

API Documentation for Smart Risk v2.3

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Document history

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Prepared By	Nikhil Kumar Sharma	Document Custodian	PAS
Reviewed By	Madhulika Thakur	Document Release Date	01 April 2024
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Introduction

This document explains the Smart Risk APIs which expose supplier data from the Smart Risk application. This document can be used by the technical team who would be consuming the APIs to understand the type of information an API shares, along with the details of the request that can be made by the consuming application.

Environments

Smart Risk APIs are available on UAT and production environments; details are given below:

Environment	Description	URL
QA	Used to interact with the QA environment's data set	https://XXXXXX/api/v1.o
UAT	Used to interact with the UAT environment's data set	https://smartriskapi.tsclabs.in/api/v1.0
PROD	Used to interact with the Production environment's data set	https://smartriskapi.thesmartcube.com/api/v1.o

Authentication and security

Smart Risk APIs are secured with credentials, and the Smart Cube team will share the API credentials to access the API data. Examples of authentication, request variables and response of all the API endpoints are given below under the Smart Risk API details section.

Methods call limitations

To avoid excessive usage of the methods that can lead to a negative impact on overall performance, specific call number restrictions have been set. The maximum number of requests possible to send in a single call is currently limited to 100 (by the time the API has been first implemented). If a call surpassing this number is sent, an error-response code 400 is returned with the following response:

[&]quot;API calls quota exceeded!"



Smart Risk API details

Please find below details of APIs:

- ▶ Supplier financials to get suppliers' key financial information and ratios
- Supplier risk summary to get risk summary from suppliers' risk profiles
- Supplier risk ratings to get one or more suppliers' risk ratings at both the overall and sub-risk levels
- ► Country risk ratings to get country-level risk ratings across P-E-S-T-L-E parameters
- Supplier parameter to get risk parameter values for one or more suppliers
- ▶ Supplier news to get one or more suppliers' news as available on the platform
- Key ESG information to get essential environmental, social and governance information if captured on the platform
- Credit rating information to get suppliers' third-party risk ratings if captured on the platform
- Country news to get country-level news as available on the platform
- ► Category news to get product group or commodity-level news as available on the platform
- ▶ Logistics news to get news on mapped logistics nodes as available on the platform
- Geographic risk exposures to get list of top 10 sourcing countries for one or more categories
- Category risk ratings information to extract one or more categories' risk ratings
- ▶ Top trending themes and topics to extract top 10 risk themes for one or more categories
- Supplier rating updates to get details on suppliers for which ratings have changed on the platform
- Category rating updates to get details on categories for which ratings have changed on the platform
- Country rating updates to get details on country for which ratings have changed on the platform

Supplier financials

To get suppliers' key financial information and ratios

Below are details of calling method, request parameters and response of the API:

Method	Endpoint
POST	api/v1.o/financials

Params (Body)	Values	Required	Comments
supplier_code	String	Yes	Maximum 500 supplier code with comma separator can be pass to API Example: SR001, SR002, SR003
Offset	Integer	Optional	Offset: 0: The records on the first page, i.e., 1 to 500 records Offset: 1: The records on the second page, i.e., 501 to 1000 records



Body Request format:

```
{
"supplier_code":"SRoo1",
"offset": o
}
```

Headers	Values	Required
username	String	Yes
password	String	Yes

Headers request format:

```
{
"username": "xyz@thesmartcube.com",
"password": "xyz",
"Content-Type": "application/json"
```

Status	Response
200	<pre>"success": true, "error": false, "message": "OK", "status_code": 200, "payload": { "total_records": 19, "limit": 2000, "offset": 0, "supplier_code_invalid": "", "supplier_data_notprocessed": "", "records": [{ "supplier_name": "SR00001", "supplier_code": "SR001", "client_category": "Accounting", "sourcing_country": "United States", "line_item": "Net profit", "value": 7.2, "unit": "million", "currency": "GBP",</pre>



```
"period": "FY_12/31/2023"
                },
                {
                  "supplier_name": "SRoooo2",
                  "supplier_code": "SRoo2",
                  "client_category": "Accounting",
                  "sourcing_country": "United States",
                  "line_item": "Debt-to-capital",
                  "value": 16.2,
                  "unit": "x",
                  "currency": "GBP",
                  "period": "FY_12/31/2019"
                },
                  "supplier_name": "SRoooo3",
                  "supplier_code": "SRoo3",
                  "client_category": "Accounting",
                  "sourcing_country": "United States",
                  "line_item": "Y-o-Y growth",
                  "value": 2.2,
                  "unit": "%",
                  "currency": "GBP",
                  "period": "FY_12/31/2019"
                },
                  "supplier_name": "SRoooo4",
                  "supplier_code": "SRoo4",
                  "client_category": "Accounting",
                  "sourcing_country": "United States",
                  "line_item": "Total debt",
                  "value": 11.2,
                  "unit": "million",
                  "currency": "GBP",
                  "period": "FY_12/31/2019"
                }
              ]
            }
          }
          {
            "success": false,
            "error": true,
            "message": "Either client does not exist or credential is invalid",
401
            "status_code": 401,
            "payload": []
          }
```



Supplier risk summary

To get risk summary from suppliers' risk profile

Below are details of calling method, request parameters and response of the API:

Request

Method	Endpoint
POST	/api/v1.o/riskSummary

Params (Body)	Values	Required	Comments
supplier_code	String	Yes	Maximum 500 supplier code with comma separator can be pass to API Example: SR001, SR002, SR003
Offset	Integer	Optional	Offset: 0: The records on the first page, i.e., 1 to 500 records Offset: 1: The records on the second page, i.e., 501 to 1000 records

Body Request format:

```
"supplier_code":"SRoo1",
"offset": o
}
```

Headers	Values	Required
Username	String	Yes
Password	String	Yes

```
{
"username": "xyz@thesmartcube.com",
"password": "xyz",
"Content-Type": "application/json"
}
```



Status Response { "success": true, "error": false, "message": "OK", "status_code": 200, "payload": { "total_records": 13, "limit": 2000, "offset": o, "supplier_code_invalid": "", "supplier data notprocessed": "", "records": [{ "supplier_name": "SRoooo1", "supplier_code": "SRoo1", "client_category": "BUSINESS SERVICES - TRAVEL, MEETING & EVENTS", "sourcing_country": "United States", "supplier_hq": "United States", "supplier_address": "P. O. BOX 123456, DALLAS TX, United States", "supplier_web": "https://www. SRoo1.com/", "supplier_hq_city": "New York", "supplier_hq_address": "123 AB Street New York, NY 123456, US", "supplier_group": "Group 1", "supplier status": "Tier 1", 200 "supplier_desc": " SR00001 Travel Related Services provide services such as hotels and travel (cars, flights, cruises) bookings for personal as well as business travel, foreign exchange services and travel insurances globally; it is one of the business of American Express which was founded in 1850 and operates into financial services", "overall_summary": " SR00001 faces low risk due to strong financials and experienced management. However, the country risk exists, the country's GDP grew 5% in 2021 and is expected to grow by 3.2% in 2022. The economy will see a sharp slowdown as the government's fiscal support fades and the impact of Omicron will weigh on services spending and hit the supply chain. Russia and Ukraine combined account for less than 1% of the US imports and exports; the current conflict is not expected to have a major impact on the economy; however, the conflict could help keep inflation pressures elevated.", "last_updated": "26-Mar-2023" }, "supplier_name": "SR00002", "supplier_code": "SRoo2", "client_category": "BUSINESS SERVICES - CORPORATE SERVICES", "sourcing_country": "United Kingdom", "supplier_hg": "United Kingdom", "supplier_address": "123 Midsummer Square, United Kingdom", "supplier_web": "https://www2.SRoo2.com/", "supplier_hq_city": "London", "supplier_hq_address": "123 New Square, London 123456, United Kingdom",



```
"supplier_group": "Group 2",
                  "supplier_status": "Tier 1",
                  "supplier_desc": " SR00002 is a consulting service provider with a 100 years of experience; it
          offers auditing, accounting, financial advisory, risk management and tax services. The firm provides
          international financial reporting, assurance and advisory, tax auditing, corporate governance, risk
          consulting, and management and board advisory services. Additionally, it provides merger and
          acquisition, government compliance, financial advisory and human capital consulting services. Deloitte
          caters to aviation, defense, automotive, finance, banking, consumer products, healthcare, insurance, life
          sciences, media, oil and gas, power, real estate, retail, technology, telecommunication, hospitality, and
          government sectors",
                  "overall_summary": " SR00002 faces low risk due to strong financials, experienced management
          and low business concentration risk. However, the country risk exists, the country's GDP grew 7.5% in
          2021 and is expected to grow by 4.6% in 2022. New Covid-19 variants faster-than-expected monetary
          tightening and tense relations with the EU, over the Northern Ireland protocol further cloud the
          outlook.",
                  "last_updated": "o5-Mar-2023"
                }
              ]
            }
          }
          {
            "success": false,
            "error": true,
            "message": "Either client does not exist or credential is invalid",
401
            "status_code": 401,
            "payload": []
          }
```

