



nomitech

New Open Mind Technologies

CostOS API V6.2

COST **OS**

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Authentication

To access the API you must use Basic Authentication in every request

For more information about Basic Authentication see
https://en.wikipedia.org/wiki/Basic_access_authentication

See also the example at the end of the document.

Methods

listEPS

Parameters	Value	description
NONE		

Description

Enterprise project structure list

Example request

[/ces/jsonapi/listEPS.action](#)

```
[
  {
    "code": "10",
    "description": "",
    "id": 9,
    "title": "Direct Projects"
  },
  {
    "code": "10.10",
    "description": "",
    "id": 10,
    "title": "Buildings"
  }
]
```

projectEPSwithURLViewMetadata

Parameters	Value	description
NONE		

Description

Table, URL and project Metadata

Example request

</ces/jsonapi/projectEPSwithURLViewMetadata.action>

```
[
  {
    "columnName": "eps.CODE1",
    "dataType": "Text",
    "displayName": "EPS LEVEL 1 CODE",
    "fieldName": "epsLevel1Code",
    "kendoDataType": "string"
  },
  {
    "columnName": "eps.CODE2",
    "dataType": "Text",
    "displayName": "EPS LEVEL 2 CODE",
    "fieldName": "epsLevel2Code",
    "kendoDataType": "string"
  }
]
```

projectEPSViewMetadata

Parameters	Value	description
NONE		

Description

Table and Metadata

Example request

</ces/jsonapi/projectEPSViewMetadata.action>

```
[
  {
    "columnName": "eps.CODE1",
    "dataType": "Text",
    "displayName": "EPS LEVEL 1 CODE",
    "fieldName": "epsLevel1Code",
    "kendoDataType": "string"
  },
  {
    "columnName": "eps.CODE2",
    "dataType": "Text",
    "displayName": "EPS LEVEL 2 CODE",
    "fieldName": "epsLevel2Code",
    "kendoDataType": "string"
  }
]
```

projectEPSWithUsersViewMetadata

Parameters	Value	description
NONE		

Description

Enterprise project structure list with user information metadata

Example request

</ces/jsonapi/projectEPSWithUsersViewMetadata.action>

```
[
  {
    "columnName": "eps.CODE1",
    "dataType": "Text",
    "displayName": "EPS LEVEL 1 CODE",
    "fieldName": "epsLevel1Code",
    "kendoDataType": "string"
  },
  {
    "columnName": "eps.CODE2",
    "dataType": "Text",
    "displayName": "EPS LEVEL 2 CODE",
    "fieldName": "epsLevel2Code",
    "kendoDataType": "string"
  }
]
```


listGlobalPropertiesDefaults

Parameters	Value	description
NONE		

Description

List with default global properties

Example request

</ces/jsonapi/listGlobalPropertiesDefaults.action>

```
{
  "clientLogo": "C:\\CostOS V\\costos_logo.png",
  "clientName": "Nomitech Contractors",
  "clientSignature": "NOMI",
  "currencyDataList": [
    {
      "code": "EU",
      "currencySymbol": "€",
      "displayName": "EUR - Eurozone Euros",
      "threeDigitCode": "EUR"
    },
    {
      "code": "US",
      "currencySymbol": "$",
      "displayName": "USD - United States Dollars",
      "threeDigitCode": "USD"
    },
    {
      "code": "GB",
      "currencySymbol": "£",
      "displayName": "GBP - Great Britain Pound",
      "threeDigitCode": "GBP"
    },
    {
      "code": "IN",
      "currencySymbol": "Rs",
      "displayName": "INR - Indian Rupee",
      "threeDigitCode": "INR"
    },
    {
      "code": "MY",
      "currencySymbol": "RM",
      "displayName": "MYR - Malaysian Ringgit",
      "threeDigitCode": "MYR"
    },
    {
      "code": "QA",
      "currencySymbol": "QAR",
      "displayName": "QAR - Qatar Riyals",
      "threeDigitCode": "QAR"
    },
    {
      "code": "SA",
      "currencySymbol": "SAR",
      "displayName": "SAR - Saudi Arabia Riyals",
      "threeDigitCode": "SAR"
    },
    {
      "code": "SG",
```

```
        "currencySymbol": "SG$",
        "displayName": "SGD - Singapore Dollar",
        "threeDigitCode": "SGD"
    }
],
"currencyList": "EUR;USD;GBP;INR;MYR;QAR;SAR;SGD;AED;TRY;RUB;",
"currencySymbol": "£",
"decimalScale": "2",
"defaultCountry": "GB",
"defaultCountryName": "UNITED KINGDOM",
"defaultCurrencyCode": "GBP",
"defaultCurrencyName": "GBP - Great Britain Pound",
"dieselPrice": "1.05",
"dividerScale": "32",
"electricityPrice": "0.1",
"lubricatesPrice": "1.5",
"otherEnergy": "0.5",
"petrolPrice": "1.3",
"roundingMode": "4"
}
```

