

CA Business Service Insight

Web Service API Reference Guide

8.1



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Chapter 1: Getting Started

This section contains the following topics:

[Introduction](#) (see page 10)

[Authentication](#) (see page 11)

[Restrictions](#) (see page 11)

[HTTP Type](#) (see page 11)

[Universally Unique Identifiers \(UUIDs\)](#) (see page 11)

[Pagination](#) (see page 12)

[Base URI](#) (see page 12)

Introduction

The CA Business Service Insight web service API provides access to the services, vendors, categories, weight sets and calculated natural and weighted SMI scores for services defined in the CA Business Service Insight database. You use the API to obtain public data defined on the CA Business Service Insight Overlord system or private data defined on a customers' off premise database.

The CA Business Service Insight API is a RESTful web service interface for use by third party applications who wish to interface directly with the SMI data generated by CA Business Service Insight. These web services can be used in scripts such as PERL, cURL, Ruby, and so on.

The CA Business Service Insight web service provides access to the following resources that are available in the global Cloud Commons database or the local integrated database:

- Services
- Providers
- Categories
- Capabilities
- Organizations
- Weight sets
- Mdrs
- Surveys
- Metrics
- Indicators

You use the web service to obtain a calculated caparison score based on category or demographic for services defined in the CA Business Service Insight database

You can also use the web service to approve or reject services, and to move service related metric data from one service to another.

You can use the web service to input metric or indicator related data that is used in the calculation of comparison scores.

Authentication

API KEYS and SHARED SECRET

An API key and Shared Secret are required for all web service calls. You receive a Key and Secret pair after registering your organization with Cloud Commons. To complete the registration process from the CA Business Service Insight user interface on the Administration menu, click Site Settings, Global Sharing.

HTTPS

All CA Business Service Insight web service calls are passed over the internet using HTTPS.

Restrictions

Each web service documented below includes a restriction parameter. The restrictions are:

None

The web service has no restrictions and is open to all public users.

Limited

The web service has limited restrictions. Details are documented in the topic for the web service.

Administrator Only

Administrator security permissions are required to use the web service.

HTTP Type

Each web service includes a definition for “HTTP Type”. This defines the type of CRUD operation used for the web service (create, read, update or delete).

Universally Unique Identifiers (UUIDs)

You will quickly realize that many of the web services are UUID based. UUIDs are used to uniquely identify the many resources of the CA Business Service Insight SMI DB. Each, service, provider, and category has its own UUID. The UUIDs are used in many places to query data or to update data. UUIDs for the resources are returned in all GET operations where they may be used in a subsequent web service call.

Pagination

You can use optional pagination for all web services that return more than one row.

The following examples illustrate how you can use pagination to return records:

- If you have 26 rows to be returned and `&page=1` and `&rows=20`, you will be given the first 20 records.
- If you specify `&page=2` and `&rows=20` you will be given the remaining 6 records.
- If `&page=1` and `&rows=40` you will be given all 26 records.
- If `&page` and `&rows` are not provided the web service shows all data.

Base URI

The base URI is the following:

`https://smi.cloudcommons.com:8443/Insight_API/<type>/SMI/<version>`

<version>

Specifies the version of the SMI framework is to be queried. The current version of SMI is "0.5".

<type>

Specifies the format of the output. The supported formats are json and xml.

The format is defined as part of the resource definition in `<type>`

XML

The Insight API can pass standard XML data back to the calling application.

JSON

The Insight API can pass standard JSON data back to the calling application.

Chapter 2: Initial Resources

This section contains the following topics:

[Show SMI](#) (see page 13)

[Show SMI Versions](#) (see page 14)

[Show All Web Services](#) (see page 15)

[Show All SMI Characteristics](#) (see page 17)

[Show a Specific Characteristic](#) (see page 19)

Show SMI

This web service shows the next level of SMI.

HTTP Type

GET

Restriction

None. Open to all public users.

URI

{type}

Parameter	Description
N/A	No parameters required.

Example:

This following URI will simply show “SMI”. This web service call is reserved for future use and at this time will not show anything different.

`https://smi.cloudcommons.com:8443/Insight_API/json`

Sample output of successful execution:

```
{
  "result":
    {
      "returnCode": "0",
      "errorMessage": "Operation Successful.",
      "resultCount": 1,
      "Bean-List": {
        "ResourceString-Bean":[
          { "characteristic": "SMI" }
        ]
      }
    }
}
```

Show SMI Versions

This web service displays the supported SMI versions available.

HTTP Type

GET

Restriction

None. Open to all public users.

URI

`{type}/SMI`

Parameter	Description
N/A	No parameters required.

Example:

The following URI displays all available SMI versions that are supported in the SMI DB.

`https://smi.cloudcommons.com:8443/Insight_API/json/SMI`

Sample output of successful execution:

```
{
  "result":
  {
    "returnCode": "0",
    "errorMessage": "Operation Successful.",
    "resultCount": 1,
    "Bean-List": {
      "ResourceString-Bean":[
        { "characteristic": "0.5" }
      ]
    }
  }
}
```

Show All Web Services

This web service displays a list of all supported web services that may be used.

HTTP Type

GET

Restriction

None. Open to all public users.

URI

`{type}/SMI/{version}`

Parameter	Description
N/A	No parameters required.

Example:

The following URI displays the next level web services currently supported.

https://smi.cloudcommons.com:8443/Insight_API/json/SMI/0.5?page=1&rows=10

Sample output of successful execution:

```
{
  "result":
  {
    "returnCode": "0",
    "errorMessage": "Operation Successful.",
    "resultCount": 10,
    "Bean-List": {
      "ResourceString-Bean": [
        { "characteristic": "/categories" },
        { "characteristic": "/category/categoryUUID" },
        { "characteristic":
"/category/create?name=categoryName&desc=categoryDescription" },
        { "characteristic": "/category/categoryUUID/service" },
        { "characteristic": "/providers" },
        { "characteristic": "/provider/providerUUID" },
        { "characteristic": "/provider/providerUUID/service" },
        { "characteristic":
"/provider/create?name=providerName&url=companySiteURL&desc=providerDescription&
rs=yearInBusiness&desg=bussDesignation" },
        { "characteristic": "/services" },
        { "characteristic": "/service/serviceUUID" },
        ]
      }
    }
  }
}
```

Show All SMI Characteristics

This web service displays a list of all the SMI characteristics for the specified SMI version.

HTTP Type

GET

Restriction

None. Open to all public users.

URI

{type}/SMI/{version}/smiCharacteristic

Parameter	Description
&key	The API Key that is provided when your application has been registered.
&secret	The Shared Secret that is provided when your application has been registered.
&page	Defines the page number to display.
&rows	Defines the number of records to display per page.
&sort	Valid value for this web service is: "name". If not defined, no sorting is performed.
&childInfo	This may be set to either "true" to show the scores of all sub characteristics or "false" to show only the score of the specified characteristic. If &childInfo is not defined the default is true.

Example:

The following URI displays all SMI characteristics for version 0.5 of the SMI model. It will show the name of the SMI characteristic and the name of the parent level characteristic. "Overall" is the top level characteristic and then the hierarchy follows underneath.

https://smi.cloudcommons.com:8443/Insight_API/json/SMI/0.5/smiCharacteristic?key=df3936ec01c5d3adf9f0048116cd5b84&secret=13f6232ebf484e57103cd4ac234a22aa&page=1&rows=20

Sample output of successful execution:

```
{
  "result":
    {
      "returnCode": "0",
      "errorMessage": "Operation Successful.",
      "resultCount": 20,
      "Bean-List": {
        "ResourceCharacteristic-Bean":[
          { "entityName": "Access Control", "parentEntityName":
"Security" },
          { "entityName": "Accountability", "parentEntityName":
"Policy" },
          { "entityName": "Accuracy", "parentEntityName":
"Functionality" },
          { "entityName": "Acquisition", "parentEntityName": "Cost"
},
          { "entityName": "Adaptability", "parentEntityName":
"Agility" },
          { "entityName": "Agility", "parentEntityName": "Overall" },
          { "entityName": "Agility_measure", "parentEntityName":
"Agility" },
          { "entityName": "Analyzability or Root Cause Analysis",
"parentEntityName": "Resiliency or Fault Tolerance" },
          { "entityName": "Auditability", "parentEntityName":
"Compliance" },
          { "entityName": "Availability", "parentEntityName":
"Quality" },
          { "entityName": "Availability_measure",
"parentEntityName": "Availability" },
          { "entityName": "Awareness or Visibility",
"parentEntityName": "Agility" },
          { "entityName": "Business Stability", "parentEntityName":
"Provider" },
          { "entityName": "Capability", "parentEntityName":
"Overall" },
          { "entityName": "Capacity or Elasticity",
"parentEntityName": "Agility" },
          { "entityName": "Carbon Footprint", "parentEntityName":
"Efficiency" },
```

```

        { "entityName": "Certifications", "parentEntityName":
"Provider" },
        { "entityName": "Communications and Operations",
"parentEntityName": "Security" },
        { "entityName": "Compliance", "parentEntityName": "Risk" },
        { "entityName": "Compliance_measure", "parentEntityName":
"Compliance" }
    ]
}
}
}

```

Show a Specific Characteristic

This web service displays the SMI characteristics starting from a specific characteristic.

HTTP Type

GET

Restriction

None. Open to all public users.

URI

{type}/SMI/{version}/smiCharacteristic/{characteristic}

Parameter	Description
{characteristic}	The name of the SMI characteristic where you want to start. This is a hierarchical model and can be defined here as such. Consider it like a directory structure.
&key	The API Key that is provided when your application has been registered.
&secret	The Shared Secret that is provided when your application has been registered.
&page	Defines the page number to display.
&rows	Defines the number of records to display per page.
&sort	Valid value for this web service is: "name". If not defined, no sorting is performed.
&childInfo	This may be set to either "true" to show the scores of all sub characteristics or "false" to show only the score of the specified characteristic. If &childInfo is not defined the default is true.