Supplier risk ratings

To get one or more suppliers' risk ratings at the overall and sub-risk level

Below are details of calling method, request parameters and response of the API:

Request

Method	Endpoint
POST	/api/v1.o/riskRatings



Params (Body)	Values	Required	Comments
supplier_code	String	Yes	Maximum 500 supplier code with comma separator can be pass to API Example: SR001, SR002, SR003
Duration	String	Optional	Duration is fixed as 7d,3od,6od and 9od Example: for 7d, API returns data from current date – 7 days including the current day; default duration is (current date – 1 day)
Offset	Integer	No	Offset: 0: The records on the first page, i.e., 1 to 500 records Offset: 1: The records on the second page, i.e., 501 to 1000 records

Body request format:

```
{
  "supplier_code":"SRoo1",
  "duration": "7d",
  "offset": o
}
```

Headers	Values	Required
username	String	Yes
password	String	Yes

Headers request format:

```
{
"username": "xyz@thesmartcube.com",
"password": "xyz",
"Content-Type": "application/json"
}
```

Status	Response	
200	<pre>{ "success": true, "error": false, "message": "OK", "status_code": 200, "payload": { "total_records": 1,</pre>	



```
"limit": 1000,
"offset": o,
"supplier_code_invalid": "",
"supplier_data_notprocessed": "",
"records": [
   "supplier_name": "SRoooo1",
   "supplier_code": "SRoo1",
   "client_category": "Electronic Systems and Components Manufacturing",
   "sourcing_country": "United States",
   "supplier_overall_risk": 3.7,
   "risk_rating": [
     {
       "risk_type": "Financial",
       "risk_type_rating": 3.7,
       "sub_risk": [
         {
           "sub_risk_name": "Profitability",
           "sub_risk_rating": 4.5
         },
           "sub_risk_name": "Solvency",
           "sub_risk_rating": 3.4
         },
           "sub_risk_name": "Liquidity",
           "sub_risk_rating": 3
         },
           "sub_risk_name": "Sponsor",
           "sub_risk_rating": 1
         }
       ]
     },
       "risk_type": "Operational",
       "risk_type_rating": 4.2,
       "sub_risk": [
         {
           "sub_risk_name": "Scale",
           "sub_risk_rating": 2.5
         },
           "sub_risk_name": "Concentration",
           "sub_risk_rating": 4
         },
           "sub_risk_name": "Competition",
           "sub_risk_rating": 2.5
         },
```



```
{
      "sub_risk_name": "Management",
      "sub_risk_rating": 1
   },
     "sub_risk_name": "Security",
      "sub_risk_rating": 5
   },
    {
      "sub_risk_name": "Product quality",
     "sub_risk_rating": 5
   },
      "sub_risk_name": "Geographic",
     "sub_risk_rating": 2
      "sub_risk_name": "Supply",
     "sub_risk_rating": 4
   },
     "sub_risk_name": "Demand",
      "sub_risk_rating": 2
   },
      "sub_risk_name": "Technology",
     "sub_risk_rating": 5
 ]
},
  "risk_type": "Legal & ethical",
  "risk_type_rating": 2.6,
  "sub_risk": [
      "sub_risk_name": "Business ethics",
     "sub_risk_rating": 3.2
   },
      "sub_risk_name": "Corporate governance",
      "sub_risk_rating": 1
   },
     "sub_risk_name": "Licenses & approvals",
      "sub_risk_rating": 1
   },
      "sub_risk_name": "Social commitment",
     "sub_risk_rating": 1
   }
```



```
]
                    },
                     {
                       "risk_type": "Human & environmental",
                       "risk_type_rating": 1.8,
                       "sub_risk": [
                           "sub_risk_name": "Labour health & safety",
                           "sub_risk_rating": 1.3
                        },
                           "sub_risk_name": "Labour compensation",
                           "sub_risk_rating": 1.3
                        },
                           "sub_risk_name": "Labour rights",
                           "sub_risk_rating": 2
                        },
                           "sub_risk_name": "Operations sustainability",
                           "sub_risk_rating": 2.8
                        },
                           "sub_risk_name": "Product safety",
                           "sub_risk_rating": 1
                        }
                      ]
                    },
                       "risk_type": "Other",
                       "risk_type_rating": "N/A",
                       "sub_risk": []
                    }
                  ],
                   "date": "2024-03-28"
                 }
              ]
             }
          }
             "success": false,
             "error": true,
             "message": "Either client does not exist or credential is invalid",
401
             "status_code": 401,
             "payload": []
          }
```

Country risk ratings



To get country-level risk ratings across P-E-S-T-L-E parameters

Below are details of calling method, request parameters and response of the API:

Request

Method	Endpoint
POST	/api/v1.o/countryRiskRatings

Params (Body)	Values	Required	Comments	
country_name	String	Yes	Maximum 500 country name with comma separator can be pass to API Example: India, Japan, China	
duration	String	Optional	Duration is fixed as 7d,3od,6od and 9od Example: for 7d, API returns data from current date – 7 days including the current day; default duration is (current date – 1 day)	
Offset	Integer	No	Offset: 0: The records on the first page, i.e., 1 to 500 records Offset: 1: The records on the second page, i.e., 501 to 1000 records	

Body request format:

```
{
  "country_name": "India, United States",
  "duration": "9od",
  "offset":o
}
```

Headers	Values	Required
username	String	Yes
password	String	Yes

Headers request format:

```
{
"username": "xyz@thesmartcube.com",
"password": "xyz",
"Content-Type": "application/json"
}
```



```
Status
              Response
              {
                "success": true,
                "error": false,
                "message": "OK",
                "status_code": 200,
                "payload": {
                  "total_records": 1,
                  "limit": 1000,
                  "offset": o,
                  "country_name_invalid": "",
                  "country_data_notprocessed": "",
                  "records": [
                    {
                      "country": "United States",
                      "country_overall_risk": 2,
                      "political": 2.5,
                      "economic": 2.5,
                      "social": 1,
200
                      "technology": 1,
                      "legal": 2.3,
                      "environmental": 2,
                      "country_overall_risk_summary": "Operational risk in the US is low as government looks to
              reduce debt by strong post-COVID 19 recovery of economy; however, debt levels are higher by 10pp of
              GDP as compared to pre-COVID 19 levels. Russian invasion of Ukraine in 2022 increased political and
              social tensions, sanctions imposed on Russia have led to major delay in supply chains, which poses
              challenges to manufacturing over 2023–2024. Terrorism is an ongoing concern, and firms could be
              affected directly by attacks. Increase in public spending in response to the pandemic has created long-
              term fiscal sustainability issues. The deepening US-China rivalry will continue to pose risks, particularly
              for the control of global semiconductor market as the US plans to start manufacturing semi-conductors
              on its own.",
                      "date": "2024-03-28"
                    }
                  ]
                }
              }
              {
                "success": false,
                "error": true,
                "message": "Either client does not exist or credential is invalid",
   401
                "status_code": 401,
                "payload": []
              }
```



Parameter info of sub-risk

To get risk parameter values for one or more suppliers

Below are details of calling method, request parameters and response of the API:

Request

Method	Endpoint
POST	/api/v1.o/subRiskParameters

Params (Body)	Values	Required	Comments
supplier_code	String	Yes	Maximum 500 supplier code with comma separator can be pass to API Example: SR001, SR002, SR003, SR004
Offset	Integer	No	Offset: 0: The records on the first page, i.e., 1 to 500 records Offset: 1: The records on the second page, i.e., 501 to 1000 records

Body request format:

```
{
  "supplier_code": "SRoo1, SRoo2, SRoo3, SRoo4",
  "offset": o
}
```