listUnitAliases

Parameters	Value	description
NONE		

Description

CostOS units and aliases

Example request

[/ces/sonapi/listUnitAliases.action](#)

```
[
  {
    "fromUnit": "CUSTOM8",
    "id": 1,
    "toUnit": " CalWK"
  },
  {
    "fromUnit": "CUSTOM4",
    "id": 2,
    "toUnit": "dM3"
  }
]
```

listGroupCodeNames

Parameters	Value	description
NONE		

Description

The name of all groupcodes

Example request

</ces/jsonapi/listGroupCodeNames.action>

```
{
  "groupCode1DisplayName": "CSI_DIV16 | SMM7",
  "groupCode1Division": "false",
  "groupCode1Id": "true",
  "groupCode1Seperator": ".",
  "groupCode1Style": "dotted",
  "groupCode1TitleSeperator": "-",
  "groupCode2DisplayName": "NRM1",
  "groupCode2Division": "false",
  "groupCode2Id": "true",
  "groupCode2Seperator": ".",
  "groupCode2Style": "dotted",
  "groupCode2TitleSeperator": "-",
  "groupCode3DisplayName": "CSI Masterformat 2015",
  "groupCode3Division": "false",
  "groupCode3Id": "true",
  "groupCode3Seperator": ".",
  "groupCode3Style": "numeric5",
  "groupCode3TitleSeperator": "-",
  "groupCode4DisplayName": "NRM2",
  "groupCode4Division": "false",
  "groupCode4Id": "true",
  "groupCode4Seperator": ".",
  "groupCode4Style": "dotted",
  "groupCode4TitleSeperator": "-",
  "groupCode5DisplayName": "UniFormat II_QMM",
  "groupCode5Division": "false",
  "groupCode5Id": "true",
  "groupCode5Seperator": ".",
  "groupCode5Style": "dotted",
  "groupCode5TitleSeperator": "-",
  "groupCode5division": "false",
  "groupCode6DisplayName": "EPC | HMM | RMM2 | CESMM4",
  "groupCode6Division": "false",
  "groupCode6Id": "true",
  "groupCode6Seperator": ".",
  "groupCode6Style": "dotted",
  "groupCode6TitleSeperator": "-",
  "groupCode7DisplayName": "POMI",
  "groupCode7DivisionId": "false",
  "groupCode7Id": "true",
  "groupCode7Seperator": ".",
  "groupCode7Style": "dotted",
  "groupCode7TitleSeperator": "-",
  "groupCode8DisplayName": "Masterformat 2016 | ARUP (Letters)",
  "groupCode8DivisionId": "false",
  "groupCode8DivisionSeperator": ".",
  "groupCode8Id": "true",
  "groupCode8Style": "dotted",
}
```

```
"groupCode8TitleSeperator": "-",
"groupCode9DisplayName": "ICMS | Resource Coding",
"groupCode9Division": "false",
"groupCode9Id": "true",
"groupCode9Style": "dotted",
"groupCode9seperator": ".",
"groupCode9titleSeperator": "-",
"groupSeperator": ".",
"titleSeperator": "-",
"wbs1DivisionId": "false",
"wbs1Name": "Project WBS 1",
"wbs1Seperator": ".",
"wbs1ShowID": "false",
"wbs1TitleSeperator": "-",
"wbs2Code": "false",
"wbs2Name": "Project WBS 2",
"wbs2Seperator": ".",
"wbs2division": "true"
}
```