Example:

The following URI displays the "Quality" characteristic. The "childInfo=false" can be removed from the URI to show all characteristics that are children, grandchildren, great-grandchildren, etc... of the "Quality" characteristic.

https://smi.cloudcommons.com:8443/Insight_API/json/SMI/0.5/smiCharacteristic/Overall/Quality?childInfo=false&key=df3936ec01c5d3adf9f0048116cd5b84&secret=13f6232ebf484e57103cd4ac234a22aa&page=1&rows=10

Sample output of successful execution:

```
{
  "result":
    {
      "returnCode": "0",
      "errorMessage": "Operation Successful.",
      "resultCount": 10,
      "Bean-List": {
        "ResourceCharacteristic-Bean":[
          { "entityName": "Quality", "parentEntityName": "Overall" },
          { "entityName": "Quality_measure", "parentEntityName":
"Quality" },
          { "entityName": "Effectiveness", "parentEntityName":
"Quality" },
          { "entityName": "Functionality", "parentEntityName":
"Quality" },
          { "entityName": "Availability", "parentEntityName":
"Quality" },
          { "entityName": "Serviceability", "parentEntityName":
"Quality" },
          { "entityName": "Serviceability_measure",
"parentEntityName": "Serviceability" },
          { "entityName": "Service Continuity", "parentEntityName":
"Serviceability" },
          { "entityName": "Supportability", "parentEntityName":
"Serviceability" },
          { "entityName": "Maintainability", "parentEntityName":
"Serviceability" }
        ]
      }
    }
}
```

Chapter 3: Capabilities

This section contains the following topics:

[Create a Capability](#) (see page 21)

[Get All Capabilities](#) (see page 22)

[Get a Capability by UUID](#) (see page 25)

[Delete a Capability](#) (see page 26)

Create a Capability

This web service allows the user to create a capability.

HTTP Type

POST

Restriction

Administrator Only.

URI

{type}/SMI/{version}/capability/create

Parameter	Description
&key	The API Key that is provided when your application has been registered.
&secret	The Shared Secret that is provided when your application has been registered.
&name	Name of the resource being created.
&desc	Description of the resource being created.
&standard	This can be set to 0 or 1. This determines if the capability defined is part of the predefined data from install.

Example:

The following URI creates a capability called "TestCapability".

```
https://smi.cloudcommons.com:8443/Insight_API/json/SMI/0.5/capability/create?name=TestCapability&desc=This%20is%20a%20test&key=4f400a9b486c764d3a6ec5f86fe0a2aa&secret=e320f8f11cb88b5ab346d9ab34033d95&standard=1
```

Sample output of successful execution:

```
{
  "result":
    {
      "returnCode": "0",
      "errorMessage": "Operation Successful.",
      "resultCount": 1,
      "Bean-List": {
        "ResourceCapability-Bean": [
          { "uuid": "d9ccd30e-c69f-46c2-9cea-a34482671ff2", "name":
            "TestCapability", "createdBy": "testadmin@ca.com", "creationDate": "2011-03-23
            19:36:43.0", "description": "This is a test", "isStandard": "1" }
        ]
      }
    }
}
```

Get All Capabilities

This web service allows the user to list all available capabilities.

HTTP Type

GET

Restriction

None. Open to all public users.

URI

{type}/SMI/{version}/{capabilities}

Parameter	Description
&key	The API Key that is provided when your application has been registered.
&secret	The Shared Secret that is provided when your application has been registered.
&page	Defines the page number to display.
&rows	Defines the number of records to display per page.

&sort Valid values for this web service are: "name" and "createdOn". If not defined, no sorting is performed.

Example:

The following URI displays all available capabilities defined in the global SMI DB. The data returned shows the capabilities UUID, name and description.

```
https://smi.cloudcommons.com:8443/Insight_API/json/SMI/0.5/capabilities?page=1&rows=10&key=df3936ec01c5d3adf9f0048116cd5b84&secret=13f6232ebf484e57103cd4ac234a22aa
```

Sample output of successful execution:

```
{
  "result": {
    "returnCode": "0",
    "errorMessage": "Operation Successful.",
    "resultCount": 10,
    "Bean-List": {
      "ResourceCapability-Bean": [
        { "uuid": "10a6b076-bf63-11df-b89d-57e6fb3fdd68", "name":
"Order Processing", "createdBy": "SMIGLOBAL", "creationDate": "2011-03-09
12:43:54.0", "description": "one of capability measurement for Characteristic
Capability", "isStandard": "1" },
        { "uuid": "10b7610a-bf63-11df-88f0-37bfd8b33e4f", "name":
"Inventory Management", "createdBy": "SMIGLOBAL", "creationDate": "2011-03-09
12:43:54.0", "description": "one of capability measurement for Characteristic
Capability", "isStandard": "1" },
        { "uuid": "10b7610a-bf63-11df-8af5-3b795744c2d8", "name":
"Fulfillment", "createdBy": "SMIGLOBAL", "creationDate": "2011-03-09 12:43:54.0",
"description": "one of capability measurement for Characteristic Capability",
"isStandard": "1" },
        { "uuid": "10b9c364-bf63-11df-a0f1-cfccae69237b", "name":
"Payment Services", "createdBy": "SMIGLOBAL", "creationDate": "2011-03-09
12:43:54.0", "description": "one of capability measurement for Characteristic
Capability", "isStandard": "1" },
        { "uuid": "10bc25c8-bf63-11df-a20a-7f448a16d334", "name":
"Reporting", "createdBy": "SMIGLOBAL", "creationDate": "2011-03-09 12:43:54.0",
"description": "one of capability measurement for Characteristic Capability",
"isStandard": "1" },
        { "uuid": "10bc25c8-bf63-11df-b70a-cbf8e5972232", "name":
"Catalog Management", "createdBy": "SMIGLOBAL", "creationDate": "2011-03-09
12:43:54.0", "description": "one of capability measurement for Characteristic
Capability", "isStandard": "1" },
        { "uuid": "10be8822-bf63-11df-bad1-9ff013117c9d", "name":
"Customer Management", "createdBy": "SMIGLOBAL", "creationDate": "2011-03-09
12:43:54.0", "description": "one of capability measurement for Characteristic
Capability", "isStandard": "1" },
        { "uuid": "10be8822-bf63-11df-a51f-a76ca324ee4a", "name":
"Catalog Searching", "createdBy": "SMIGLOBAL", "creationDate": "2011-03-09
12:43:54.0", "description": "one of capability measurement for Characteristic
Capability", "isStandard": "1" },
        { "uuid": "10c0ea86-bf63-11df-80b3-5fb9b3e03036", "name":
"Integrations", "createdBy": "SMIGLOBAL", "creationDate": "2011-03-09 12:43:54.0",
"description": "one of capability measurement for Characteristic Capability",
"isStandard": "1" },
        { "uuid": "10c34ce0-bf63-11df-903a-4b5b5b7d47ea", "name":
"Send and Receive Email", "createdBy": "SMIGLOBAL", "creationDate": "2011-03-09
12:43:54.0", "description": "one of capability measurement for Characteristic
Capability", "isStandard": "1" },
```

```
    ]  
  }  
}
```

Get a Capability by UUID

This web service displays information for a specific capability.

HTTP Type

GET

Restriction

None. Open to all public users.

URI

{type}/SMI/{version}/capability/{capabilityUUID}

Parameter	Description
{capabilityUUID}	UUID of the capability being created.
&key	The API Key that is provided when your application has been registered.
&secret	The Shared Secret that is provided when your application has been registered.

Example:

The following URI displays the capability “Order Processing” and its specific data.

```
https://smi.cloudcommons.com:8443/Insight_API/json/SMI/0.5/capability/10c8119e-bf63-11df-be7b-efa17c147565?key=df3936ec01c5d3adf9f0048116cd5b84&secret=13f6232ebf484e57103cd4ac234a22aa
```

Sample output of successful execution:

```
{
  "result":
    {
      "returnCode": "0",
      "errorMessage": "Operation Successful.",
      "resultCount": 1,
      "Bean-List": {
        "ResourceCapability-Bean": [
          { "uuid": "10c8119e-bf63-11df-be7b-efa17c147565", "name":
            "Directory", "createdBy": "SMIGLOBAL", "creationDate": "1970-01-01 00:00:00.0",
            "description": "one of capability measurement for Characteristic Capability",
            "isStandard": "1" }
        ]
      }
    }
}
```

Delete a Capability

This web service allows a user to delete a capability.

HTTP Type

DELETE

Restriction

Administrator Only.

URI

{type}/SMI/{version}/capability/{capabilityUUID}/delete

Parameter	Description
{capabilityUUID}	UUID of the capability to delete.
&key	The API Key that is provided when your application has been registered.
&secret	The Shared Secret that is provided when your application has been registered.

Example:

`https://smi.cloudcommons.com:8443/Insight_API/json/SMI/0.5/capability/1d60e8f6-c7a9-4e40-9538-d3f6624cb508/delete?key=95bf5da46010b6ddaa8baca04fd94e73&secret=7ec5680d8ac7f03c919dad7770381358`

Sample output of successful execution:

```
{
  "result":
    {
      "returnCode": "0",
      "errorMessage": "Operation Successful.",
      "resultCount": 0,
    }
}
```


Chapter 4: Categories

This section contains the following topics:

[Get All Categories](#) (see page 29)
[Get a Category by UUID](#) (see page 32)
[Get All Capabilities for a Category](#) (see page 33)
[Get All Services by Category UUID](#) (see page 36)
[Assign a Capability to a Category](#) (see page 38)
[Remove a Capability from a Category](#) (see page 39)
[Create a Category](#) (see page 40)
[Delete a Category](#) (see page 41)

Get All Categories

This web service lists all the available categories.

HTTP Type

GET

Restriction

None. Open to all public users.