Headers	Values	Required
Username	String	Yes
Password	String	Yes

```
{
"username": "xyz@thesmartcube.com",
"password": "xyz",
"Content-Type": "application/json"
}
```



```
Status
              Response
              {
                "success": true,
                "error": false,
                "message": "OK",
                "status_code": 200,
                "payload": {
                  "total_records": 1,
                  "limit": 1000,
                  "offset": o,
                  "supplier_code_invalid": "",
                  "supplier_data_notprocessed": "",
                  "records": [
                      "supplier_name": "SRoooo1",
                      "supplier_code": "SRoo1",
                      "client_category": "BUSINESS SERVICES - IT INFRASTRUCTURE",
                      "sourcing_country": "United States",
                      "parameters": [
                        {
                          "risk_type": "Financial",
                          "sub_risk": "Profitability",
                          "parameter": "Revenue growth",
                          "parameter_value": "11.83",
                          "parameter_score ": "1.00"
200
                        },
                          "risk_type": "Financial",
                          "sub_risk": "Profitability",
                          "parameter": "Operating margin",
                          "parameter_value": "6.41",
                          "parameter_score ": "4.00"
                        },
                          "risk_type": "Financial",
                          "sub_risk": "Profitability",
                          "parameter": "Return on assets",
                          "parameter_value": "5.76",
                          "parameter_score ": "3.00"
                        },
                          "risk_type": "Financial",
                          "sub_risk": "Solvency",
                          "parameter": "Debt-to-capital",
                          "parameter_value": "o.44",
                          "parameter_score ": "3.00"
                        },
                        {
```



```
"risk_type": "Financial",
           "sub_risk": "Solvency",
            "parameter": "Net debt-to-EBITDA",
           "parameter_value": "2.39",
           "parameter_score ": "2.00"
            "risk_type": "Financial",
           "sub_risk": "Solvency",
           "parameter": "Interest coverage ratio",
           "parameter_value": "11.58",
            "parameter_score ": "1.00"
          },
           "risk_type": "Financial",
           "sub_risk": "Liquidity",
           "parameter": "Quick ratio",
           "parameter_value": "o.84",
           "parameter_score": "4.00"
          },
           "risk_type": "Financial",
           "sub_risk": "Sponsor",
           "parameter": "Parent or key investor type",
            "parameter_value": "Government-backed or Forbes Global 2000",
            "parameter_score ": "1.00"
          },
           "risk_type": "Operational",
           "sub_risk": "Scale",
           "parameter": "Size of business – revenue (last 12 months)",
           "parameter_value": "$62.2 billion (FY21)",
           "parameter_score": "1.00"
          },
           "risk_type": "Operational",
           "sub_risk": "Scale",
           "parameter": "Size of business - employees (latest)",
           "parameter_value": ">40,000",
           "parameter_score ": "1.00"
           "risk_type": "Operational",
           "sub_risk": "Scale",
           "parameter": "Capital intensity",
            "parameter_value": "Capital requirement is low as operations are mainly driven by human
talent",
            "parameter_score ": "1.0"
         },
          {
```



```
"risk_type": "Operational",
           "sub_risk": "Concentration",
           "parameter": "Business concentration - customer",
           "parameter_value": "Customers are more diverse (Upto 10% revenue from top 3
customers)",
           "parameter_score ": "1.00"
         },
           "risk_type": "Operational",
           "sub_risk": "Concentration",
           "parameter": "Business concentration – geography",
           "parameter_value": "It has presence in 26 geographic regions around the world (the largest
country market contributes not more than 10% revenue)",
           "parameter_score ": "1.00"
         },
           "risk_type": "Operational",
           "sub_risk": "Competition",
           "parameter": "Competitive advantages",
           "parameter_value": "Has market-leading process or product designs/patents or is a vertically
integrated company and it is the only player in the industry with some advantages",
           "parameter_score ": "1.00"
         },
         ş
           "risk_type": "Operational",
           "sub_risk": "Competition",
           "parameter": "Nature of competition",
           "parameter_value": "Moderate differentiation, as vendors have relatively similar offerings
and primarily differentiate on basis of brand, quality, cost and sub-domain specific
expertise/experience",
           "parameter_score ": "3.0"
         },
           "risk_type": "Operational",
           "sub_risk": "Management",
           "parameter": "Management quality",
           "parameter_value": "Average tenure of all CXOs is 5 or more years in the current company
and most CXOs have long experience in the same industry",
           "parameter_score ": "1.00"
         },
           "risk_type": "Operational",
           "sub_risk": "Security",
           "parameter": "Physical & IT security",
           "parameter_value": "The company has ISO 27001 certification; no major security breach or
service disruption in the last 3 years",
           "parameter_score ": "1.00"
         },
           "risk_type": "Operational",
```



```
"sub_risk": "Product quality",
           "parameter": "Product or service quality",
           "parameter_value": "There is ISO 9001:2015 and other quality certifications for their product
services (has recognised quality certifications and/or quality management program)",
           "parameter_score ": "1.00"
         },
           "risk_type": "Operational",
           "sub_risk": "Geographic",
           "Country": "United States",
           "risk_score": "1.9"
         },
           "risk_type": "Operational",
           "sub_risk": "Supply",
           "parameter": "Supply stability",
           "parameter_value": "Supply stability is high as it is largely driven by talent pool availability;
although there are some tech skills shortage, it is not likely to hamper ongoing services",
           "parameter_score ": "1.0"
         },
         {
           "risk_type": "Operational",
           "sub_risk": "Supply",
           "parameter": "Nature of supply chain",
           "parameter_value": "Supply chain is very stable and fairly global with a high focus on low-
cost regions (India, LATAM, Eastern Europe, South East Asia); there are limited supply-related risks
associated with the global nature as the service delivery is primarily remote",
           "parameter_score ": "3.0"
         },
           "risk_type": "Operational",
           "sub_risk": "Demand",
           "parameter": "Demand stability",
           "parameter_value": "Demand is fairly stable; however, changes in corporate policies and
enterprises evaluating in-sourcing some of the services might impact the demand",
           "parameter_score ": "3.0"
         },
           "risk_type": "Operational",
           "sub_risk": "Technology",
           "parameter": "Impact of technology",
           "parameter_value": "Technology disruption is moderate as IT/BPO firms are developing
proprietary technologies and gaining expertise with emerging technologies such as GenAl, Al/ML, RPA,
AR/VR, predictive analytics, etc.",
           "parameter_score ": "3.0"
         }
       1
   ]
 }
```



```
}
           {
             "success": false,
             "error": true,
             "message": "Either client does not exist or credential is invalid",
401
             "status_code": 401,
             "payload": []
           }
```

Supplier news

To get one or more suppliers' news as available on the platform

Below are details of calling method, request parameters and response of the API:

Request

Method	Endpoint
POST	api/v1.o/supplierNews

Params (Body)	Values	Required	Comments
supplier_code	String	Yes	Maximum 500 supplier code with comma separator can be pass to API. Example: SR001, SR002, SR003
Duration	String	Optional	Duration is fixed as 1d, 7d, 3od, 6od, 9od or blank Example: for 7d, API returns data from current date – 7 days
Offset	Integer	No	Offset: o: The records on the first page, i.e., 1 to 500 records Offset: 1: The records on the second page, i.e., 501 to 1000 records

Body request format:

```
"supplier_code": "SR001, SR002, SR003, SR004",
  "duration": "9od",
  "offset": o
}
```