listProjectEPSWithURL

Parameters	Value	description
NONE		

Description

Projects and url structure information

Example request

[/ces/jsonapi/listProjectEPSWithURL.action](#)

```
[
  {
    "defaultProjectClient": "",
    "defaultProjectCode": "WER",
    "defaultProjectCountry": "GB",
    "defaultProjectCreateDate": "2018-04-17T09:42:18",
    "defaultProjectCreatorId": "admin",
    "defaultProjectCurrency": "GBP",
    "defaultProjectCurrencySymbol": "£",
    "defaultProjectDescription": "",
    "defaultProjectEditorId": "admin",
    "defaultProjectGeoLocation": "0.0,0.0",
    "defaultProjectId": 1,
    "defaultProjectLastUpdate": "2018-05-03T10:09:02",
    "defaultProjectLocation": "",
    "defaultProjectOfferedPrice": 0,
    "defaultProjectState": "",
    "defaultProjectStatus": "enum.boqstatus.underreview",
    "defaultProjectTitle": "wer",
    "defaultProjectTotalCost": 0,
    "epsLevel1Code": "10",
    "epsLevel1Title": "wer",
    "projectUrlDatabaseEngine": "3",
    "projectUrlDatabaseHostname": "192.168.2.15",
    "projectUrlDatabaseName": "CostOS_TEST_APRIL2018ProjectDatabase",
    "projectUrlDatabasePort": "1433",
    "projectUrlEditorId": "john",
    "projectUrlId": 1,
    "projectUrlIsDefaultRevision": true,
    "projectUrlLastUpdate": "2018-05-03T10:09:02",
    "projectUrlName": "wer",
    "projectUrlRevisionName": "",
    "projectUrlType": "Project"
  },
  {
    "defaultProjectClient": "",
    "defaultProjectCode": "WER",
    "defaultProjectCountry": "GB",
    "defaultProjectCreateDate": "2018-04-17T09:42:18",
    "defaultProjectCreatorId": "admin",
    "defaultProjectCurrency": "GBP",
    "defaultProjectCurrencySymbol": "£",
    "defaultProjectDescription": "",
    "defaultProjectEditorId": "admin",
    "defaultProjectGeoLocation": "0.0,0.0",
    "defaultProjectId": 1,
    "defaultProjectLastUpdate": "2018-05-03T10:09:02",
    "defaultProjectLocation": "",
    "defaultProjectOfferedPrice": 0,
```

```
"defaultProjectState": "",
"defaultProjectStatus": "enum.boqstatus.underreview",
"defaultProjectTitle": "wer",
"defaultProjectTotalCost": 0,
"epsLevel1Code": "10",
"epsLevel1Title": "wer",
"projectUrlDatabaseEngine": "3",
"projectUrlDatabaseHostname": "192.168.2.15",
"projectUrlDatabaseName": "CostOS_TEST_APRIL2018ProjectDatabase",
"projectUrlDatabasePort": "1433",
"projectUrlEditorId": "john",
"projectUrlId": 1,
"projectUrlIsDefaultRevision": true,
"projectUrlLastUpdate": "2018-05-03T10:09:02",
"projectUrlName": "wer",
"projectUrlRevisionName": "",
"projectUrlType": "Project"
}
]
```