URI

{type}/SMI/{version}/categories

Parameter	Description
&key	The API Key that is provided when your application has been registered.
&secret	The Shared Secret that is provided when your application has been registered.
&page	Defines the page number to display.
&rows	Defines the number of records to display per page.
&sort	Valid values for this web service are: "name" and "createdOn". If not defined, no sorting is performed.

Example:

The following URI displays all available categories defined in the global SMI DB. The data returned shows the UUID, name and description for the category. The data returned also shows if this is one of the standard categories that have been predefined.

```
https://smi.cloudcommons.com:8443/Insight_API/json/SMI/0.5/categories?page=1&rows=20&key=df3936ec01c5d3adf9f0048116cd5b84&secret=13f6232ebf484e57103cd4ac234a22aa
```

Sample output of successful execution:

```

{
  "result":
  {
    "returnCode": "0",
    "errorMessage": "Operation Successful.",
    "resultCount": 12,
    "Bean-List": {
      "ResourceCategory-Bean": [
        { "uuid": "ab986674-8291-11df-b78a-f765177ca478", "name":
"E-Commerce", "description": "E-Commerce as a Service", "creationDate": "2011-03-09
12:43:59.0", "isStandard": "1" },
        { "uuid": "aba45240-8291-11df-bca3-339c3162b513", "name":
"E-mail", "description": "E-mail as a service", "creationDate": "2011-03-09
12:43:59.0", "isStandard": "1" },
        { "uuid": "aba6b49a-8291-11df-90d9-ab8d193f071a", "name":
"Customer Relationship Management", "description": "Customer Relationship Management
as a Service", "creationDate": "2011-03-09 12:43:59.0", "isStandard": "1" },
        { "uuid": "afe5e6ac-8291-11df-88d9-9f5571f66705", "name":
"Compute", "description": "Compute as a Service", "creationDate": "2011-03-09
12:43:59.0", "isStandard": "1" },
        { "uuid": "afef701e-8291-11df-b1a1-abf70f427a60", "name":
"Database", "description": "Database as a Service", "creationDate": "2011-03-09
12:43:59.0", "isStandard": "1" },
        { "uuid": "aff1d278-8291-11df-848f-773f78f42ae3", "name":
"Business Intelligence", "description": "Business Intelligence as a Service",
"creationDate": "2011-03-09 12:43:59.0", "isStandard": "1" },
        { "uuid": "aff434d2-8291-11df-83d5-7327a550bb19", "name":
"Backup and Recovery", "description": "Backup and Recovery as a Service",
"creationDate": "2011-03-09 12:43:59.0", "isStandard": "1" },
        { "uuid": "aff6972c-8291-11df-95b2-33c3ca0d848e", "name":
"Enterprise Resource Planning", "description": "Enterprise Resource Planning as a
Service", "creationDate": "2011-03-09 12:43:59.0", "isStandard": "1" },
        { "uuid": "aff6972c-8291-11df-8b8c-7ffee011557d", "name":
"IT Management", "description": "IT Management as a Service", "creationDate":
"2011-03-09 12:43:59.0", "isStandard": "1" },
        { "uuid": "aff8f986-8291-11df-a286-6b58c17ae1bb", "name":
"Project and Portfolio Management", "description": "Project and Portfolio Management
as a Service", "creationDate": "2011-03-09 12:43:59.0", "isStandard": "1" },
        { "uuid": "affb5be0-8291-11df-89b7-bb39e1cecb2e", "name":
"Platform", "description": "Platform as a Service", "creationDate": "2011-03-09
12:43:59.0", "isStandard": "1" },
        { "uuid": "0988c5db-63a0-42dc-a858-67ba3458ef60", "name":
"StevenTestNow", "description": "This is a test", "creationDate": "2011-03-15
15:00:26.0", "isStandard": "0" }
      ]
    }
  }
}

```

}

Get a Category by UUID

This web service lists a specific category by UUID.

HTTP Type

GET

Restriction

None. Open to all public users.

URI

{type}/SMI/{version}/category/{categoryUUID}

Parameter	Description
-----------	-------------

{categoryUUID}	UUID of the category to query.
----------------	--------------------------------

&key	The API Key that is provided when your application has been registered.
------	---

&secret	The Shared Secret that is provided when your application has been registered.
---------	---

Example:

The following URI displays the category “E-Commerce” and its specific data.

```
https://smi.cloudcommons.com:8443/Insight_API/json/SMI/0.5/category/aba45240-8291-11df-bca3-339c3162b513?key=df3936ec01c5d3adf9f0048116cd5b84&secret=13f6232ebf484e57103cd4ac234a22aa
```

Sample output of successful execution:

```
{
  "result":
    {
      "returnCode": "0",
      "errorMessage": "Operation Successful.",
      "resultCount": 1,
      "Bean-List": {
        "ResourceCategory-Bean": [
          { "uuid": "aba45240-8291-11df-bca3-339c3162b513", "name":
            "E-mail", "description": "E-mail as a service", "creationDate": "1970-01-01
            00:00:00.0", "isStandard": "1" }
        ]
      }
    }
}
```

Get All Capabilities for a Category

This web service lists all the capabilities assigned to a specific category. This web service also shows which capabilities are required for the specific category. This information is useful when you want to assign a service to a category.

HTTP Type

GET

Restriction

None. Open to all public users.

URI

{type}/SMI/{version}/category/{categoryUUID}/capabilities

Parameter	Description
-----------	-------------

{categoryUUID}	UUID of the category to query.
----------------	--------------------------------

&key	The API Key that is provided when your application has been registered.
------	---

&secret	The Shared Secret that is provided when your application has been registered.
&page	Defines the page number to display.
&rows	Defines the number of records to display per page.
&sort	Valid values for this web service are: "name" and "createdOn". If not defined, no sorting is performed.

Example:

The following URI displays all the capabilities for the “E-mail” category. This will also show which capabilities are required (isRequired flag=1) for this category.

https://smi.cloudcommons.com:8443/Insight_API/json/SMI/0.5/category/aba45240-8291-11df-bca3-339c3162b513/capabilities?page=1&rows=20&key=df3936ec01c5d3adf9f0048116cd5b84&secret=13f6232ebf484e57103cd4ac234a22aa

Sample output of successful execution:

```
{
  "result":
  {
    "returnCode": "0",
    "errorMessage": "Operation Successful.",
    "resultCount": 7,
    "Bean-List": {
      "ResourceCategoryCapability-Bean": [
        { "uuid": "10c34ce0-bf63-11df-903a-4b5b5b7d47ea",
          "categoryId": "3002", "name": "Send and Receive Email", "isRequired": "1",
          "createdBy": "SMIGLOBAL", "creationDate": "1970-01-01 00:00:00.0" },
        { "uuid": "10c34ce0-bf63-11df-9bd1-7f494bc8198a",
          "categoryId": "3002", "name": "Address Book", "isRequired": "1", "createdBy":
          "SMIGLOBAL", "creationDate": "1970-01-01 00:00:00.0" },
        { "uuid": "10c5af3a-bf63-11df-a6a2-3fd61e181b32",
          "categoryId": "3002", "name": "Calendar", "isRequired": "0", "createdBy":
          "SMIGLOBAL", "creationDate": "1970-01-01 00:00:00.0" },
        { "uuid": "10c8119e-bf63-11df-8dc4-77b539ebae89",
          "categoryId": "3002", "name": "Notes", "isRequired": "0", "createdBy": "SMIGLOBAL",
          "creationDate": "1970-01-01 00:00:00.0" },
        { "uuid": "10c8119e-bf63-11df-be7b-efa17c147565",
          "categoryId": "3002", "name": "Directory", "isRequired": "0", "createdBy":
          "SMIGLOBAL", "creationDate": "1970-01-01 00:00:00.0" },
        { "uuid": "10ca73f8-bf63-11df-80d1-f78288b56e87",
          "categoryId": "3002", "name": "IM Integration", "isRequired": "0", "createdBy":
          "SMIGLOBAL", "creationDate": "1970-01-01 00:00:00.0" },
        { "uuid": "10ca73f8-bf63-11df-9d72-9bd190d555e2",
          "categoryId": "3002", "name": "Mobile Push Support", "isRequired": "0", "createdBy":
          "SMIGLOBAL", "creationDate": "1970-01-01 00:00:00.0" }
      ]
    }
  }
}
```

Get All Services by Category UUID

This web service lists all the services assigned to a specific category.

HTTP Type

GET

Restriction

Limited. Open to all public users with the following limitation:

This web service only lists services approved by the Cloud Commons Consortium. Services created by the user making the request are also listed, even if the service has not been approved.