Headers	Values	Required
Username	String	Yes
Password	String	Yes



Headers request format:

```
{
"username": "xyz@thesmartcube.com",
"password": "xyz",
"Content-Type": "application/json"
}
```

```
Status
              Response
                "success": true,
                "error": false,
                "message": "OK",
                "status_code": 200,
                "payload": {
                  "total_records": 6,
                  "limit": 1000,
                  "offset": o,
                  "supplier_code_invalid": "",
                  "supplier_data_notprocessed": "",
                  "records": {
                   "o": {
                     "supplier_name": "Dell Corporation Ltd",
                     "supplier_code": "SRoo1",
                     "client_category": "IT Hardware Manufacturing",
                      "sourcing_country": "England",
200
                     "risk_type": "Operational",
                     "sub_risk": {
                       "Management": [
                         {
                           "supplier_news_date": "2024-01-11",
                           "supplier_news_title": "Dell shuffles channel management",
                           "supplier_news_link":
              "https://www.computerweekly.com/microscope/news/366565956/Dell-shuffles-channel-management",
                           "supplier_news_desc": "Dell has revealed it is making changes to the structure of its
              channel management team. The firm's global channel chief, Denise Millard, is becoming chief partner
              officer, reporting to Bill Scannell. Dell is also bidding farewell to Diego Majdalani, who has been leading
              global channel sales..",
                            "supplier_news_score": 1
                         }
                       ]
                     }
                   },
```



```
"1": {
       "supplier_name": "Dell Corporation Ltd",
       "supplier_code": "SRoo1",
       "client_category": "IT Hardware Manufacturing",
       "sourcing_country": "England",
       "risk_type": "Operational",
       "sub_risk": {
         "Scale": [
           ş
             "supplier_news_date": "2024-02-06",
             "supplier news title": "Dell Technologies plumps up partner profit opportunities and
competencies",
             "supplier_news_link": "https://www.arnnet.com.au/article/1303768/dell-technologies-
plumps-up-partner-profit-opportunities-and-competencies.html",
             "supplier_news_desc": "Dell Technologies has unveiled its Partner Program for 2024
featuring new three competencies, more profit opportunities and the inclusion of Partner ProServices.
New incentives will provide \"higher profit potential\" as it moves to streamline the Dell APEX
Infrastructure offerings",
             "supplier_news_score": 1
           },
             "supplier_news_date": "2024-02-16",
             "supplier_news_title": "Dell and Nokia to advance cloud and private 5G",
             "supplier_news_link": "https://www.silverliningsinfo.com/newswire/dell-and-nokia-
advance-cloud-and-private-5g",
             "supplier_news_desc": "Dell Technologies and Nokia announce the extension of a strategic
partnership to use each company's expertise and industry-leading solutions, including infrastructure
solutions from Dell and private wireless connectivity from Nokia, to advance open network
architectures",
             "supplier_news_score": 1
           },
             "supplier_news_date": "2024-03-19",
             "supplier_news_title": "Dell Partners with Nvidia to expedite enterprise Al adoption",
             "supplier_news_link": "https://www.itweb.co.za/article/dell-partners-nvidia-to-accelerate-
ai-adoption/LPp6V7rB6XO7DKQz",
             "supplier_news_desc": "Dell will collaborate with Nvidia to introduce a rack-scale, high-
density, liquid-cooled architecture based on the Nvidia Grace Blackwell Superchip. These systems will
support the next-generation ecosystem aiming to provide the foundation for improvements in
performance density",
             "supplier_news_score": 1
           },
             "supplier_news_date": "2024-03-26",
             "supplier_news_title": "Dell reduces its global workforce by about 6,000 jobs after",
             "supplier_news_link": "https://www.hindustantimes.com/business/dell-lays-off-workforce-
as-part-of-broader-cost-cuts-101711401666457.html",
             "supplier_news_desc": "Dell Technologies said that it will reduce its workforce as part of a
broader initiative to cut costs. In a filing, the company said that it will limit external hiring and begin
```



```
employee reorganization. The company has 120,000 employees down from about 126,000 a year earlier
          as of February this year",
                        "supplier_news_score": 3
                    1
                  }
                },
                "3": {
                  "supplier_name": "Dell Corporation Ltd",
                  "supplier_code": " SRoo1",
                  "client_category": "IT Hardware Manufacturing",
                  "sourcing_country": "England",
                  "risk_type": "Financial",
                  "sub_risk": {
                    "Profitability": [
                        "supplier_news_date": "2024-03-01",
                        "supplier_news_title": "Dell Technologies delivers fourth quarter and full year fiscal 2024",
                        "supplier_news_link": "https://www.prnewswire.com/news-releases/dell-technologies-
          delivers-fourth-quarter-and-full-year-fiscal-2024-financial-results-302076436.html",
                        "supplier_news_desc": "Dell Technologies announces financial results for its fiscal 2024
          fourth quarter and full year. Q4 revenue was $22.3 billion, down 11% year over year. Revenue for the year
          was $88.4 billion, down 14% from fiscal year 2023. Operating income was $5.2 billion",
                        "supplier_news_score": 2
                      }
                    ]
                  }
                }
              }
            }
          }
          {
            "success": false,
            "error": true,
            "message": "Either client does not exist or credential is invalid",
401
            "status_code": 401,
            "payload": []
          }
```



Key ESG information

To get essential environmental, social and governance information if captured on the platform

Below are details of calling method, request parameters and response of the API:

Request

Method	Endpoint
POST	api/v1.o/keyEsgInformation

Params (Body)	Values	Required	Comments
supplier_code	String	Yes	Maximum 500 supplier code with comma separator can be pass to API. Example: SR001, SR002, SR003
Offset	Integer	No	Offset: o: The records on the first page, i.e., 1 to 500 records Offset: 1: The records on the second page, i.e., 501 to 1000 records

Body request format:

```
"supplier_code":"SRoo1, SRoo2",
  "offset": o
}
```

Headers	Values	Required
Username	String	Yes
Password	String	Yes

```
{
"username": "xyz@thesmartcube.com",
"password": "xyz",
"Content-Type": "application/json"
}
```



```
Status
              Response
              {
                "success": true,
                "error": false,
                "message": "OK",
                "status_code": 200,
                "payload": {
                  "total_records": 10,
                       "limit": 500,
                  "offset": o,
                  "supplier_code_invalid": "SRoo1",
                  "supplier_data_notprocessed": "",
                  "records": [
                      "supplier_name": "SRoooo1",
                      "supplier_code": "SRoo1",
                      "client_category": "Automobile and Vehicles",
                      "sourcing_country": "United States",
200
                      "ESG_parameter": "Total Energy Use/Million in Revenue",
                      "ESG_value ": 42.33,
                      "ESG_unit": "billion_tonne"
                    },
                      "supplier_name": " SR00002",
                      "supplier_code": "SRoo2",
                      "client_category": "Automobile and Vehicles",
                      "sourcing_country": "United States",
                      "ESG_parameter": "Total Greenhouse Gas / Carbon Dioxide Emissions 7",
                      "ESG_value ": 45.33,
                      "ESG_unit": "billion_tonne"
                    }
                  ]
                }
              }
              {
                "success": false,
                "error": true,
                "message": "Either client does not exist or credential is invalid",
   401
                "status_code": 401,
                "payload": []
              }
```



Credit rating Information

To get suppliers' third-party risk ratings, if captured on the platform

Below are details of calling method, request parameters and response of the API:

Request

Method	Endpoint
POST	api/v1.o/creditRating

Params (Body)	Values	Required	Comments
supplier_code	String	Yes	Maximum 500 supplier code with comma separator can be pass to API. Example: SR001, SR002, SR003
Offset	Integer	No	Offset: 0: The records on the first page, i.e., 1 to 500 records Offset: 1: The records on the second page, i.e., 501 to 1000 records

Body request format:

```
"supplier_code":"SRoo1, SRoo2",
  "offset": o
}
```

Headers	Values	Required
username	String	Yes
password	String	Yes

```
{
"username": "xyz@thesmartcube.com",
"password": "xyz",
"Content-Type": "application/json"
}
```



```
Status
              Response
              {
                "success": true,
                "error": false,
                "message": "OK",
                "status_code": 200,
                "payload": {
                  "total_records": 3,
                  "limit": 500,
                  "offset": o,
                  "supplier_code_invalid": "",
                  "supplier_data_notprocessed": "",
                  "records": [
                      "supplier_name": "SRoooo1",
                      "supplier_code": "SRoo1",
                      "client_category": "Automobile and Vehicles",
                      "sourcing_country": "United States",
                      "tpr_rating": "Aaa+,Baa+,Ca,Da-",
                      "tpr_summary": "Third-Party Risk Summary united states"
200
                    },
                      "supplier_name": "SRoooo2",
                      "supplier_code": "SRoo2",
                      "client_category": "Automobile and Vehicles",
                      "sourcing_country": "Germany",
                      "tpr_rating": "Stable",
                      "tpr_summary": "Third-Party Risk Summary germany"
                    },
                    {
                      "supplier_name": "SRoooo3",
                      "supplier_code": "SRoo3",
                      "client_category": "Automobile and Vehicles",
                      "sourcing_country": "India",
                      "tpr_rating": "Aaa+",
                      "tpr_summary": "Third-Party Risk Summary India"
                    }
                  ]
                }
              }
              {
                "success": false,
                "error": true,
                "message": "Either client does not exist or credential is invalid",
   401
                "status_code": 401,
                "payload": []
             }
```



Country news

To get country-level news as available on the platform

Below are details of calling method, request parameters and response of the API:

Request

Method	Endpoint
POST	api/v1.o/countryNews

Params (Body)	Values	Required	Comments
country_name	String	Yes	Example: India, Wales
Duration	String	Optional	Duration is fixed as 1d, 7d, 3od, 6od, 9od or blank Example: for 7d, API returns data from current date – 7 days
Offset	Integer	No	Offset: 0: The records on the first page, i.e., 1 to 500 records Offset: 1: The records on the second page, i.e., 501 to 1000 records

Body request format:

```
"country_name":"India, United States ",
"duration": "9od",
"offset": o
```

Headers	Values	Required
username	String	Yes
password	String	Yes

```
"username": "xyz@thesmartcube.com",
"password": "xyz",
"Content-Type": "application/json"
}
```