listProjectEPS

Parameters	Value	description
NONE		

Description
Projects structure information

Example request
<p>/ces/jsonapi/listProjectEPS.action</p> <pre>[{ "defaultProjectClient": "", "defaultProjectCode": "DEMO", "defaultProjectConsumableTotalCost": 0, "defaultProjectCountry": "GB", "defaultProjectCreateDate": "2017-11-11T15:03:10", "defaultProjectCreatorId": "tolis", "defaultProjectCurrency": "QAR", "defaultProjectCurrencySymbol": "QAR", "defaultProjectCustomCumDecimal1": 0, "defaultProjectCustomCumDecimal10": 0, "defaultProjectCustomCumDecimal11": 0, "defaultProjectCustomCumDecimal12": 0, "defaultProjectCustomCumDecimal13": 0, "defaultProjectCustomCumDecimal14": 0, "defaultProjectCustomCumDecimal15": 0, "defaultProjectCustomCumDecimal16": 0, "defaultProjectCustomCumDecimal17": 0, "defaultProjectCustomCumDecimal18": 0, "defaultProjectCustomCumDecimal19": 0, "defaultProjectCustomCumDecimal2": 0, "defaultProjectCustomCumDecimal20": 0, "defaultProjectCustomCumDecimal3": 0, "defaultProjectCustomCumDecimal4": 0, "defaultProjectCustomCumDecimal5": 0, "defaultProjectCustomCumDecimal6": 0, "defaultProjectCustomCumDecimal7": 0, "defaultProjectCustomCumDecimal8": 0, "defaultProjectCustomCumDecimal9": 0, "defaultProjectDescription": "", "defaultProjectEditorId": "tolis", "defaultProjectEquipmentManhours": 3003, "defaultProjectEquipmentTotalCost": 23132.016, "defaultProjectGeoLocation": "0.0,0.0", "defaultProjectId": 10057, "defaultProjectLaborManhours": 115.3363605, "defaultProjectLaborTotalCost": 464.99226, "defaultProjectLastUpdate": "2018-04-19T10:32:08", "defaultProjectLocation": "", "defaultProjectMaterialTotalCost": 0, "defaultProjectOfferedPrice": 23597.00826, "defaultProjectState": "", "defaultProjectStatus": "enum.boqstatus.completed", "defaultProjectSubcontractorTotalCost": 0, "defaultProjectTitle": "demo", "defaultProjectTotalCost": 23597.00826, "epsLevel1Code": "10", "epsLevel1Title": "Direct Projects" }]</pre>


```
}  
]
```

listProjectEPSWithUsers

Parameters	Value	description
NONE		

Description

Projects and user structure information

Example request

[/ces/jsonapi/listProjectEPSWithUsers.action](#)

```
[
  {
    "defaultProjectClient": "",
    "defaultProjectCode": "WER",
    "defaultProjectCountry": "GB",
    "defaultProjectCreateDate": "2018-04-17T09:42:18",
    "defaultProjectCreatorId": "admin",
    "defaultProjectCurrency": "GBP",
    "defaultProjectDescription": "",
    "defaultProjectEditorId": "admin",
    "defaultProjectGeoLocation": "0.0,0.0",
    "defaultProjectId": 1,
    "defaultProjectLastUpdate": "2018-05-03T10:09:02",
    "defaultProjectLocation": "",
    "defaultProjectOfferedPrice": 0,
    "defaultProjectState": "",
    "defaultProjectStatus": "enum.boqstatus.underreview",
    "defaultProjectTitle": "wer",
    "defaultProjectTotalCost": 0,
    "epsLevel1Code": "10",
    "epsLevel1Title": "wer"
  },
  {
    "defaultProjectClient": "",
    "defaultProjectCode": "SAIP01",
    "defaultProjectCountry": "GB",
    "defaultProjectCreateDate": "2018-04-18T13:02:48",
    "defaultProjectCreatorId": "admin",
    "defaultProjectCurrency": "GBP",
    "defaultProjectDescription": "",
    "defaultProjectEditorId": "admin",
    "defaultProjectGeoLocation": "0.0,0.0",
    "defaultProjectId": 2,
    "defaultProjectLastUpdate": "2018-07-03T13:43:34",
    "defaultProjectLocation": "",
    "defaultProjectOfferedPrice": 10020,
    "defaultProjectState": "",
    "defaultProjectStatus": "enum.boqstatus.completed",
    "defaultProjectTitle": "saip01",
    "defaultProjectTotalCost": 10020,
    "epsLevel1Code": "10",
    "epsLevel1Title": "wer",
    "userAQuote": true,
    "userAditms": true,
    "userAdmin": true,
    "userEditms": true,
    "userEmail": "admin@nomitech.eu",
    "userEsclte": true,
    "userEstimator": true,
  }
]
```

```
    "userId": "admin",
    "userName": "CostOS Administrator",
    "userProps": true,
    "userRQuote": true,
    "userRSRC": true,
    "userRditms": true,
    "userSQuote": true,
    "userTakeoff": true,
    "userVaitms": true,
    "userVarSusr": true,
    "userVarsAdmin": true,
    "userWbs": true,
    "userXchange": true
  },
]
```