URI

{type}/SMI/{version}/category/{categoryUUID}/service

Parameter	Description
-----------	-------------

{categoryUUID}	UUID of the category to query.
----------------	--------------------------------

&key	The API Key that is provided when your application has been registered.
------	---

&secret	The Shared Secret that is provided when your application has been registered.
---------	---

&page	Defines the page number to display.
-------	-------------------------------------

&rows	Defines the number of records to display per page.
-------	--

&sort	Valid values for this web service are: "name" and "createdOn". If not defined, no sorting is performed.
-------	---

Example:

The following URI displays all the capabilities currently included in the “E-mail” category.

```
https://smi.cloudcommons.com:8443/Insight_API/json/SMI/0.5/category/aba45240-8291-11df-bca3-339c3162b513/service?page=1&rows=10&key=df3936ec01c5d3adf9f0048116cd5b84&secret=13f6232ebf484e57103cd4ac234a22aa
```

Sample output of successful execution:

```
{
  "result":
  {
    "returnCode": "0",
    "errorMessage": "Operation Successful.",
    "resultCount": 10,
    "Bean-List": {
      "ResourceService-Bean": [
        { "uuid": "e0c8eb85-5716-44f6-9726-d33014a69347", "name":
          "Novell GroupWise", "description": "service_name from survey", "provider": "Internal
          IT", "providerUUID": "4bcde651-a48e-49ad-a824-8db958a9c8d5", "categoryName":
          "E-mail", "naturalScore": "null", "group": "null", "label": "null", "createdOn":
          "2011-03-23 16:38:45.0", "needsApproval": "No", "createdBy": "SMIGLOBAL" },
        { "uuid": "521a10a9-1f21-4d71-9d49-0837ce126c38", "name":
          "Cox Business", "description": "service_name from survey", "provider": "null",
          "providerUUID": "null", "categoryName": "E-mail", "naturalScore": "48", "group":
          "null", "label": "null", "createdOn": "2011-03-23 16:38:45.0", "needsApproval":
          "No", "createdBy": "SMIGLOBAL" },
        { "uuid": "e035a666-89a6-42b6-ad14-25376475817e", "name":
          "AOL Mail", "description": "service_name from survey", "provider": "null",
          "providerUUID": "null", "categoryName": "E-mail", "naturalScore": "47", "group":
          "null", "label": "null", "createdOn": "2011-03-23 16:38:45.0", "needsApproval":
          "No", "createdBy": "SMIGLOBAL" },
        { "uuid": "ec0a0a2f-8f50-45cf-8f29-407e8e3a6bc2", "name":
          "IBM Lotus Domino Notes", "description": "service_name from survey", "provider":
          "Internal IT", "providerUUID": "4bcde651-a48e-49ad-a824-8db958a9c8d5",
          "categoryName": "E-mail", "naturalScore": "null", "group": "null", "label": "null",
          "createdOn": "2011-03-23 16:38:45.0", "needsApproval": "No", "createdBy":
          "SMIGLOBAL" },
        { "uuid": "9ae63465-13e4-4641-92e7-7cc5304fb5b7", "name":
          "Gmail", "description": "service_name from survey", "provider": "Google",
          "providerUUID": "50fc741c-5447-11df-823a-8f98fa01fa88", "categoryName": "E-mail",
          "naturalScore": "47", "group": "null", "label": "null", "createdOn": "2011-03-23
          16:38:45.0", "needsApproval": "No", "createdBy": "SMIGLOBAL" },
        { "uuid": "ef679c29-c40d-4a76-8a42-e9fd154491bd", "name":
          "Microsoft Exchange Online", "description": "service_name from survey", "provider":
          "Microsoft", "providerUUID": "e4083870-e41c-44d4-a733-7e7ea7fd90be",
          "categoryName": "E-mail", "naturalScore": "null", "group": "null", "label": "null",
          "createdOn": "2011-03-23 16:38:45.0", "needsApproval": "No", "createdBy":
          "SMIGLOBAL" },

```

```
        { "uuid": "3ae22ca8-ee98-4baf-b70d-1a3cbf0589d6", "name":
"createTest1", "description": "null", "provider": "null", "providerUUID": "null",
"categoryName": "E-mail", "naturalScore": "76", "group": "null", "label": "null",
"createdOn": "2011-03-23 21:58:20.0", "needsApproval": "No", "createdBy":
"testadmin@ca.com" },
        { "uuid": "1cd8837f-3df9-4757-be70-8d8ba51bf5f8", "name":
"InsightDemo", "description": "null", "provider": "null", "providerUUID": "null",
"categoryName": "E-mail", "naturalScore": "29", "group": "null", "label": "null",
"createdOn": "2011-03-24 08:58:08.0", "needsApproval": "No", "createdBy":
"testadmin@ca.com" },
        { "uuid": "b128fe15-6ce7-498e-bb6b-3d7d46d6908b", "name":
"Microsoft Live", "description": "service_name from survey", "provider":
"Microsoft", "providerUUID": "e4083870-e41c-44d4-a733-7e7ea7fd90be",
"categoryName": "E-mail", "naturalScore": "null", "group": "null", "label": "null",
"createdOn": "2011-03-23 16:38:45.0", "needsApproval": "No", "createdBy":
"SMIGLOBAL" },
        { "uuid": "29d0f72b-6bef-48bf-981c-fb684d516fe4", "name":
"LotusLive", "description": "service_name from survey", "provider": "IBM",
"providerUUID": "50ccc514-5447-11df-adb0-b3e81e264bff", "categoryName": "E-mail",
"naturalScore": "54", "group": "null", "label": "null", "createdOn": "2011-03-23
16:38:45.0", "needsApproval": "No", "createdBy": "SMIGLOBAL" }
    ]
}
}
```

Assign a Capability to a Category

This web service assigns a capability to a category. You can define the capability as required for the specified category.

HTTP Type

POST

Restriction

Administrator Only.

URI

{type}/SMI/{version}/category/{categoryUUID}/capability/{capabilityUUID}/create

Parameter	Description
-----------	-------------

{categoryUUID}	UUID of the category to be assigned the capability.
----------------	---

{capabilityUUID}	UUID of the capability to assign to the category.
------------------	---

&key	The API Key that is provided when your application has been registered.
&secret	The Shared Secret that is provided when your application has been registered.
&isRequired	Valid values are 1 or 0. 1 indicates that the capability is a required capability for this category. 0 indicates that it is not a required capability for this category.

Example:

The following URI sets the capability “Send and Receive Mail” to the “E-Commerce” category.

```
https://smi.cloudcommons.com:8443/Insight_API/json/SMI/0.5/category/ab986674-8291-11df-b78a-f765177ca478/capability/10c34ce0-bf63-11df-903a-4b5b5b7d47ea?&key=df3936ec01c5d3adf9f0048116cd5b84&secret=13f6232ebf484e57103cd4ac234a22aa
```

Sample output of successful execution:

```
{
  "result":
    {
      "returnCode": "0",
      "errorMessage": "Operation Successful.",
      "resultCount": 0,
    }
}
```

Remove a Capability from a Category

This web service removes a capability from being assigned to a specific category.

HTTP Type

DELETE

Restriction

Administrator Only.

URI

{type}/SMI/{version}/category/{categoryUUID}/capability/delete

Parameter	Description
-----------	-------------

{categoryUUID}	UUID of the category to which the capability is currently assigned.
----------------	---

&key	The API Key that is provided when your application has been registered.
------	---

&secret The Shared Secret that is provided when your application has been registered.

&capabilityUID UUID of the capability to be deleted from the category.

Example:

```
https://smi.cloudcommons.com:8443/Insight_API/json/SMI/0.5/category/29c2c5ea-4173-4b58-b08b-90dc2906e58b/capability/delete?capabilityUUID=c1d1857d-190c-4369-86b1-1422628902a2&key=95bf5da46010b6ddaa8baca04fd94e73&secret=7ec5680d8ac7f03c919dad7770381358
```

Sample output of successful execution:

```
{
  "result":
    {
      "returnCode": "0",
      "errorMessage": "Operation Successful.",
      "resultCount": 0,
    }
}
```

Create a Category

This web service allows the user to create a category.

HTTP Type

POST

Restriction

Administrator Only.

URI

{type}/SMI/{version}/category/create

Parameter	Description
&key	The API Key that is provided when your application has been registered.
&secret	The Shared Secret that is provided when your application has been registered.
&name	Name of the resource being created.
&desc	Description of the resource being created.

Example:

The following URI creates a capability called “New_Category”. New categories that are created will not be standard (is_standard=0). The UUID of the new category is returned.

```
https://smi.cloudcommons.com:8443/Insight_API/json/SMI/0.5/category/create?name=New_Category&desc=My_Category&key=df3936ec01c5d3adf9f0048116cd5b84&secret=13f6232ebf484e57103cd4ac234a22aa
```

Sample output of successful execution:

```
{
  "result":
    {
      "returnCode": "0",
      "errorMessage": "Operation Successful.",
      "resultCount": 1,
      "Bean-List": {
        "ResourceCategory-Bean": [
          { "uuid": "0988c5db-63a0-42dc-a858-67ba3458ef60", "name":
            "New_Category", "description": "This is a test", "creationDate": "2011-03-15
            15:00:26.0", "isStandard": "0" }
        ]
      }
    }
}
```

Delete a Category

This web service allows a user to delete a category.

HTTP Type

DELETE

Restriction

Administrator Only.

URI

{type}/SMI/{version}/category/{categoryUUID}/delete

Parameter	Description
&key	The API Key that is provided when your application has been registered.
&secret	The Shared Secret that is provided when your application has been registered.

Example:

`https://smi.cloudcommons.com:8443/Insight_API/json/SMI/0.5/category/29c2c5ea-4173-4b58-b08b-90dc2906e58b/delete?key=95bf5da46010b6ddaa8baca04fd94e73&secret=7ec5680d8ac7f03c919dad7770381358`

Sample output of successful execution:

```
{
  "result":
    {
      "returnCode": "0",
      "errorMessage": "Operation Successful.",
      "resultCount": 0,
    }
}
```

Chapter 5: Organizations

This section contains the following topics:

[Create an Organization](#) (see page 43)

[Update an Organization](#) (see page 44)

[Get an Organization by Name](#) (see page 46)

[Get All Organizations](#) (see page 47)

Create an Organization

This web service creates an organization.

HTTP Type

POST

Restriction

Administrator Only.

This web service is restricted to the global Cloud Commons DB only. This web service is restricted from being used on a local integrated DB.

URI

{type}/SMI/{version}/organization/create

Parameter	Description
&key	The API Key that is provided when your application has been registered.
&secret	The Shared Secret that is provided when your application has been registered.
&name	Name of the resource being created.
&geog	The geographic location of the organization.
&url	The URL of the organization.
&size	Number of employees in the organization.
&yrs	Number of years the organization being created has been in business.
&country	Country where the organization has its headquarters.
&rev	Yearly revenue of the organization.
&zip	Zip or postal code of the organization.
&ind	Industry sector that the organization belongs to.