Status Response { "success": true, "error": false, "message": "OK", "status_code": 200, "payload": { "total_records": 12, "limit": 1000, "offset": o, "country_name_invalid": "", "country data notprocessed": "", "records": ["country": "India", "sub_risk": "Geographic", "country_param": "Economic", "country_news_date": "2024-03-26", "country_news_title": "India supports Philippines in upholding its national sovereignty", "country_news_link": "https://www.business-standard.com/external-affairs-defencesecurity/news/india-supports-philippines-in-upholding-its-national-sovereignty-eam-124032600441_1.html", "country_news_description": "India firmly supports the Philippines in upholding its national sovereignty and wants to explore new areas of cooperation, including in defence and security, External Affairs Minister S Jaishankar said on Tuesday, amid the Southeast Asian nation's maritime dispute with 200 China in the South China Sea.", "country_news_score": 1 }, "country": "India", "sub_risk": "Geographic", "country_param": "Economic", "country_news_date": "2024-03-26", "country_news_title": "India plans to replace minimum wage by living wages by 2025", "country_news_link": "https://economictimes.indiatimes.com/news/how-to/india-plans-toreplace-minimum-wage-by-living-wages-by-2025-heres-what-it-could-itmean/articleshow/108795967.cms?UTM_Source=Google_Newsstand&UTM_Campaign=RSS_Feed&UT M_Medium=Referral", "country_news_description": "India is set to replace its minimum wage system with a living wage system by 2025. The government is seeking technical assistance from the ILO to develop a framework for estimating and implementing the living wage, as per the Economic Times report.", "country_news_score": 1 }, "country": "India", "sub_risk": "Geographic", "country_param": "Economic", "country_news_date": "2024-03-26",



```
"country_news_title": "India's CAD narrows to 1.2% of GDP in Q3 due to higher service costs",
       "country_news_link": "https://economictimes.indiatimes.com/news/economy/indicators/indias-
cad-at-1-2-of-gdp-in-q3-down-from-1-3-in-q2fy4-and-2-in-
q3fy23/articleshow/108793556.cms?UTM_Source=Google_Newsstand&UTM_Campaign=RSS_Feed&UT
M_Medium=Referral",
       "country_news_description": "Current account deficit narrowed sequentially to $10.5 billion in the
quarter ended December 2023 (Q3 FY24) 1.2 per cent of GDP from $11.4 billion in Q2 FY24 (1.3 per cent
of GDP). The deficit was also down from $16.8 billion or 2 per cent of GDP in the year-ago period (Q3
FY23)",
       "country_news_score": 1
     },
       "country": "India",
       "sub_risk": "Geographic",
       "country_param": "Political",
       "country_news_date": "2024-03-27",
       "country_news_title": "Philippines, India to cooperate on maritime security efforts",
                                 "https://www.philstar.com/headlines/2024/03/27/2343724/philippines-
       "country_news_link":
india-cooperate-maritime-security-efforts",
       "country_news_description": "Malacañang said that the Philippines and India agreed to cooperate
on maritime security, a collaboration particularly important for Manila's vast seafaring workforce.",
       "country_news_score": 1
     },
       "country": "India",
       "sub_risk": "Geographic",
       "country_param": "Economic",
       "country_news_date": "2024-03-28",
       "country_news_title": "Mumbai overtakes Beijing as Asia's wealth hub",
       "country_news_link": "https://www.wionews.com/india-news/indias-billionaire-boom-mumbai-
overtakes-beijing-as-asias-wealth-hub-704497",
       "country_news_description": "Mumbai has outpaced Beijing to claim the title of Asia's billionaire
capital, with 92 billionaires compared to Beijing's 91, marking a major shift in wealth dynamics. Mumbai
experienced a 47 per cent surge in wealth over the past year",
       "country_news_score": 1
     },
     ş
       "country": "India",
       "sub_risk": "Geographic",
       "country_param": "Economic",
       "country_news_date": "2024-03-28",
       "country_news_title": "India's April-Feb fiscal deficit at 86.5% of 2023/24 target",
       "country_news_link": "https://www.zawya.com/en/world/indian-sub-continent/indias-april-feb-
fiscal-deficit-at-865-of-2023-24-target-fxokictd",
       "country_news_description": "India's fiscal deficit for eleven months of the current financial year
that ends March 31, was 15.01 trillion rupees ($180.07 billion) or 86.5% of the estimate of the whole year,
government data showed",
       "country_news_score": 1
     },
     {
```



```
"country": "United States",
       "sub_risk": "Geographic",
       "country_param": "Political",
       "country_news_date": "2024-03-25",
       "country_news_title": "US eyes revamped military command in Japan",
       "country_news_link": "https://www.wionews.com/videos/us-eyes-revamped-military-command-
in-japan-704143",
       "country_news_description": "Washington and Tokyo are planning to announce an agreement to
restructure the US military command in Japan when Prime Minister Fumio Kishida visits the White House
next month. According to reports, this would be the biggest upgrade for the Security Alliance in decades.",
       "country_news_score": 1
     },
       "country": "United States",
       "sub_risk": "Geographic",
       "country_param": "Technology",
       "country_news_date": "2024-03-25",
       "country_news_title": "Japan, US discuss boosting military cooperation",
       "country_news_link":
                                        "https://guardian.ng/news/japan-us-discuss-boosting-military-
cooperation/",
       "country_news_description": "Japan and the United States are in talks to boost military
cooperation as they eye a growing threat from China. The two countries are discussing increased
integration and cooperation, Japan's government spokesman Yoshimasa Hayashi said",
       "country_news_score": 1
     },
       "country": "United States",
       "sub_risk": "Geographic",
       "country_param": "Political",
       "country_news_date": "2024-03-26",
       "country_news_title": "US, UK sanction alleged China-based hackers for targeting voters, critics",
                                  "https://www.aljazeera.com/news/2024/3/25/us-uk-sanction-alleged-
       "country_news_link":
china-based-hackers-for-targeting-voters-critics",
       "country_news_description": "The United States and the United Kingdom have announced
sanctions against a Chinese company and two individuals after an alleged cyber-espionage operation
targeted millions of people, including legislators, voters and prominent Beijing critics.",
       "country_news_score": 3
     },
       "country": "United States",
       "sub_risk": "Geographic",
       "country_param": "Economic",
       "country_news_date": "2024-03-26",
       "country_news_title": "Six presumed dead after crippled Singapore-flagged cargo knocks down
Baltimore bridge",
       "country_news_link": "https://www.channelnewsasia.com/world/singapore-flagged-cargo-ship-
dali-baltimore-bridge-six-presumed-dead-4223746",
```

"country_news_description": "Six workers were missing and presumed dead from a bridge that

collapsed in Baltimore Harbor when a massive cargo ship crippled by a power loss rammed into the

structure, forcing closure of one of the busiest ports on the US Eastern Seaboard.",



```
"country_news_score": 4
                },
                  "country": "United States",
                  "sub_risk": "Geographic",
                  "country_param": "Economic",
                  "country_news_date": "2024-03-27",
                  "country_news_title": "Nigeria to import seven million barrels of U.S. crude in two months",
                  "country_news_link": "https://guardian.ng/news/nigeria-to-import-seven-million-barrels-of-u-s-
          crude-in-two-months/",
                  "country_news_description": "Although Nigeria produces one of the lightest and environmentally
          friendly crude oil in the world, local refineries, especially Dangote refinery will import West Texas
          Intermediate (WTI) of about seven million barrels this month and next month.",
                  "country_news_score": 1
                }
              ]
            }
          }
          {
            "success": false,
            "error": true,
            "message": "Either client does not exist or credential is invalid",
401
            "status_code": 401,
            "payload": []
          }
```

Category news

To get product group or commodity-level news as available on the platform

Below are details of calling method, request parameters and response of the API:

Request

Method	Endpoint
POST	api/v1.o/categoryNews

Params (Body)	Values	Required	Comments
Category	String	Yes	Example: Marketing, Networking
news_type	String	Optional	Example: All or Premium or Blank
Duration	String	Optional	Duration is fixed as 1d, 7d, 3od, 6od, 9od or blank Example: for 7d, API returns data from current date – 7 days
Offset	Integer	No	Offset: 0: The records on the first page, i.e., 1 to 500 records Offset: 1: The records on the second page, i.e., 501 to 1000 records



Body request format:

```
{
  "category": "Accounting, Marketing",
  "duration" : "3od",
  "news_type" : "",
  "offset": o
}
```

Headers	Values	Required
username	String	Yes
password	String	Yes

Headers request format:

```
"username": "xyz@thesmartcube.com",
"password": "xyz",
"Content-Type": "application/json"
```