listProjectUsers

Parameters	Value	description
NONE		

Description

List with project user information

Example request

[/ces/jsonapi/listProjectUsers.action](#)

```
[
  {
    "defaultProjectClient": "",
    "defaultProjectCode": "DEMO",
    "defaultProjectCountry": "GB",
    "defaultProjectCreateDate": "2017-11-11T15:03:10",
    "defaultProjectCreatorId": "tolis",
    "defaultProjectCurrency": "QAR",
    "defaultProjectDescription": "",
    "defaultProjectEditorId": "tolis",
    "defaultProjectGeoLocation": "0.0,0.0",
    "defaultProjectId": 10057,
    "defaultProjectLastUpdate": "2018-04-19T10:32:08",
    "defaultProjectLocation": "",
    "defaultProjectOfferedPrice": 23597.00826,
    "defaultProjectState": "",
    "defaultProjectStatus": "enum.boqstatus.completed",
    "defaultProjectTitle": "demo",
    "defaultProjectTotalCost": 23597.00826,
    "epsLevel1Code": "10",
    "epsLevel1Title": "Direct Projects"
  },
  {
    "defaultProjectClient": "",
    "defaultProjectCode": "TOLIS",
    "defaultProjectCountry": "GB",
    "defaultProjectCreateDate": "2017-11-11T21:29:01",
    "defaultProjectCreatorId": "tolis",
    "defaultProjectCurrency": "GBP",
    "defaultProjectDescription": "",
    "defaultProjectEditorId": "tolis",
    "defaultProjectGeoLocation": "51.5073219,-0.1276474",
    "defaultProjectId": 10058,
    "defaultProjectLastUpdate": "2018-04-17T10:34:03",
    "defaultProjectLocation": "",
    "defaultProjectOfferedPrice": 267247793.11821997,
    "defaultProjectState": "London, England",
    "defaultProjectStatus": "enum.boqstatus.underreview",
    "defaultProjectTitle": "Test",
    "defaultProjectTotalCost": 267247793.11821997,
    "epsLevel1Code": "10",
    "epsLevel1Title": "Direct Projects"
  }
]
```

listProjectURLSByProjectId

Parameters	Value	description
projectId	Long	The project id

Description

Project structure pointed by project id

Example request

</ces/isonapi/listProjectURLSByProjectId.action?projectId=3>

```
[
  {
    "defaultProjectClient": "", "defaultProjectCode": "TS2",
    "defaultProjectCountry": "EU",
    "defaultProjectCreateDate": "2015-06-15T15:30:56",
    "defaultProjectCreatorId": "george",
    "defaultProjectCurrency": "GBP",
    "defaultProjectCurrencySymbol": "£",
    "defaultProjectDescription": "",
    "defaultProjectEditorId": "george",
    "defaultProjectGeoLocation": "0.0,0.0",
    "defaultProjectId":3,
    "defaultProjectLastUpdate": "2015-06-15T15:30:56",
    "defaultProjectLocation": "",
    "defaultProjectOfferedPrice": 2250,
    "defaultProjectState": "",
    "defaultProjectStatus": "enum.boqstatus.completed",
    "defaultProjectTitle": "TEST 2",
    "defaultProjectTotalCost": 2250,
    "epsLevel1Code": "10",
    "epsLevel1Title": "BUILDINGS",
    "projectUrlDatabaseEngine": "3",
    "projectUrlDatabaseHostname": "192.168.2.10",
    "projectUrlDatabaseName": "cep_1431347614589",
    "projectUrlDatabasePort": "1433",
    "projectUrlEditorId": "george",
    "projectUrlId": 3,
    "projectUrlIsDefaultRevision": true,
    "projectUrlLastUpdate": "2015-06-15T15:30:56",
    "projectUrlName": "TEST 2",
    "projectUrlRevisionName": "TEST 2",
    "projectUrlType": "Project"
  }
]
```