Example:

This example creates an organization called TestOrg.

```
https://smi.cloudcommons.com:8443/Insight_API/json/SMI/0.5/organization/create?name=TestOrg&geog=North%20America&size=32&url=http://www.test.com&yrs=21&key=52dale089a5a8ee3d3ccf38254f5e8b8&secret=9a31daab4f41ac1897c102339283e303
```

Sample output of successful execution:

```
{
  "result":
    {
      "returnCode": "0",
      "errorMessage": "Operation Successful.",
      "resultCount": 1,
      "Bean-List": {
        "ResourceOrganization-Bean": [
          { "id": "3155", "name": "TestOrg", "uuid":
            "b06f0a1e-ff29-4aea-a182-3a4883ef6231", "geography": "North America", "size": "32",
            "url": "http://www.test.com", "yearInBusiness": "21", "country": "null", "revenue":
            "null", "postalCode": "null", "industry": "null", "creationDate": "2011-3-24
            21:59:43. 0", "createdBy": "testadmin@ca.com", }
          ]
        }
      }
    }
}
```

Update an Organization

This web service updates information for an organization.

HTTP Type

PUT

Restriction

Administrator Only.

This web service is restricted to the global Cloud Commons DB only. This web service is restricted from being used on a local integrated DB.

URI

{type}/SMI/{version}/organization/{name}/update

Parameter	Description
{name}	The existing name of the organization.
&key	The API Key that is provided when your application has been registered.

&secret	The Shared Secret that is provided when your application has been registered.
&toname	Updated name of the organization.
&geog	Updated geographic location of the organization.
&url	Updated URL of the organization.
&size	Updated number of employees in the organization.
&yrs	Updated number of years the organization being created has been in business.
&country	Updated country where the organization has its headquarters.
&rev	Updated yearly revenue of the organization.
&zip	Updated zip or postal code of the organization.
&ind	Updated industry sector that the organization belongs to.

Example:

This example updates the TestOrg organization with the data defined in the provided parameters.

```
https://smi.cloudcommons.com:8443/Insight_API/json/SMI/0.5/organization/TestOrg/update?name=NewTestOrg&geog=Asia&size=55&url=http://www.test1.com&yrs=44&key=98ce4910fc7f6fdb7af270ea9b3162b6&secret=eafe362499eacad24b3092ec12853590
```

Sample output of successful execution:

```
{
  "result":
    {
      "returnCode": "0",
      "errorMessage": "Operation Successful.",
      "resultCount": 1,
      "Bean-List": {
        "ResourceOrganization-Bean": [
          { "id": "3155", "name": "NewTestOrg", "uuid":
            "b06f0a1e-ff29-4aea-a182-3a4883ef6231", "geography": "Asia", "size": "55", "url":
            "http://www.test1.com", "yearInBusiness": "44", "country": "null", "revenue":
            "null", "postalCode": "null", "industry": "null", "creationDate": "2011-3-24
            21:59:43. 0", "createdBy": "testadmin@ca.com", }
        ]
      }
    }
}
```

Get an Organization by Name

This web service gets information for an organization by name.

HTTP Type

GET

Restriction

None. Open to all public users.

URI

{type}/SMI/{version}/organization/{name}

Parameter	Description
-----------	-------------

{name}	The name of the organization.
--------	-------------------------------

&key	The API Key that is provided when your application has been registered.
------	---

&secret	The Shared Secret that is provided when your application has been registered.
---------	---

Example:

This example displays information on the TestOrg organization.

`https://smi.cloudcommons.com:8443/Insight_API/json/SMI/0.5/organization/TestOrg?key=98ce4910fc7f6fdb7af270ea9b3162b6&secret=eafe362499eacad24b3092ec12853590`

Sample output of successful execution:

```
{
  "result":
  {
    "returnCode": "0",
    "errorMessage": "Operation Successful.",
    "resultCount": 1,
    "Bean-List": {
      "ResourceOrganization-Bean": [
        { "id": "3155", "name": "TestOrg", "uuid":
"b06f0a1e-ff29-4aea-a182-3a4883ef6231", "geography": "North America", "size": "32",
"url": "http://www.test.com", "yearInBusiness": "21", "country": "null", "revenue":
"null", "postalCode": "null", "industry": "null", "creationDate": "2011-3-24
21:59:43. 0", "createdBy": "testadmin@ca.com", }
      ]
    }
  }
}
```

Get All Organizations

This web service gets a list of all defined organizations.

HTTP Type

GET

Restriction

Administrator Only.

URI

{type}/SMI/{version}/organizations

Parameter	Description
&key	The API Key that is provided when your application has been registered.
&secret	The Shared Secret that is provided when your application has been registered.
&page	Defines the page number to display.
&rows	Defines the number of records to display per page.
&sort	Valid values for this web service are: "organizationID", "name", "yrs", "size", and "createdOn". If not defined, no sorting is performed.
&search	Defines the search criteria. The search criteria searches the name and displays matching records. If not defined, no searching is done.

Example:

```
https://smi.cloudcommons.com:8443/Insight_API/json/SMI/0.5/organizations?key=98ce4910fc7f6fdb7af270ea9b3162b6&secret=ea362499e24b3092ec12853590&page=1&rows=10
```

Sample output of successful execution:

```
{
  "result":
    {
      "returnCode": "0",
      "errorMessage": "Operation Successful.",
      "resultCount": 10,
      "Bean-List": {
        "ResourceOrganization-Bean": [
```

```
    { "id": "1", "name": "$default$", "uuid":  
      "8cd473d4-0e5f-47ac-970a-7b695eb45723", "geography": "null", "size": "0", "url":  
      "null", "yearInBusiness": "0", "country": "null", "revenue": "null", "postalCode":  
      "null", "industry": "null", "creationDate": "1970-1-1 0:0:0. 0", "createdBy":  
      "SMIGLOBAL", },  
    { "id": "3000", "name": "Organization1", "uuid":  
      "66b459c0-02fc-41ea-9f3d-40987523b386", "geography": "null", "size": "0", "url":  
      "null", "yearInBusiness": "0", "country": "null", "revenue": "null", "postalCode":  
      "null", "industry": "null", "creationDate": "2011-3-23 16:38:58. 0", "createdBy":  
      "SMIGLOBAL", },  
    { "id": "3001", "name": "Organization2", "uuid":  
      "7d0338f2-b32c-4d42-9968-a1f55df02d4a", "geography": "null", "size": "0", "url":  
      "null", "yearInBusiness": "0", "country": "null", "revenue": "null", "postalCode":  
      "null", "industry": "null", "creationDate": "2011-3-23 16:38:58. 0", "createdBy":  
      "SMIGLOBAL", },  
    { "id": "3002", "name": "Organization3", "uuid":  
      "4afde5fb-2f07-47fc-a721-5cd48bb84acb", "geography": "null", "size": "0", "url":  
      "null", "yearInBusiness": "0", "country": "null", "revenue": "null", "postalCode":  
      "null", "industry": "null", "creationDate": "2011-3-23 16:38:58. 0", "createdBy":  
      "SMIGLOBAL", },  
    { "id": "3003", "name": "Organization4", "uuid":  
      "92178f3b-7ce7-4d4d-8bd8-d6d6aaab13c7", "geography": "null", "size": "0", "url":  
      "null", "yearInBusiness": "0", "country": "null", "revenue": "null", "postalCode":  
      "null", "industry": "null", "creationDate": "2011-3-23 16:38:58. 0", "createdBy":  
      "SMIGLOBAL", },  
    { "id": "3004", "name": "Organization5", "uuid":  
      "b1d7fe85-1a48-440a-9a2c-919bca64ed47", "geography": "null", "size": "0", "url":  
      "null", "yearInBusiness": "0", "country": "null", "revenue": "null", "postalCode":  
      "null", "industry": "null", "creationDate": "2011-3-23 16:38:58. 0", "createdBy":  
      "SMIGLOBAL", },  
    { "id": "3005", "name": "Organization6", "uuid":  
      "b26079bf-6fce-482d-a44a-8a5c8da81640", "geography": "null", "size": "0", "url":  
      "null", "yearInBusiness": "0", "country": "null", "revenue": "null", "postalCode":  
      "null", "industry": "null", "creationDate": "2011-3-23 16:38:58. 0", "createdBy":  
      "SMIGLOBAL", },  
    { "id": "3006", "name": "Organization7", "uuid":  
      "1cad17cc-6218-4425-a487-a868d7f8f42a", "geography": "null", "size": "0", "url":  
      "null", "yearInBusiness": "0", "country": "null", "revenue": "null", "postalCode":  
      "null", "industry": "null", "creationDate": "2011-3-23 16:38:58. 0", "createdBy":  
      "SMIGLOBAL", },  
    { "id": "3007", "name": "Organization8", "uuid":  
      "914f2a23-77e3-4cdd-8489-992ec96a6790", "geography": "null", "size": "0", "url":  
      "null", "yearInBusiness": "0", "country": "null", "revenue": "null", "postalCode":  
      "null", "industry": "null", "creationDate": "2011-3-23 16:38:58. 0", "createdBy":  
      "SMIGLOBAL", },
```

```
        { "id": "3008", "name": "Organization9", "uuid":  
"07e56eaf-60ed-440e-95e8-8aba00acd335", "geography": "null", "size": "0", "url":  
"null", "yearInBusiness": "0", "country": "null", "revenue": "null", "postalCode":  
"null", "industry": "null", "creationDate": "2011-3-23 16:38:58. 0", "createdBy":  
"SMIGLOBAL", }  
    }  
}
```


Chapter 6: Providers

This section contains the following topics:

[Get All Providers](#) (see page 51)

[Get a Provider by UUID](#) (see page 54)

[Get All Services by Provider UUID](#) (see page 55)

[Create a Provider](#) (see page 57)

[Delete a Provider](#) (see page 58)

[Update Provider Information](#) (see page 59)

Get All Providers

This web service obtains a list of all defined providers.

HTTP Type

GET

Restriction

None. Open to all public users.