Status	Response
200	<pre>{ "success": true, "error": false, "message": "OK", "status_code": 200, "payload": { "total_records": 9, "limit": 1000, "offset": 0, "category_name_invalid": "", "category_data_notprocessed": "", "records": [{ "category_id": CRoo1, "category": "IT Services", "risk_type": "Operational",</pre>



```
"sub_risk": "Supply",
       "theme": "Material price & supply",
       "topic": "Enterprise Hardware",
       "category_news_date": "2024-03-30",
       "category_news_title": "Microsoft and OpenAI plan to build a $100 billion supercomputer to
power artificial intelligence",
       "category_news_link": "https://ca.news.yahoo.com/microsoft-openai-plan-build-100-
001149249.html",
       "category_news_desc": "Microsoft and OpenAI are planning an unprecedented supercomputer
that uses millions of specialized server chips and could cost up to $100 billion. The US-based
supercomputer, known as \"Starqate,\" would be the centerpiece of a five-phase plan focused on a series
of supercomputer installations",
       "category_news_score": 1,
       "news_type": "Premium",
       "news_tag": ""
     },
       "category_id": CRoo1,
       "category": "IT Services",
       "risk_type": "Operational",
       "sub_risk": "Supply",
       "theme": "Material price & supply",
       "topic": "Enterprise Hardware",
       "category news date": "2024-03-29",
       "category_news_title": "Schneider Electric and NVIDIA collaborate on AI data center designs",
       "category_news_link": "https://telecomtalk.info/schneiderelectric-nvidia-collaborate-on-ai-
datacenter-designs/944213/",
       "category_news_desc": "Schneider Electric and NVIDIA have joined forces to optimise data
center infrastructure, particularly focusing on edge AI and digital twin technologies. In addition to AI
data center reference designs, AVEVA, will integrate its digital twin platform with NVIDIA Omniverse",
       "category_news_score": 1,
       "news_type": "Premium",
       "news_tag": ""
     },
       "category_id": CRoo1,
       "category": "IT Services",
       "risk_type": "Operational",
       "sub_risk": "Supply",
       "theme": "Material price & supply",
       "topic": "Semiconductor Chips and Electronic Components",
       "category_news_date": "2024-03-27",
       "category_news_title": "Pragmatic Semiconductor opens UK's first 300mm wafer fab",
       "category_news_link":
"https://www.theregister.com/2024/03/27/pragmatic_opens_300mm_fab/",
       "category_news_desc": "UK chipmaker Pragmatic Semiconductor has officially opened its latest
manufacturing facilities in Durham. Pragmatic claims that its Pragmatic Park site at Durham is the UK's
first production facility for producing 300mm semiconductor wafers.",
       "category_news_score": 1,
       "news_type": "Premium",
```



```
"news_taq": ""
               },
                 "category_id": CRoo1,
                 "category": "IT Services",
                 "risk_type": "Operational",
                 "sub_risk": "Supply",
                 "theme": "Trade events",
                 "topic": "Semiconductor Chips and Electronic Components",
                 "category_news_date": "2024-03-27",
                 "category_news_title": "S. Korea, EU to conduct joint research on semiconductor,
          communications network technologies",
                 "category_news_link":
          "https://en.yna.co.kr/view/AEN20240327003400320#:~:text=SEOUL%2C%20March%2027%20(Yonhap)
          ,Seoul's%2oscience%2oministry%2osaid%2oWednesday.",
                 "category_news_desc": "South Korea and the European Union have agreed to conduct joint
          research projects on advanced semiconductor and next-generation communications network
          technologies in the next three years, Seoul's science ministry said. Under the agreement, South Korea
          and the EU will jointly invest 12M euros",
                 "category_news_score": 1,
                 "news_type": "Premium",
                 "news_tag": ""
               }
              1
            }
          }
          {
            "success": false,
            "error": true,
            "message": "Either client does not exist or credential is invalid",
401
            "status_code": 401,
            "payload": []
          }
```



Logistics news

To get news on mapped logistics nodes as available on the platform

Below are details of calling method, request parameters and response of the API:

Request

Method	Endpoint
POST	api/v1.o/logisticsNews

Params (Body)	Values	Required	Comments
mode	String	Yes	Example: Road, Rail, Air, Ocean, Warehousing
Duration	String	Optional	Duration is fixed as 1d, 7d, 3od, 6od, 9od or blank Example: for 7d, API returns data from current date – 7 days
Offset	Integer	No	Offset: 0: The records on the first page, i.e., 1 to 500 records Offset: 1: The records on the second page, i.e., 501 to 1000 records

Body request format:

```
{
  "mode":"Road, Rail, Air",
  "duration": "god",
  "offset": o
}
```

Headers	Values	Required
username	String	Yes
password	String	Yes

Headers request format:

```
{
"username": "xyz@thesmartcube.com",
"password": "xyz",
"Content-Type": "application/json"
}
```



Response

Status Response { "success": true, "error": false, "message": "OK", "status_code": 200, "payload": { "total_records": 3, "limit": 500, "offset": o, "mode_name_invalid": "", "category_data_notprocessed": "", "records": ["mode": "Road", "region": " United Kingdom", "logistics_news_date": "2023-05-16", "logistics_news_title": " MPs to meet over plan for congested M1 Junction 28", "logistics_news_link": " https://www.bbc.com/news/uk-england-derbyshire-65597356 ", "logistics_news_desc": " Regional transport body Midlands Connect said it was working on plans to improve Junction 28 in Derbyshire. An event at Westminster Hall, chaired by Bolsover's Conservative MP Mark Fletcher, is due to be attended by Ashfield MP Lee Anderson, as well as businesses and councils.", "logistics_news_score": 1 200 }, "mode": "Ocean", "region": "Turkey", "logistics_news_date": "2023-07-02", "logistics_news_title": " Shipping containers ablaze at earthquake-stricken Turkey's Iskenderun Port, operations halted", "logistics_news_link": " https://timesofindia.indiatimes.com/world/middle-east/shippingcontainers-ablaze-at-earthquake-stricken-turkeys-iskenderun-port-operationshalted/articleshow/97702999.cms", "logistics_news_desc": " Hundreds of shipping containers were ablaze at Turkey's Iskenderun Port on Tuesday, shutting down operations and forcing freight liners to divert vessels to other ports. Turkey's maritime authority said on Monday that the port was damaged due to earthquake that struck Turkey and neighbouring Syria", "logistics_news_score": 4 }, "mode": "Warehousing", "region": "Europe", "logistics_news_date": "2023-07-02", "logistics_news_title": "Logistics Execs See 2023 Recession as "Likely" or "Certain"", "logistics_news_link": " https://www.prnewswire.com/news-releases/agility-logistics-execs-see-2023-recession-as-likely-or-certain-301738488.html",



Geographic risk exposures

To get list of top 10 sourcing countries for one or more categories

Below are details of calling method, request parameters and response of the API:

Request

Method	Endpoint
POST	api/v1.o/geographicRiskExposures

Params (Body)	Values	Required	Comments
category	String	Yes	Maximum 500 category with comma separator can be pass to API. Example: CR001, CR002, CR003
Offset	Integer	Optional	Offset: 0: The records on the first page, i.e., 1 to 500 records Offset: 1: The records on the second page, i.e., 501 to 1000 records

```
{
"category":"CRoo1",
"offset": 0
```

Headers	Values	Required
username	String	Yes



password String Yes

Headers request format:

```
{
"username": "xyz@thesmartcube.com",
"password": "xyz",
"Content-Type": "application/json"
}
```

```
Status
              Response
              {
                "success": true,
                "error": false,
                "message": "OK",
                "status_code": 200,
                "payload": {
                  "total_records": 11,
                  "limit": 1000,
                  "offset": o,
                  "category_invalid": "",
                  "category_data_notprocessed": "",
                  "records": [
                      "category_id": CRoo1,
                      "category": "IT Services",
                      "country": "Ukraine",
                      "PESTLE_score": 4.1875,
                      "sustainability_score": 3,
200
                      "trend": "down"
                    },
                      "category_id": CRoo1,
                      "category": "IT Services",
                      "country": "India",
                      "PESTLE_score": 2.9625,
                      "sustainability_score": 5,
                      "trend": "down"
                    },
                      "category_id": CRoo1,
                      "category": "IT Services",
                      "country": "United Kingdom",
                      "PESTLE_score": 2.4125,
                      "sustainability_score": 1,
                      "trend": "down"
```



```
},
  "category_id": CRoo1,
  "category": "IT Services",
  "country": "Kuwait",
  "PESTLE_score": 1.975,
  "sustainability_score": 3,
  "trend": "up"
},
  "category_id": CRoo1,
  "category": "IT Services",
  "country": "United States",
  "PESTLE_score": 1.9375,
  "sustainability_score": 2,
  "trend": "up"
},
  "category_id": CRoo1,
  "category": "IT Services",
  "country": "England",
  "PESTLE_score": 1.5125,
  "sustainability_score": 1,
  "trend": "up"
},
  "category_id": CRoo1,
  "category": "IT Services",
  "country": "Scotland",
  "PESTLE_score": 1.5125,
  "sustainability_score": 1,
  "trend": "up"
},
  "category_id": CRoo1,
  "category": "IT Services",
  "country": "Australia",
  "PESTLE_score": 1.1625,
  "sustainability_score": 1,
  "trend": "up"
},
  "category_id": CRoo1,
  "category": "IT Services",
  "country": "Finland",
  "PESTLE_score": 1.1625,
  "sustainability_score": 1,
  "trend": "up"
},
{
```



```
"category_id": CRoo1,
    "category": "IT Services",
    "country": "Ireland",
    "PESTLE_score": 1.1625,
    "sustainability_score": 2,
    "trend": "Up"
    }
}

{

"success": false,
    "error": true,
    "message": "Either client does not exist or credential is invalid",
    "status_code": 401,
    "payload": []
}
```

Category risk rating

To extract one or more categories' risk ratings

Below are details of calling method, request parameters and response of the API:

Request

Method	Endpoint
POST	api/v1.o/categoryRiskRatings

Params (Body)	Values	Required	Comments
Category	String	Yes	Example: CR001, CR002
Duration	String	Optional	Duration is fixed as 1d, 7d, 3od, 6od, 9od or blank Example: for 7d, API returns data from current date – 7 days
Offset	Integer	No	Offset: 0: The records on the first page, i.e., 1 to 500 records Offset: 1: The records on the second page, i.e., 501 to 1000 records

```
"category":"CRoo1, CRoo2",
"duration": "9od",
"supplier_type":"Strategic/Managed",
```



"offset": o

}

Headers	Values	Required
username	String	Yes
password	String	Yes

Headers request format:

```
{
"username": "xyz@thesmartcube.com",
"password": "xyz",
"Content-Type": "application/json"
}
```

```
Status
              Response
              {
                "success": true,
                "error": false,
                "message": "OK",
                "status_code": 200,
                "payload": {
                  "total_records": 2,
                  "limit": 1000,
                  "offset": o,
                  "category_name_invalid": "",
                  "category_data_notprocessed": "",
                  "records": [
                    {
                      "category_id": CRoo1,
200
                      "category": "IT Services",
                      "category_overall_risk": 2.3,
                      "category_sub-risk": [
                          "sub_risk": "Scale",
                          "sub_risk_rating": 3.0,
                          "parameters": []
                        },
                          "sub_risk": "Supply",
                          "sub_risk_rating": 2.3,
                          "parameters": []
                        },
```



```
{
      "sub_risk": "Demand",
      "sub_risk_rating": 3.0,
      "parameters": []
   },
      "sub_risk": "Competition",
      "sub_risk_rating": 5.0,
      "parameters": []
   },
      "sub_risk": "Technology",
      "sub_risk_rating": 1.0,
      "parameters": []
   },
      "sub_risk": "Geographic",
      "sub_risk_rating": 1.9,
      "parameters": []
   }
 ],
  "date": "2024-04-02"
},
  "category_id": 363,
  "category": "IT Services",
  "category_overall_risk": 2.3,
  "category_sub-risk": [
      "sub_risk": "Scale",
      "sub_risk_rating": 1,
      "parameters": []
   },
      "sub_risk": "Supply",
      "sub_risk_rating": 1.7,
      "parameters": []
   },
      "sub_risk": "Demand",
      "sub_risk_rating": 3,
      "parameters": []
    },
      "sub_risk": "Competition",
      "sub_risk_rating": 3,
      "parameters": []
   },
      "sub_risk": "Technology",
```



```
"sub_risk_rating": 3,
                       "parameters": []
                     },
                       "sub_risk": "Geographic",
                       "sub_risk_rating": 1.9,
                       "parameters": []
                     }
                   ],
                   "date": "2024-04-01"
                 }
               ]
             }
           }
             "success": false,
             "error": true,
             "message": "Either client does not exist or credential is invalid",
401
             "status_code": 401,
             "payload": []
```

Top trending themes and topics

To extract top 10 risk themes for one or more categories

Below are details of calling method, request parameters and response of the API:

Request

Method	Endpoint
POST	api/v1.o/categoryTopicsConcern

Params (Body)	Values	Required	Comments
category	String	Yes	Example: CRoo1, CRoo2, CRoo3
news_type	String	No	Example: All or Premium or Blank
Offset	Integer	No	Offset: 0: The records on the first page, i.e., 1 to 500 records Offset: 1: The records on the second page, i.e., 501 to 1000 records

```
{
"category":"CRoo1",
```



```
"news_type": "All",
  "offset": o
}
```

Headers	Values	Required
username	String	Yes
password	String	Yes

Headers request format:

```
{
"username": "xyz@thesmartcube.com",
"password": "xyz",
"Content-Type": "application/json"
}
```

```
Status
              Response
              {
                "success": true,
                "error": false,
                "message": "OK",
                "status_code": 200,
                "payload": {
                  "total_records": 8,
                  "limit": 10,
                  "offset": o,
                  "category_name_invalid": "",
                  "category_data_notprocessed": "",
                  "records": [
   200
                      "category_id": CRoo1,
                      "category": "IT Services",
                      "sub_risk": "Others",
                      "theme": "Material price & supply",
                      "hot_topics": "Cloud,IT Services",
                      "trend": "up"
                    },
                      "category_id": CRoo1,
                      "category": "IT Services",
                      "sub_risk": "Others",
                      "theme": "Supplier operations",
```



```
"hot_topics": "IT Services, Semiconductor Chips and Electronic Components, Semiconductors",
       "trend": "up"
     },
     {
       "category_id": CRoo1,
       "category": "IT Services",
       "sub_risk": "Others",
       "theme": "Trade events",
       "hot_topics": "IT Services, Semiconductor Chips and Electronic Components, Semiconductors",
       "trend": "up"
     },
       "category_id": CRoo1,
       "category": "IT Services",
       "sub_risk": "Supply",
       "theme": "Labour rate & supply",
       "hot_topics": "IT Services, Semiconductor Chips and Electronic Components, Semiconductors",
       "trend": "up"
     },
       "category_id": CRoo1,
       "category": "IT Services",
       "sub_risk": "Supply",
       "theme": "Market competition",
       "hot_topics": "Cloud,IT Services,Semiconductor Chips and Electronic Components",
       "trend": "down"
     },
       "category_id": CRoo1,
       "category": "IT Services",
       "sub_risk": "Supply",
       "theme": "Material price & supply",
       "hot_topics": "Cloud, Copper, Enterprise Hardware, Hardware - End User Computing, IT
Services, Semiconductor Chips and Electronic Components, Semiconductors, Software, Soybean
Feedstock, Telecommunications",
       "trend": "down"
     },
       "category_id": CRoo1,
       "category": "IT Services",
       "sub_risk": "Supply",
       "theme": "Supplier operations",
       "hot_topics": "IT Services, Pulp, Semiconductor Chips and Electronic Components",
       "trend": "up"
     3,
       "category_id": CRoo1,
       "category": "IT Services",
       "sub_risk": "Supply",
       "theme": "Trade events",
```



```
"hot_topics": "Cloud, Copper, Enterprise Hardware, IT Services, Semiconductor Chips and
          Electronic Components, Semiconductors, Telecommunications",
                  "trend": "up"
                }
              ]
            }
          }
          {
            "success": false,
            "error": true,
            "message": "Either client does not exist, or credential is invalid",
401
            "status_code": 401,
            "payload": []
```

Supplier rating updates

To get details on suppliers for which ratings have changed on the platform

Below are details of calling method, request parameters and response of the API:

Request

Method	Endpoint
POST	api/v1.o/supplierRatingUpdates

Params (Body)	Values	Required Comments	
Duration	String	Optional	Duration is fixed as 7d, 3od, 6od, 9od or blank Example: for 7d, API returns data from current date – 7 days
Offset	Integer	No	Offset: 0: The records on the first page, i.e., 1 to 500 records Offset: 1: The records on the second page, i.e., 501 to 1000 records

```
{
  "duration":"7d",
  "offset": o
}
```



Headers	Values	Required
username	String	Yes
password	String	Yes

Headers request format:

```
{
"username": "xyz@thesmartcube.com",
"password": "xyz",
"Content-Type": "application/json"
}
```

```
Status
              Response
              {
               "success": true,
                "error": false,
                "message": "OK",
                "status_code": 200,
                "payload": {
                  "total_records": 7,
                  "limit": 2000,
                 "offset": o,
                 "records": [
                     "supplier_code": "SRoo1",
                     "supplier_name": "SR00001"
                   },
200
                     "supplier_code": "SRoo2",
                     "supplier_name": "SR00002"
                     "supplier_code": "SRoo3",
                     "supplier_name": "SRoooo3"
                   },
                     "supplier_code": "SRoo4",
                     "supplier_name": "SRoooo4"
                   },
                     "supplier_code": "SRoo5",
                     "supplier_name": "SRoooo5"
                   },
```



```
{
                   "supplier_code": "SRoo6",
                   "supplier_name": "SRoooo6"
                 },
                   "supplier_code": "SRoo7",
                   "supplier_name": "SRoooo7"
                 },
              ]
             }
           }
             "success": false,
             "error": true,
             "message": "Either client does not exist, or credential is invalid",
401
             "status_code": 401,
             "payload": []
           }
```

Category rating updates

To get details on categories for which ratings have changed on the platform

Below are details of calling method, request parameters and response of the API:

Request

Method	Endpoint
POST	api/v1.o/categoryRatingUpdates

Params (Body)	Values	Required	Comments
Duration	String	Optional	Duration is fixed as 7d, 3od, 6od, 9od or blank Example: for 7d, API returns data from current date – 7 days
Offset	Integer	No	Offset: 0: The records on the first page, i.e., 1 to 500 records Offset: 1: The records on the second page, i.e., 501 to 1000 records

```
{
  "duration":"7d",
  "offset": o
}
```