listProjectUserByProjectId

Parameters	Value	description
projectId	Long	The project id

Description

Project user information pointed by project id

Example request

</ces/isonapi/listProjectUserByProjectId.action?projectId=3>

```
[
  {
    "defaultProjectClient": "",
    "defaultProjectCode": "TS2",
    "defaultProjectCountry": "EU",
    "defaultProjectCreateDate": "2015-06-15T15:30:56",
    "defaultProjectCreatorId": "george",
    "defaultProjectCurrency": "GBP",
    "defaultProjectDescription": "",
    "defaultProjectEditorId": "george",
    "defaultProjectGeoLocation": "0.0,0.0",
    "defaultProjectId":3,
    "defaultProjectLastUpdate": "2015-06-15T15:30:56",
    "defaultProjectLocation": "",
    "defaultProjectOfferedPrice": 2250,
    "defaultProjectState": "",
    "defaultProjectStatus": "enum.boqstatus.completed",
    "defaultProjectTitle": "TEST 2",
    "defaultProjectTotalCost": 2250,
    "epsLevel1Code": "10",
    "epsLevel1Title": "BUILDINGS"
  }
]
```

listColumnCustomizations

Parameters	Value	description
NONE		

Description

A list of column customization

Example request

<http://192.168.2.91:8080/ces/jsonapi/listColumnCustomizations.action>

```
[
  {
    "id": 1091,
    "name": "factor3",
    "resourceType": "labor",
    "selectionList": false,
    "selectionValues": ""
  },
  {
    "id": 1092,
    "name": "customEpsDate3",
    "resourceType": "projectinfo",
    "selectionList": false,
    "selectionValues": ""
  }
]
```

boqItemViewMetadata

Parameters	Value	description
NONE		

Description

Boq item information with metadata

Example request

</ces/jsonapi/boqItemViewMetadata.action>

```
[
  {
    "columnName": "projectCode",
    "dataType": "Text",
    "displayName": "Group Code",
    "fieldKey": null,
    "fieldName": "projectCode",
    "kendoDataType": "string"
  },
  {
    "columnName": "projectName",
    "dataType": "Text",
    "displayName": "Title",
    "fieldKey": null,
    "fieldName": "projectName",
    "kendoDataType": "string"
  }
]
```