URI

{type}/SMI/{version}/providers

Parameter	Description
&key	The API Key that is provided when your application has been registered.
&secret	The Shared Secret that is provided when your application has been registered.
&page	Defines the page number to display.
&rows	Defines the number of records to display per page.
&sort	Valid values for this web service are: "name", "yrs", "size", "businessDesignation" and "createdOn". If not defined, no sorting is performed.
&search	Defines the search criteria. The search criteria searches the name and description and displays matching records. If not defined, no searching is done.

Example:

This URI displays all available providers defined in the global SMI DB. The data returned shows the provider's UUID, name, description, and so on.

```
https://smi.cloudcommons.com:8443/Insight_API/json/SMI/0.5/providers?page=1&rows=10&key=df3936ec01c5d3adf9f0048116cd5b84&secret=13f6232ebf484e57103cd4ac234a22aa
```

Sample output of successful execution:

```
{
  "result":
    {
      "returnCode": "0",
      "errorMessage": "Operation Successful.",
      "resultCount": 10,
      "Bean-List": {
        "ResourceProvider-Bean": [
          { "uuid": "4a91bfe2-5447-11df-bb3c-63263b3f8077", "name":
            "Carp Data Service LLC", "companySiteURL": "www.OgonPro.com", "description": "Deep
            Ogon Professional Ogon Pro finds hidden money for businesses with affordable Data
            Mining and Business Intelligence. Digging deep into data reveals ... www.ogonpro.com/
            ", "providerTypeId": "null", "bussDesignation": "null", "firstName": "null",
            "lastName": "null", "telephone": "null", "fax": "null", "email": "null", "title":
            "null", "streetAddress1": "null", "city": "null", "state": "null", "postalCode":
            "null", "country": "null", "yrsInBuss": "null", "streetAddress2": "null" },
          { "uuid": "4a91bfe2-5447-11df-aedd-d75925261e69", "name":
            "Carrier Call Ltd.", "companySiteURL": "www.carriercall.com", "description":
            "Carrier Call is a telecommunication software firm based in Switzerland. Our product
            portfolio provides sophisticated management and operational support for ...
            www.carriercall.com/ ", "providerTypeId": "null", "bussDesignation": "null",
            "firstName": "null", "lastName": "null", "telephone": "null", "fax": "null", "email":
            "null", "title": "null", "streetAddress1": "null", "city": "null", "state": "null",
            "postalCode": "null", "country": "null", "yrsInBuss": "null", "streetAddress2":
            "null" },
          { "uuid": "4a91bfe2-5447-11df-9a0a-0f17915054b7", "name":
            "Christian James Inc.", "companySiteURL": "www.paygosaas.com", "description":
            "PayGo SaaS is an affordable yet powerful Point of Sale (POS) SaaS for retailers.
            It runs on Mac OS X and Windows. paygosaas.com/ ", "providerTypeId": "null",
            "bussDesignation": "null", "firstName": "null", "lastName": "null", "telephone":
            "null", "fax": "null", "email": "null", "title": "null", "streetAddress1": "null",
            "city": "null", "state": "null", "postalCode": "null", "country": "null",
            "yrsInBuss": "null", "streetAddress2": "null" },
```

```
{ "uuid": "4a94223c-5447-11df-ad7a-afb51cb4adbe", "name":
"Clarity Accounting", "companySiteURL": "www.clarityaccounting.com", "description":
"Small business accounting software for small businesses and self-employed
professionals. Set up within minutes. Try it for free.
https://www.clarityaccounting.com/ ", "providerTypeId": "null", "bussDesignation":
"null", "firstName": "null", "lastName": "null", "telephone": "null", "fax": "null",
"email": "null", "title": "null", "streetAddress1": "null", "city": "null", "state":
"null", "postalCode": "null", "country": "null", "yrsInBuss": "null",
"streetAddress2": "null" },
{ "uuid": "4a94223c-5447-11df-a643-8fa7eb7e4a2d", "name":
"Classic Informatics private limited", "companySiteURL": "www.winkbill.com",
"description": "Winkbill.com offers secure and effective online invoicing and billing
system where you can easily create send and track all your invoices. www.winkbill.com/
", "providerTypeId": "null", "bussDesignation": "null", "firstName": "null",
"lastName": "null", "telephone": "null", "fax": "null", "email": "null", "title":
"null", "streetAddress1": "null", "city": "null", "state": "null", "postalCode":
"null", "country": "null", "yrsInBuss": "null", "streetAddress2": "null" },
{ "uuid": "4a968496-5447-11df-816b-a3ef5772d348", "name":
"Clinical Financial Services LLC", "companySiteURL":
"www.clinicalfinancialservices.com", "description": "Clinical Financial Services
provides administrative cash flow and negotiation solutions for research facilities
conducting clinical trials. www.clinicalfinancialservices.com/ ", "providerTypeId":
"null", "bussDesignation": "null", "firstName": "null", "lastName": "null",
"telephone": "null", "fax": "null", "email": "null", "title": "null",
"streetAddress1": "null", "city": "null", "state": "null", "postalCode": "null",
"country": "null", "yrsInBuss": "null", "streetAddress2": "null" },
{ "uuid": "4a968496-5447-11df-8d5a-93604fc752fc", "name":
"Convey", "companySiteURL": "www.convey.com", "description": "nil",
"providerTypeId": "null", "bussDesignation": "null", "firstName": "null",
"lastName": "null", "telephone": "null", "fax": "null", "email": "null", "title":
"null", "streetAddress1": "null", "city": "null", "state": "null", "postalCode":
"null", "country": "null", "yrsInBuss": "null", "streetAddress2": "null" },
{ "uuid": "4a9b494a-5447-11df-9c76-833e6c49522a", "name":
"e-conomic Interntional", "companySiteURL": "www.e-conomic.com", "description": "Do
your accounting online with e-conomic. Create book and e-mail invoices in one go.
Give your accountant free access. www.e-conomic.com/ ", "providerTypeId": "null",
"bussDesignation": "null", "firstName": "null", "lastName": "null", "telephone":
"null", "fax": "null", "email": "null", "title": "null", "streetAddress1": "null",
"city": "null", "state": "null", "postalCode": "null", "country": "null",
"yrsInBuss": "null", "streetAddress2": "null" },
{ "uuid": "4a9daba4-5447-11df-b1e0-f76306a2dff6", "name":
"eVapt Inc", "companySiteURL": "www.evapt.com", "description": "eVapt is a proven
Subscription Management Metering & Billing Platform for cloud computing and on-demand
service providers. www.evapt.com/ ", "providerTypeId": "null", "bussDesignation":
"null", "firstName": "null", "lastName": "null", "telephone": "null", "fax": "null",
"email": "null", "title": "null", "streetAddress1": "null", "city": "null", "state":
"null", "postalCode": "null", "country": "null", "yrsInBuss": "null",
"streetAddress2": "null" },
```

```
{ "uuid": "4aa27058-5447-11df-99b7-17310b717768", "name":
"Financial Transmission Network Inc.", "companySiteURL": "www.ftni.com",
"description": "Financial Transmission Network Inc. (FTNI) designs develops and
manages scalable customized solutions that incorporate check imaging ACH processing
... www.ftni.com/ ", "providerTypeId": "null", "bussDesignation": "null",
"firstName": "null", "lastName": "null", "telephone": "null", "fax": "null", "email":
"null", "title": "null", "streetAddress1": "null", "city": "null", "state": "null",
"postalCode": "null", "country": "null", "yrsInBuss": "null", "streetAddress2":
"null" }
}
}
```

Get a Provider by UUID

This web service lists information for a specific provider by UUID.

HTTP Type

GET

Restriction

None. Open to all public users.

URI

{type}/SMI/{version}/provider/{providerUUID}

Parameter	Description
{providerUUID}	UUID of the provider to query.
&key	The API Key that is provided when your application has been registered.
&secret	The Shared Secret that is provided when your application has been registered.

Example:

The following URI displays the provider "Google" and its specific data.

```
https://smi.cloudcommons.com:8443/Insight_API/json/SMI/0.5/provider/50fc741c-5447-11df-823a-8f98fa01fa88?&key=52dale089a5a8ee3d3ccf38254f5e8b8&secret=9a31daab4f41ac1897c102339283e303
```

Sample output of successful execution:

```
{
  "result":
    {
      "returnCode": "0",
      "errorMessage": "Operation Successful.",
      "resultCount": 1,
      "Bean-List": {
        "ResourceProvider-Bean": [
          { "uuid": "50fc741c-5447-11df-823a-8f98fa01fa88", "name":
"Google", "companySiteURL": "http://www.gmail.com", "description": "Read Gmail on
your mobile phone by pointing your phone's web browser to http://gmail.com/app. Learn
more. Lots of space. Over 2757.272164 megabytes (and ... www.gmail.com/ ",
"providerTypeId": "null", "bussDesignation": "null", "firstName": "null",
"lastName": "null", "telephone": "null", "fax": "null", "email": "null", "title":
"null", "streetAddress1": "null", "city": "null", "state": "null", "postalCode":
"null", "country": "null", "yrsInBuss": "null", "streetAddress2": "null" }
        ]
      }
    }
}
```

Get All Services by Provider UUID

This web service lists all the services associated to the specified provider UUID.

HTTP Type

GET

Restriction

Limited. Open to all public users with the following limitation:

This web service only lists services approved by the Cloud Commons Consortium. Services created by the user making the request are also listed, even if the service has not been approved.

URI

{type}/SMI/{version}/provider/{providerUUID}/service

Parameter	Description
-----------	-------------

{providerUID D}	UUID of the category to query.
--------------------	--------------------------------

&key	The API Key that is provided when your application has been registered.
------	---

&secret	The Shared Secret that is provided when your application has been registered.
---------	---

&page	Defines the page number to display.
&rows	Defines the number of records to display per page.
&sort	Valid values for this web service are: "name", "createdOn", and "score". If not defined, no sorting is performed.