Headers	Values	Required
username	String	Yes
password	String	Yes

Headers request format:

```
{
"username": "xyz@thesmartcube.com",
"password": "xyz",
"Content-Type": "application/json"
}
```

```
Status
              Response
              {
               "success": true,
                "error": false,
                "message": "OK",
                "status_code": 200,
                "payload": {
                  "total_records": 6,
                  "limit": 2000,
                 "offset": o,
                 "records": [
                     "category_id": CRoo1,
                     "category_name": "Accounting"
                   },
200
                     "category_id": CRoo2,
                     "category_name": "API"
                   },
                     "category_id": CRoo3,
                     "category_name": "Biologics"
                   },
                     "category_id": CRoo4,
                     "category_name": "Fastners"
                   },
                     "category_id": CRoo5,
                     "category_name": "CMO"
                   },
```



```
{
    "category_id": CRoo6,
    "category_name": "IT Services"
    },
    ]
}

{
    "success": false,
    "error": true,
    "message": "Either client does not exist, or credential is invalid",
    "status_code": 401,
    "payload": []
}
```

Country rating updates

To get details on country for which ratings have changed on the platform

Below are details of calling method, request parameters and response of the API:

Request

Method	Endpoint
POST	api/v1.o/countryRatingUpdates

Params (Body)	Values	Required Comments	
Duration	String	Optional	Duration is fixed as 7d, 3od, 6od, 9od or blank Example: for 7d, API returns data from current date – 7 days
Offset	Integer	No	Offset: 0: The records on the first page, i.e., 1 to 500 records Offset: 1: The records on the second page, i.e., 501 to 1000 records

```
{
  "duration":"7d",
  "offset": 0
}
```



Headers	Values	Required
username	String	Yes
password	String	Yes

Headers request format:

```
{
"username": "xyz@thesmartcube.com",
"password": "xyz",
"Content-Type": "application/json"
}
```

```
Status
              Response
              {
                "success": true,
                "error": false,
                "message": "OK",
                "status_code": 200,
                "payload": {
                  "total_records": 2,
                  "limit": 2000,
                  "offset": o,
                  "records": [
200
                      "country_id": CUoo1,
                      "country_name": "Brazil"
                    },
                      "country_id": CU002,
                      "country_name": "United States"
                    }
                  ]
                }
              }
                "success": false,
                "error": true,
                "message": "Either client does not exist, or credential is invalid",
   401
                "status_code": 401,
                "payload": []
              }
```



Supplier Master

To get the details of all the on-boarded suppliers.

Below are details of calling method, request parameters and response of the API:

Request

Method	Endpoint
POST	api/v1.o/allSuppliersDetails

Params (Body)	Values	Required	Comments
Offset	Integer	No	Offset: 0: The records on the first page, i.e., 1 to 500 records Offset: 1: The records on the second page, i.e., 501 to 1000 records

Body request format:

```
{
  "offset": o
}
```

Headers	Values	Required
username	String	Yes
Password	String	Yes

Headers request format:

```
{
"username": "xyz@thesmartcube.com",
"password": "xyz",
"Content-Type": "application/json"
}
```

Status	Response
200	{ "success": true, "error": false, "message": "OK", "status_code": 200,



```
"payload": {
             "total_records": 2102,
             "limit": 2000,
             "offset": o,
             "records": [
                  "supplier_code": "SRoo1",
                  "supplier_name": "SR00001"
                },
                  "supplier_code": "SRoo2",
                  "supplier_name": "SR00002"
                  "supplier_code": "SRoo3",
                  "supplier_name": "SRoooo3"
              ]
            }
          }
          {
            "success": false,
            "error": true,
            "message": "Either client does not exist, or credential is invalid",
401
            "status_code": 401,
            "payload": []
          }
```

Category Master

To get the details of all the on-boarded categories.

Below are details of calling method, request parameters and response of the API:

Request

Method	Endpoint
POST	api/v1.o/allCategoryDetails

Params (Body)	Values	Required	Comments
Offset	Integer	No	Offset: o: The records on the first page, i.e., 1 to 500 records Offset: 1: The records on the second page, i.e., 501 to 1000 records



"offset": o

}

Headers	Values	Required
Username	String	Yes
Password	String	Yes

Headers request format:

```
{
"username": "xyz@thesmartcube.com",
"password": "xyz",
"Content-Type": "application/json"
}
```

```
Status
              Response
               "success": true,
               "error": false,
               "message": "OK",
               "status_code": 200,
               "payload": {
                 "total_records": 56,
                 "limit": 2000,
                 "offset": o,
                 "records": [
                        "category_id": CRoo1,
                        "category_name": "Accounting"
200
                    },
                        "category_id": CRoo2,
                        "category_name": "API"
                    },
                    {
                        "category_id": CRoo3,
                        "category_name": "Biologics"
                    }
                 ]
                }
              }
              {
   401
```



```
"success": false,
"error": true,
"message": "Either client does not exist, or credential is invalid",
"status_code": 401,
"payload": []
}
```

Country Master

To get the details of all the on-boarded countries.

Below are details of calling method, request parameters and response of the API:

Request

Method	Endpoint
POST	api/v1.o/allCountryDetails

Params (Body)	Values	Required	Comments
Offset	Integer	No	Offset: 0: The records on the first page, i.e., 1 to 500 records Offset: 1: The records on the second page, i.e., 501 to 1000 records

Body request format:

```
{
    "offset": o
```

Headers	Values	Required
Username	String	Yes
Password	String	Yes

Headers request format:

```
{
"username": "xyz@thesmartcube.com",
"password": "xyz",
"Content-Type": "application/json"
}
```

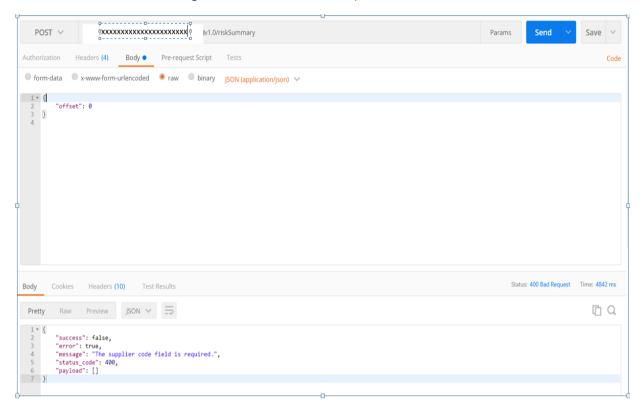


```
Status
              Response
              {
               "success": true,
               "error": false,
               "message": "OK",
               "status_code": 200,
               "payload": {
                       "total_records": 28,
                       "limit": 2000,
                       "offset": o,
                       "records": [
                        {
                                "country_id": CUoo1,
                                "country_name": "Brazil"
200
                        },
                        {
                                "country_id": CU002,
                                "country_name": "United States"
                        },
                        {
                                "country_id": CUoo3,
                                "country_name": "India"
                        }
                    ]
                 }
              }
              {
                "success": false,
                "error": true,
                "message": "Either client does not exist, or credential is invalid",
   401
                "status_code": 401,
                "payload": []
              }
```



Validations and error-handling

Validations and Error-Handing have been shown below (postman screenshot):



Supplier codes

To fetch data for multiple suppliers, all Client Supplier Codes are returned with every call response in the form of a mandatory resource. There can be up to 500 Supplier Codes.

Example of returned Supplier Codes (returned with response):



Response code and message

Response Code	Use Case	Response Message
200: OK	The request was successful	Requested data has been successfully returned
	The request cannot be processed due to a bad syntax	Invalid Json format supplied
	Missing Mandatory Data	i.e., the supplier code field is required
400: Bad Request	Wrong attribute format (not the specified type)	i.e., the offset must be a number
	Maximum number of requests in a single method call exceeded	N/A
	Maximum number of permissible input exceeded	i.e., the supplier limit 500 exhausted
401: Unauthorized	Correct Authentication has not been provided	Either client does not exist or credential is invalid
404: Not Found	The server has not found any data matching with the request or wrong URL entered	The server has not found any data matching with the request
405: Method Not allowed	Using the wrong method	Using POST instead of GET. Not possible as this method is read-only
429: Too many requests	Method call limitation exceeded	
500: Internal Server Error	The server encountered an unexpected condition which prevented it from fulfilling the request	Request not fulfilled because of an internal error
502: Bad Gateway	The server, while acting as a gateway or proxy, received an invalid response from the upstream server it accessed in attempting to fulfil the request	Error in the database, not in the REST API
503: Service Unavailable	The server is currently unable to handle the request due to a temporary overloading or maintenance of the server. The implication is that this is a temporary condition which will be alleviated after some delay	
505: HTTP Version not supported	The server does not support or refuses to support the HTTP protocol version that was used in the request message	The HTTP version used by the Client is not supported by the REST API



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