**SEO SDK for .NET**

API User Document

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# 1 – Audience

This document is intended to all developers who are familiar with C# .NET programming and who intend to use APIs from SEO-SDK to enhance Bazaarvoice SEO capabilities on their site.

This document is also a starting point for developers who want to extend the capabilities of SEO-SDK. Documents on API development can be found at <http://bazaarvoice.github.io/seo_sdk_dotnet> or <https://github.com/bazaarvoice/seo_sdk_dotnet/blob/master/docs/SEO-SDK-DOTNET_API_Developer_document.docx>

# 2 – Pre-requisites

Following are pre-requisites required for SEO-SDK to work:

* .NET Framework 2.0 or above.
* SEO-SDK-DOTNET libraries.

# 3 – Introduction

There are various SEO-SDK libraries available for download from the following location: <http://bazaarvoice.github.io/seo_sdk_dotnet> Copy the provided .dll files (BVSeoSdkDotNet.dll, Commons.dll, log4net.dll, and NVelocity.dll) to the bin folder of the host web application.

# 4 – Getting started

The simplest form to get seo-sdk to retrieve Bazaarvoice UI contents is by creating an instance of “BVManagedUIContent“ class and an instance of “BVParameters” class with all attributes populated and then invoke the BVManagedUIContent’s searchContent method by passing BVParameters instance. Below is the code snippet that gets the content.

*BVParameters bvParam = new BVParameters();*

*bvParam.UserAgent = Request.UserAgent; //taken from HTTPRequest object*

*bvParam.BaseURI = "http://localhost:8080/Sample/Example-1.jsp";*

*bvParam.PageURI = "http://localhost:8080/Sample/Example-1.jsp?bvrrp=123";*

*bvParam.ContentType = new BVContentType(BVContentType.REVIEWS);*

*bvParam.SubjectType = new BVSubjectType(BVSubjectType.PRODUCT);*

*bvParam.SubjectId = "product1";*

*BVUIContent bvUIContent = new BVManagedUIContent();*

*String content = bvUIContent.getContent(bvParam);*

The output above will yield us “HTTP 404 Forbidden” since the settings are wrong, but having set valid values to bvParam and setting right values to BVConfiguration, will get you the proper contents.

# 5 – BVConfiguration

BVSdkConfiguration is an implementation of BVConfiguration interface below is the code snippet along with the BVUIContent and BVParamaters for this example.

*BVConfiguration bvConfig = new BVSdkConfiguration();*

*bvConfig.addProperty(BVClientConfig.SEO\_SDK\_ENABLED, "true");*

*bvConfig.addProperty(BVClientConfig.STAGING, "true");*

*bvConfig.addProperty(BVClientConfig.LOAD\_SEO\_FILES\_LOCALLY, "false");*

*bvConfig.addProperty(BVClientConfig.CLOUD\_KEY,"cldKey-a4501eb5be8bf8efda68f3f4ff7b3cf4");*

*bvConfig.addProperty(BVClientConfig.LOCAL\_SEO\_FILE\_ROOT, "/");*

*bvConfig.addProperty(BVClientConfig.BV\_ROOT\_FOLDER, "6574-en\_us");*

*BVParameters bvParam = new BVParameters();*

*bvParam.UserAgent = “google”;*

*bvParam.BaseURI = "http://localhost:8080/Sample/Example-1.jsp";*

*bvParam.PageURI = "http://localhost:8080/Sample/Example-1.jsp?bvrrp=123";*

*bvParam.ContentType = new BVContentType(BVContentType.REVIEWS);*

*bvParam.SubjectType = new BVSubjectType(BVSubjectType.PRODUCT);*

*bvParam.SubjectId = "product1";*

*BVUIContent bvUIContent = new BVManagedUIContent(bvConfig);*

*String content = bvUIContent.getContent(bvParam);*

NOTE: Starting from v2.0 it is also possible to make multiple configurations using *BVConfiguration bvConfig = new BVSdkConfiguration();* and appropriate values can bet set depending on the environment.

# 6 – BVParameters

BVParameters class helps in setting all the query parameters which is internally used in BVManagedUIContent class in retrieving the content.