Example:

The following URI displays all the services currently provided by "Google" that are stored in the SMI DB.

```
https://smi.cloudcommons.com:8443/Insight_API/json/SMI/0.5/provider/50fc741c-5447-11df-823a-8f98fa01fa88/service?key=df3936ec01c5d3adf9f0048116cd5b84&secret=13f6232ebf484e57103cd4ac234a22aa
```

Sample output of successful execution:

```
{
  "result":
    {
      "returnCode": "0",
      "errorMessage": "Operation Successful.",
      "resultCount": 3,
      "Bean-List": {
        "ResourceService-Bean": [
          { "uuid": "9ae63465-13e4-4641-92e7-7cc5304fb5b7", "name":
"Gmail", "description": "service_name from survey", "provider": "Google",
"providerUUID": "50fc741c-5447-11df-823a-8f98fa01fa88", "categoryName": "E-mail",
"naturalScore": "47", "group": "null", "label": "null", "createdOn": "2011-03-23
16:38:45.0", "needsApproval": "No", "createdBy": "SMIGLOBAL" },
          { "uuid": "a04c6418-8bc8-4db5-9ae1-c12e206e48dc", "name":
"Espresso", "description": "service_name from survey", "provider": "Google",
"providerUUID": "50fc741c-5447-11df-823a-8f98fa01fa88", "categoryName": "E-mail",
"naturalScore": "52", "group": "null", "label": "null", "createdOn": "2011-03-23
16:38:45.0", "needsApproval": "No", "createdBy": "SMIGLOBAL" },
          { "uuid": "c46b8e94-28ab-4f4f-8549-4d2e03fbe86c", "name":
"AppEngine", "description": "service_name from survey", "provider": "Google",
"providerUUID": "50fc741c-5447-11df-823a-8f98fa01fa88", "categoryName": "Compute",
"naturalScore": "49", "group": "null", "label": "null", "createdOn": "2011-03-23
16:38:45.0", "needsApproval": "No", "createdBy": "SMIGLOBAL" }
        ]
      }
    }
}
```

Create a Provider

This web service creates a provider.

HTTP Type

POST

Restriction

Administrator Only.

URI

{type}/SMI/{version}/provider/create

Parameter	Description
&key	The API Key that is provided when your application has been registered.
&secret	The Shared Secret that is provided when your application has been registered.
&name	Name of the resource being created.
&desc	Description of the resource being created.
&url	The URL of the provider.
&yrs	The number of years the provider has been in business.
&desg	The designation of the provider.

Example:

The following URI creates a provider called “TestCo” and stores it in the SMI DB. The UUID of the new provider is returned.

```
https://smi.cloudcommons.com:8443/Insight_API/json/SMI/0.5/provider/create?name=TestCo&url=www.test.com&desc=This%20is%20a%20test&yrs=1&desg=Accounting&key=df3936ec01c5d3adf9f0048116cd5b84&secret=13f6232ebf484e57103cd4ac234a22aa
```

Sample output of successful execution:

```
{
  "result":
    {
      "returnCode": "0",
      "errorMessage": "Operation Successful.",
      "resultCount": 1,
      "Bean-List": {
        "ResourceProvider-Bean": [
          { "uuid": "229e9e95-d057-4e48-87a7-5f810c087789", "name":
            "TestCo", "companySiteURL": "https://www.test.com", "description": "This is a test",
            "providerTypeId": "null", "bussDesignation": "Accounting", "firstName": "null",
            "lastName": "null", "telephone": "null", "fax": "null", "email": "null", "title":
            "null", "streetAddress1": "null", "city": "null", "state": "null", "postalCode":
            "null", "country": "null", "yrsInBuss": "1", "streetAddress2": "null" }
        ]
      }
    }
}
```

Delete a Provider

This web service deletes a provider.

HTTP Type

DELETE

Restriction

Administrator Only.

URI

{type}/SMI/{version}/provider/{providerUUID}/delete

Parameter	Description
{providerUUID}	UUID of the provider to delete.
&key	The API Key that is provided when your application has been registered.
&secret	The Shared Secret that is provided when your application has been registered.

Example:

```
https://smi.cloudcommons.com:8443/Insight_API/json/SMI/0.5/provider/b7ae983c-35b3-478f-84f5-ab7997e28383/delete?key=98ce4910fc7f6fdb7af270ea9b3162b6&secret=eafe362499eacad24b3092ec12853590
```

Sample output of successful execution:

```
{
  "result":
    {
      "returnCode": "0",
      "errorMessage": "Operation Successful.",
      "resultCount": 0,
    }
}
```

Update Provider Information

This web service updates provider information by name.

HTTP Type

PUT

Restriction

Administrator Only.

URI

{type}/SMI/{version}/provider/{from_name}/update

Parameter	Description
{from_name}	The existing name of the provider.
&key	The API Key that is provided when your application has been registered.
&secret	The Shared Secret that is provided when your application has been registered.
&toname	Updated name of the organization.
&geog	Updated geographic location of the provider.
&url	Updated URL of the provider.
&yrs	Updated number of years the provider has been in business.

Example:

```
https://smi.cloudcommons.com:8443/Insight_API/json/SMI/0.5/provider/TestProvider/
update?key=98ce4910fc7f6fdb7af270ea9b3162b6&secret=eafe362499eacad24b3092ec128535
90&toname=NewTestProvider&yrs=25&desc=This%20is%20a%20new%20description&url=www.n
ewurl.com
```

Sample output of successful execution:

```
{
  "result":
    {
      "returnCode": "0",
      "errorMessage": "Operation Successful.",
      "resultCount": 1,
      "Bean-List": {
        "ResourceProvider-Bean": [
          { "uuid": "229e9e95-d057-4e48-87a7-5f810c087789", "name":
            "NewTestProvider", "companySiteURL": "https://www.newurl.com", "description": "This
            is a new description", "providerTypeId": "null", "bussDesignation": "Accounting",
            "firstName": "null", "lastName": "null", "telephone": "null", "fax": "null", "email":
            "null", "title": "null", "streetAddress1": "null", "city": "null", "state": "null",
            "postalCode": "null", "country": "null", "yrsInBuss": "25", "streetAddress2": "null"
          }
        ]
      }
    }
}
```

Chapter 7: Services

This section contains the following topics:

[Get All Services](#) (see page 61)
[Get a Service by Service UUID](#) (see page 64)
[Get All Capabilities for a Service](#) (see page 66)
[Create a Service](#) (see page 67)
[Assign a Capability to a Service by UUID](#) (see page 69)
[Assign a Capability to a Service by Name](#) (see page 70)
[Assign a List of Capabilities to a Service by Name](#) (see page 71)
[Remove a Capability from a Service](#) (see page 72)
[Update a Service Provider by UUID](#) (see page 73)
[Update a Service Provider by Name](#) (see page 74)
[Approve a Service](#) (see page 75)
[Categorize a Service](#) (see page 77)
[Delete a Service](#) (see page 78)
[Move Raw Data](#) (see page 79)
[Show All Services that need Approval](#) (see page 80)
[Update Service Information](#) (see page 83)

Get All Services

This web service lists all the available services.

HTTP Type

GET

Restriction

Limited. Open to all public users with the following limitation:

This web service only lists services approved by the Cloud Commons Consortium. Services created by the user making the request are also listed, even if the service has not been approved.

URI

{type}/SMI/{version}/services

Parameter	Description
&key	The API Key that is provided when your application has been registered.
&secret	The Shared Secret that is provided when your application has been registered.
&page	Defines the page number to display.

&rows	Defines the number of records to display per page.
&sort	Valid values for this web service are: "name", "createdOn", and "score". If not defined, no sorting is performed.
&search	Defines the search criteria. The search criteria searches the name and description and displays matching records. If not defined, no searching is done.

Example:

This URI displays all available services defined in the global SMI DB. The data returned shows the service's UUID, name, description, the category it belongs to, and so on.

`https://smi.cloudcommons.com:8443/Insight_API/json/SMI/0.5/services?&key=52dale089a5a8ee3d3ccf38254f5e8b8&secret=9a31daab4f41ac1897c102339283e303&page=1&rows=10`

