integers. See getMetaData	0 or 1	the categories the opportunity is filed under.	
created	date as string	0 or 1	creation date of the opportunity	
description	string	0 or 1	description of the opportunity, possibly in HTML format.	
imageUrl		0 or 1	url of the picture provided for the opportunity. The URL is encoded. See http://en.wikipedia.org/wiki/Url_encoding	
location	Location	0 or 1	the place where the opportunity takes place	
minimumAge	integer	0 or 1	minimum age in order to volunteer for the opportunity	
numReferred	integer	0 or 1	number of people who have already signed up for the opportunity	
parentOrg	Organization	0 or 1	the parent organization	
plaintextDescription	string	0 or 1	description of the opportunity, in plain text format	
plaintextSkillsNeeded	string	0 or 1	skills required or desired in order to volunteer for the opportunity, in plain text format	
skillsNeeded	string	0 or 1	skills required or desired in order to volunteer for the opportunity, possibly in HTML format	
spacesAvailable	integer	0 or 1	number of volunteers still needed	
status	string	0 or 1	status of the opportunity : one of deleted , inactive or active .	
tags	string	0 or 1	list of tags as a string	
title	string	0 or 1	the title of the opportunity	
type	string	0 or 1	the type of opportunity: one of featured , private , public , project .	
updated	date as string	0 or 1	last update date of the opportunity	
virtual	boolean	0 or 1	true if the opportunity is virtual.	
vmUrl	string	0 or 1	the VolunteerMatch url of the opportunity. The URL is encoded. For instance, http%3A%2F%2Fwww.volunteermatch.org%2Fresults	

Name	Format	Frequency	Description	
			%2Fopp_detail.jsp%3Foppid %3D607555%26apiAccountName%3Dmy+account need to be decoded into http://www.volunteermatch.org/results/opp_detail.jsp? oppid=607555&apiAccountName=my+account See http://en.wikipedia.org/wiki/Url_encoding	
volunteersNeeded	integer	0 or 1	number of volunteers needed	

Example

```
"availability": {
    "endDate": "2011-05-31",
    "endTime": "15:00:00",
    "ongoing": false,
    "singleDayOpportunity": false,
    "startDate": "2010-07-21",
    "startTime": "13:00:00"
"categoryIds": [ 30 ],
"description": " testOpp001 ",
"id": 698194,
"location": {
    "city": "San Francisco",
    "country": "US",
    "postalCode": "94108",
    "region": "CA"
} ,
"skillsNeeded": " * aa: aaa * bb: bbb ",
"title": "test Opp 001"
```

Organization

Organization structure

Name	Format	Frequency	Description
avgRating	floating number	0 or 1	the average rating that people gave to this organization
categoryIds	Array of integers. See getMetaData	0 or 1	the categories the organization is filed under.
created	date as string	0 or 1	creation date of the organization

Name	Format	Frequency	Description	
description	string	0 or 1	description of the organization, possibly in HTML format.	
imageUrl	string	0 or 1	url of the picture provided for the organization	
location	Location	0 or 1	the location of the organization	
mission	string	0 or 1	the mission of the organization, possibly in HTML format.	
name	string	0 or 1	the name of the organization	
numReviews	integer	0 or 1	the number of reviews for this organization	
plaintextDescription	string	0 or 1	description of the organization, in plain text format	
plaintextMission	string	0 or 1	the mission of the organization, in plain text format	
type	string	0 or 1	type of the organization. One of nonvm, private, public, specialevent.	
updated	date as string	0 or 1	last update date of the organization	
url	string	0 or 1	the public url of the organization	
vmUrl	string	0 or 1	the VolunteerMatch url of the organization. See http://en.wikipedia.org/wiki/Url_encoding	

Example

```
{
    "avgRating": 0.0,
    "location": {
        "city": "San Francisco",
        "country": "US",
        "region": "CA"
    },
    "name": "\"my org\"",
    "numReviews": 0,
    "vmUrl": "http%3A%2F%2Fwww.volunteermatch.org%2Fresults%2Forg_detail.jsp%3Forgid%3D12345%26apiAccountName%3Dacme1%26isPublicProgramKey%3Dtrue"
}
```

B. Error codes

HTTP Status	Meaning		
200	The request was successfully executed.		
300	A resource requires some disambiguation.		
400	The request is not well formed.		
401	The request could not be authorized		
403	The request is well formed but tries to access something forbidden.		
404	The request is well formed but the requested resource could not be found.		
405	Method not allowed. Usually the wrong verb is used, for instance GET instead of POST.		
500	An error occurred on the API service side		

HTTP Status	Message	Meaning	Raised by
300	Location needs disambiguation	The location parameter is ambiguous. Use the returned array of locations to disambiguate it.	searchOpportunities, searchOrganizations
400	Bad Request	The API service cannot make sense of the query parameter. The most common reason is that the query parameter is not a valid JSON construct. Check for missing commas, valid data types (string, number, boolean), valid structures (arrays vs primitive types).	All Calls that require some input parameter(s)
400	Cannot read the 'query' parameter. Please check your documentation.	The service can find the parameter named query in your API call but cannot make sense of it within the context of the current API call.	All Calls that require some input parameter(s)
400	Invalid 'categoryIds' parameter. Please check your documentation.	The categoryIds parameter cannot be understood.	searchOpportunities, searchOrganizations
400	Invalid 'dateRanges' parameter.	The dateRanges parameter cannot be interpreted correctly.	<u>searchOpportunities</u>
400	Invalid 'numberOfResults' parameter. Maximum is x.	This API call is requesting more results than the API key allows.	searchOpportunities, searchOrganizations
400	Invalid 'partners' parameter. Please check your documentation.	The partners parameter cannot be understood.	searchOpportunities, searchOrganizations
400	Invalid 'radius' parameter. Please check your documentation.	The radius parameter cannot be understood.	searchOpportunities, searchOrganizations
400	Invalid 'usCorps' parameter. Please check your documentation.	The usCorps parameter cannot be understood.	searchOpportunities, searchOrganizations

HTTP Status	Message	Meaning	Raised by
400	Invalid value for parameter "x" in context "y".	One of the input parameters you provided (x) is invalid. The context y will give you an hint to find the error. You may have passed an integer value as a string for instance.	All Calls that require some input parameter(s)
400	Missing location.	This API call expects a location parameter when you do not request virtual opportunities.	searchOpportunities, searchOrganizations
400	Missing 'query' parameter.	The service cannot find the parameter named query in your API call.	All Calls that require some input parameter(s)
401	You exceeded the bandwidth allowed for this period of time.	You are not allowed more that a certain bandwidth for a given period of time. Consult your customer representative.	All calls
401	You exceeded the number of calls allowed for this period of time.	You are not allowed more that a certain number of API calls for a given period of time. Consult your customer representative.	All calls
404	Location unknown.	Cannot retrieve the given location parameter.	searchOpportunities, searchOrganizations
405	POST	It is likely that you tried to execute a GET API call as a POST.	All GET calls
500	Server error. Try again later or contact VolunteerMatch.	An error occurred on the API service side. Contact VolunteerMatch.org	All calls

C. Data types formats

Data types formats

date as string: YYYY-MM-DD. For instance 2011-05-31 (May 31st 2011)

time as string: hh:mm:ss . For instance 15:00:00 (3 pm)