The class has following attributes:

|  |  |  |
| --- | --- | --- |
| **Attribute** | **Type** | **Mandatory** |
| UserAgent | String | Required |
| BaseURI | String | Optional |
| PageURI | String | Optional |
| SubjectId | String | Not required for C2013 and required for PRR implementation. |
| ContentType | BVContentType | Not required for C2013 and required for PRR implementation. |
| SubjectType | BVSubjectType | Not required for C2013 and required for PRR implementation. |

**UserAgent:** Browser’s User-Agent header information and there are various ways to obtain the information in .NET it can be obtained using ***Request.UserAgent*** where “Request” is the HTTPRequest object of the page.

**BaseURI:** It is the URL used in paginating through contents if pagination is available for the content. The URL has to be absolute or it could be just blank (null is allowed).

**PageURI:** Has to be absolute URL and contains complete information about the product, category and page number. This can also be a C2013 supported URL which can contain “bvpage” query parameters.

PRR example:

[*http://localhost:8080/Sample/Example-1.jsp*](http://localhost:8080/Sample/Example-1.jsp)

[*http://localhost:8080/Sample/Example-1.jsp?name=abcd&bvrrp=6484-en\_us/reviews/product/3/product-1.htm*](http://localhost:8080/Sample/Example-1.jsp?name=abcd&bvrrp=6484-en_us/reviews/product/3/product-1.htm)

http://localhost:8080/Sample/Example-1.jsp?name=abcd&bvpage=ctre/id3000001/stp

**SubjectId:** Identifier for the subject to get the content. This will be productId for reviews, questions and answer on SubjectType - product. This will be reviewId for SubjectType - Category.

**ContentType:** An object of type BVContentType which gets the SEO content based on the content type that is set. This class can be initialized with the following possible constant values:

REVIEWS, REVIEWSPAGE, QUESTIONS, QUESTIONSPAGE, STORIES, STORIESPAGE, and UNIVERSAL.

**SubjectType:** An object of type BVSubjectType which gets the SEO content based on the subject type that is set. This class can be initialized with the following possible constant values: PRODUCT, CATEGORY, ENTRY, & DETAIL.

# 7 – BVManagedUIContent

BVManagedUIContent class is an implementation of BVUIContent interface and an entry point class to get the required contents from bazaarvoice cloud or file based on the configuration.

BVManagedUIContent uses BVConfiguration (an interface for configuration) and BVParameters to retrieve the content which is described earlier.

BVUIContent has three important methods as mentioned below and each method signature takes BVParameters argument:

**BVUIContent.getContent:** Gets the complete SEO content either from local file or from cloud SEO based on the configuration that is used. The content includes AggregateRating and Reviews. Returns String representation of the content.

**BVUIContent.getAggregateRating:** Use this API only if you need to get the aggregate rating from local file or from cloud SEO. Also ensure that the site is configured and enabled for aggregate rating. Returns String representation of the content.

**BVUIContent.getReviews:** Use this API to get only review content from local file or from cloud SEO. Returns String representation of the content.

# 8 – Logging

The .NET SEO SDK uses log4net libraries to log debug information, exceptions and errors. The log4net setup is configured using a configuration file that is packaged along with the SDK name “BVLog4Net.config”. It contains an element name “file” where the user can specify the location of the log file, which by default is setup to log under the “C:\Windows\Temp\” folder by using the System Variable %windir%. The user can change it by changing this value.

<file value="${windir}\Temp\BV-SEO-SDK-DOTNET-LOGFILE.log" />

The configuration file needs to be copied to the root directory of the application that is using the SDK for logging to work properly.

# 9 – Resources

Below are few links to refer for further information:

Release Notes: <https://github.com/bazaarvoice/seo_sdk_dotnet/blob/master/docs/Release-Notes.docx>

API Developer Document: <https://github.com/bazaarvoice/seo_sdk_dotnet/blob/master/docs/SEO-SDK_API_Developer_document.docx>

SDK Library release site: <http://bazaarvoice.github.io/seo_sdk_dotnet>

Example: <https://github.com/bazaarvoice/seo_sdk_dotnet/tree/master/BVSeoSdkDotNet/DotNetAspxExample>