boqItemView

Parameters	Value	description
projectUrlId	Long	The project ID

Description

Get Boq item information pointed by project id

Example request

</ces/jsonapi/boqItemView.action?projectUrlId=1>

```
[
  {
    "boqItemAccuracy": "enum.quotation.accuracy.estimated",
    "boqItemActivityBased": true,
    "boqItemAdjustedProductivity": 1,
    "boqItemAdjustedUnitManHours": 0,
    "boqItemAwardedIndirectRate": 0,
    "boqItemAwardedInsuranceRate": 0,
    "boqItemAwardedManhours": 0,
    "boqItemAwardedMaterialRate": 0,
    "boqItemAwardedShipmentRate": 0,
    "boqItemAwardedSubcontractorRate": 0,
    "boqItemAwardedTotalRate": 0,
    "boqItemCode": 200,
    "boqItemConsumableCost": 0,
    "boqItemConsumableRate": 0,
    "boqItemCreateDate": "2018-04-30T13:10:21",
    "boqItemCreateUserId": "john",
    "boqItemCustomCumDecimal1": 0,
    "boqItemCustomCumDecimal10": 0,
    "boqItemCustomCumDecimal11": 0,
    "boqItemCustomCumDecimal12": 0,
    "boqItemCustomCumDecimal13": 0,
    "boqItemCustomCumDecimal14": 0,
    "boqItemCustomCumDecimal15": 0,
    "boqItemCustomCumDecimal16": 0,
    "boqItemCustomCumDecimal17": 0,
    "boqItemCustomCumDecimal18": 0,
    "boqItemCustomCumDecimal19": 0,
    "boqItemCustomCumDecimal2": 0,
    "boqItemCustomCumDecimal20": 0,
    "boqItemCustomCumDecimal3": 0,
    "boqItemCustomCumDecimal4": 0,
    "boqItemCustomCumDecimal5": 0,
    "boqItemCustomCumDecimal6": 0,
    "boqItemCustomCumDecimal7": 0,
    "boqItemCustomCumDecimal8": 0,
    "boqItemCustomCumDecimal9": 0,
    "boqItemCustomDecimal1": 0,
    "boqItemCustomDecimal10": 0,
    "boqItemCustomDecimal11": 0,
    "boqItemCustomDecimal12": 0,
    "boqItemCustomDecimal13": 0,
    "boqItemCustomDecimal14": 0,
    "boqItemCustomDecimal15": 0,
    "boqItemCustomDecimal16": 0,
    "boqItemCustomDecimal17": 0,
    "boqItemCustomDecimal18": 0,
    "boqItemCustomDecimal19": 0
  }
]
```

```
"boqItemCustomDecimal2": 0,  
"boqItemCustomDecimal20": 0,  
"boqItemCustomDecimal3": 0,  
"boqItemCustomDecimal4": 0,  
"boqItemCustomDecimal5": 0,  
"boqItemCustomDecimal6": 0,  
"boqItemCustomDecimal7": 0,  
"boqItemCustomDecimal8": 0,  
"boqItemCustomDecimal9": 0,  
"boqItemCustomPercentage1": 0,  
"boqItemCustomPercentage10": 0,  
"boqItemCustomPercentage11": 0,  
"boqItemCustomPercentage12": 0,  
"boqItemCustomPercentage13": 0,  
"boqItemCustomPercentage14": 0,  
"boqItemCustomPercentage15": 0,  
"boqItemCustomPercentage16": 0,  
"boqItemCustomPercentage17": 0,  
"boqItemCustomPercentage18": 0,  
"boqItemCustomPercentage19": 0,  
"boqItemCustomPercentage2": 0,  
"boqItemCustomPercentage20": 0,  
"boqItemCustomPercentage3": 0,  
"boqItemCustomPercentage4": 0,  
"boqItemCustomPercentage5": 0,  
"boqItemCustomPercentage6": 0,  
"boqItemCustomPercentage7": 0,  
"boqItemCustomPercentage8": 0,  
"boqItemCustomPercentage9": 0,  
"boqItemCustomText1": "",  
"boqItemCustomText10": "",  
"boqItemCustomText11": "",  
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```
}
```

```
]
```

Example

Here follows an example written in java. This is for instructional purposes only and not meant to be used in productional code

```
import java.io.BufferedReader;
import java.io.IOException;
import java.io.InputStreamReader;
import java.net.HttpURLConnection;
import java.net.InetSocketAddress;
import java.net.MalformedURLException;
import java.net.ProtocolException;
import java.net.Proxy;
import java.net.URL;
import sun.misc.BASE64Encoder;

public class Main {

    public static void main(String[] args) throws Exception {
        String username = "username";
        String password = "password";

        URL url = new URL("http://127.0.0.1:8080/ces/jsonapi/listEPS.action");
        Proxy proxy = new Proxy(Proxy.Type.HTTP, new InetSocketAddress("127.0.0.1",
            8888));
        HttpURLConnection con = (HttpURLConnection) url.openConnection(proxy);
        con.setRequestMethod("GET");
        con.setRequestProperty("Authorization", "Basic "
            + encode(username + ":" + password));
        int status = con.getResponseCode();
        BufferedReader in = new BufferedReader(
            new InputStreamReader(con.getInputStream()));
        String inputLine;
        StringBuffer content = new StringBuffer();
        while ((inputLine = in.readLine()) != null) {
            content.append(inputLine);
        }
        in.close();
        con.disconnect();
        System.out.println(status);
        System.out.println(content.toString());
    }

    public static String encode(String source) {
        BASE64Encoder enc = new sun.misc.BASE64Encoder();
        return (enc.encode(source.getBytes()));
    }
}
```