Sample output of successful execution:

```
{
  "result":
    {
      "returnCode": "0",
      "errorMessage": "Operation Successful.",
      "resultCount": 10,
      "Bean-List": {
        "ResourceService-Bean": [
          { "uuid": "0be8b680-6f22-4763-af9a-16f4998de4f3", "name":
            "Consumer Direct", "description": "service_name from survey", "provider": "HP",
            "providerUUID": "50ca62ba-5447-11df-b630-235fcae2f704", "categoryName":
            "E-Commerce", "naturalScore": "38", "group": "null", "label": "null", "createdOn":
            "2011-03-23 16:38:45.0", "needsApproval": "No", "createdBy": "SMIGLOBAL" },
          { "uuid": "3853d2eb-45a9-43b8-95d4-56c123febcdc", "name":
            "Flexible Computing Services", "description": "service_name from survey",
            "provider": "HP", "providerUUID": "50ca62ba-5447-11df-b630-235fcae2f704",
            "categoryName": "Compute", "naturalScore": "null", "group": "null", "label": "null",
            "createdOn": "2011-03-23 16:38:45.0", "needsApproval": "No", "createdBy":
            "SMIGLOBAL" },
          { "uuid": "ecbfd384-e303-4a1b-aadd-4b56630c993d", "name":
            "HP-Siebel E-Commerce", "description": "service_name from survey", "provider": "HP",
            "providerUUID": "50ca62ba-5447-11df-b630-235fcae2f704", "categoryName":
            "E-Commerce", "naturalScore": "54", "group": "null", "label": "null", "createdOn":
            "2011-03-23 16:38:45.0", "needsApproval": "No", "createdBy": "SMIGLOBAL" },
```

```

        { "uuid": "1bb251e5-0423-403f-b877-6f8f62fbc406", "name":
"HP-NetSuite", "description": "service_name from survey", "provider": "HP",
"providerUUID": "50ca62ba-5447-11df-b630-235fcae2f704", "categoryName":
"E-Commerce", "naturalScore": "49", "group": "null", "label": "null", "createdOn":
"2011-03-23 16:38:45.0", "needsApproval": "No", "createdBy": "SMIGLOBAL" },
        { "uuid": "5fd8cdd0-602f-47b0-89dd-63145d2883d5", "name":
"IBM-WebSphere Commerce", "description": "service_name from survey", "provider":
"IBM", "providerUUID": "50ccc514-5447-11df-adb0-b3e81e264bff", "categoryName":
"E-Commerce", "naturalScore": "47", "group": "null", "label": "null", "createdOn":
"2011-03-23 16:38:45.0", "needsApproval": "No", "createdBy": "SMIGLOBAL" },
        { "uuid": "da64aa78-8410-4192-bcdc-8209880e7b87", "name":
"Computing on Demand", "description": "service_name from survey", "provider": "IBM",
"providerUUID": "50ccc514-5447-11df-adb0-b3e81e264bff", "categoryName": "Compute",
"naturalScore": "55", "group": "null", "label": "null", "createdOn": "2011-03-23
16:38:45.0", "needsApproval": "No", "createdBy": "SMIGLOBAL" },
        { "uuid": "04e958df-1226-40c9-8ea1-4cad30b13c9", "name":
"IBM services delivered solution", "description": "service_name from survey",
"provider": "IBM", "providerUUID": "50ccc514-5447-11df-adb0-b3e81e264bff",
"categoryName": "E-Commerce", "naturalScore": "null", "group": "null", "label":
"null", "createdOn": "2011-03-23 16:38:45.0", "needsApproval": "No", "createdBy":
"SMIGLOBAL" },
        { "uuid": "6c059378-87df-4652-910a-c146c8e7c340", "name":
"Global Services Solution", "description": "service_name from survey", "provider":
"IBM", "providerUUID": "50ccc514-5447-11df-adb0-b3e81e264bff", "categoryName":
"E-Commerce", "naturalScore": "null", "group": "null", "label": "null", "createdOn":
"2011-03-23 16:38:45.0", "needsApproval": "No", "createdBy": "SMIGLOBAL" },
        { "uuid": "29d0f72b-6bef-48bf-981c-fb684d516fe4", "name":
"LotusLive", "description": "service_name from survey", "provider": "IBM",
"providerUUID": "50ccc514-5447-11df-adb0-b3e81e264bff", "categoryName": "E-mail",
"naturalScore": "54", "group": "null", "label": "null", "createdOn": "2011-03-23
16:38:45.0", "needsApproval": "No", "createdBy": "SMIGLOBAL" },
        { "uuid": "1c242196-fd0e-40e7-9f6f-664fbe10b33f", "name":
"Manual", "description": "null", "provider": "Oracle", "providerUUID":
"50d189c8-5447-11df-bd76-331d416b91e3", "categoryName": "null", "naturalScore":
"null", "group": "null", "label": "null", "createdOn": "2011-03-24 19:20:10.0",
"needsApproval": "Yes", "createdBy": "caatny@ca.com" }
    ]
}
}
}

```

Get a Service by Service UUID

This web service lists specific service information.

HTTP Type

GET

Restriction

Limited. Open to all public users with the following limitation:

This web service only lists services approved by the Cloud Commons Consortium. Services created by the user making the request are also listed, even if the service has not been approved.

URI

{type}/SMI/{version}/service/{serviceUUID}

Parameter	Description
-----------	-------------

{serviceUUID}	UUID of the service to query.
---------------	-------------------------------

&key	The API Key that is provided when your application has been registered.
------	---

&secret	The Shared Secret that is provided when your application has been registered.
---------	---

&sort	Valid values for this web service are: "name", "CreatedOn" and "score". If not defined, no sorting is performed.
-------	--

Example:

The following URI displays the service "Merchant Solutions" and its specific data.

```
https://smi.cloudcommons.com:8443/Insight_API/json/SMI/0.5/service/3853d2eb-45a9-43b8-95d4-56c123febcdc?key=52da1e089a5a8ee3d3ccf38254f5e8b8&secret=9a31daab4f41ac1897c102339283e303
```

Sample output of successful execution:

```
{
  "result":
    {
      "returnCode": "0",
      "errorMessage": "Operation Successful.",
      "resultCount": 1,
      "Bean-List": {
        "ResourceService-Bean":[
          { "uuid": "3853d2eb-45a9-43b8-95d4-56c123febcdc", "name":
            "Flexible Computing Services", "description": "service_name from survey",
            "provider": "HP", "providerUUID": "50ca62ba-5447-11df-b630-235fcae2f704",
            "categoryName": "Compute", "naturalScore": "null", "group": "null", "label": "null",
            "createdOn": "2011-03-23 16:38:45.0", "needsApproval": "No", "createdBy":
              "SMIGLOBAL" }
        ]
      }
    }
}
```

Get All Capabilities for a Service

This web service lists all the capabilities assigned to a specific service by UUID.

HTTP Type

GET

Restriction

Limited. Open to all public users with the following limitation:

This web service only lists capabilities for services approved by the Cloud Commons Consortium. Services created by the user making the request are also listed, even if the service has not been approved.

URI

{type}/SMI/{version}/service/{serviceUUID}/capabilities

Parameter	Description
-----------	-------------

{serviceUUID}	UUID of the service to query.
---------------	-------------------------------

&key	The API Key that is provided when your application has been registered.
------	---

&secret	The Shared Secret that is provided when your application has been registered.
---------	---

&page	Defines the page number to display.
-------	-------------------------------------

&rows	Defines the number of records to display per page.
-------	--

&sort	Valid values for this web service are: "name" and "createdOn". If not defined, no sorting is performed.
-------	---

Example:

The following URI displays all the capabilities for the "Merchant Solutions" service.

`https://smi.cloudcommons.com:8443/Insight_API/json/SMI/0.5/service/3853d2eb-45a9-43b8-95d4-56c123febcdc/capabilities?&key=52da1e089a5a8ee3d3ccf38254f5e8b8&secret=9a31daab4f41ac1897c102339283e303`

Sample output of successful execution:

```

{
  "result":
  {
    "returnCode": "0",
    "errorMessage": "Operation Successful.",
    "resultCount": 3,
    "Bean-List": {
      "ResourceServiceCapability-Bean":[
        { "uuid": "10ccd65c-bf63-11df-a2f6-73a75628b28b",
"serviceId": "3042", "name": "Create Instance", "createdBy": "SMIGLOBAL",
"creationDate": "2011-03-23 16:38:50.0" },
        { "uuid": "10cf38b6-bf63-11df-85b1-a39291f2ecc0",
"serviceId": "3042", "name": "Scale Instance", "createdBy": "SMIGLOBAL",
"creationDate": "2011-03-23 16:38:50.0" },
        { "uuid": "10d19b10-bf63-11df-b859-5f61b6d62d14",
"serviceId": "3042", "name": "Storage Service Integration", "createdBy":
"SMIGLOBAL", "creationDate": "2011-03-23 16:38:50.0" }
      ]
    }
  }
}

```

Create a Service

This web service creates a service.

HTTP Type

POST

Restriction

None. Open to all public users.

After a public user creates a service using this web service it will be viewable to that public user only and any administrator to Cloud Commons. Once the Cloud Commons Consortium approves the service, it will then be viewable by all.

This web service is restricted to the global Cloud Commons DB only. This web service is restricted from being used on a local integrated DB.

URI

{type}/SMI/{version}/service/create

Parameter	Description
-----------	-------------

&key	The API Key that is provided when your application has been registered.
------	---

<code>&secret</code>	The Shared Secret that is provided when your application has been registered.
<code>&name</code>	Name of the resource being created.
<code>&desc</code>	Description of the resource being created.
<code>&providerUID</code>	Defines the provider UUID associated with the service. Not used with <code>&providerName</code> .
<code>&providerName</code>	Defines the provider name associated with the service. Not used with <code>&providerUID</code> .

Example:

The following URI creates a provider called "TestService". The providerUUID given is "Google". The UUID of the new service is returned.

```
https://smi.cloudcommons.com:8443/Insight_API/json/SMI/0.5/service/create?key=df3936ec01c5d3adf9f0048116cd5b84&secret=13f6232ebf484e57103cd4ac234a22aa&providerUID=50fc741c-5447-11df-a06a-c7daeae07f53&name=TestService&desc=testservice
```

Sample output of successful execution:

```
{
  "result":
  {
    "returnCode": "0",
    "errorMessage": "Operation Successful.",
    "resultCount": 1,
    "Bean-List": {
      "ResourceService-Bean": [
        { "uuid": "6e20bedb-92fe-400a-a142-d382f8db011a", "name":
"TestService", "description": "testservice", "provider": "GoDaddy", "providerUUID":
"50fc741c-5447-11df-a06a-c7daeae07f53", "categoryName": "null", "naturalScore":
>null", "group": "null", "label": "null", "createdOn": "2011-02-08 19:50:11",
"needsApproval": "No", "createdBy": "admin" }
      ]
    }
  }
}
```

Assign a Capability to a Service by UUID

This web service assigns a capability to a specified service using the UUID of the service and capability. Once a service has been assigned all the required capabilities of a category, the service is automatically assigned to the category. A service may be part of multiple categories.

HTTP Type

POST

Restriction

Limited. Open to all public users with the following limitation:

As a public user you may only assign capabilities to a service that you have created. That service must not yet be approved by the Cloud Commons Consortium. You may not assign capabilities to a service that has already been approved, unless you are an administrator.

URI

{type}/SMI/{version}/service/{serviceUUID}/capability/{capabilityUUID}/create

Parameter	Description
-----------	-------------

{serviceUUID}	The UUID of the service you want to assign the capability.
---------------	--

{capabilityUUID}	The UUID of the capability to assign to the service.
------------------	--

&key	The API Key that is provided when your application has been registered.
------	---

&secret	The Shared Secret that is provided when your application has been registered.
---------	---

Example:

The following URI sets the capability “Send and Receive Mail” to the service “Merchant Solutions”.

```
https://smi.cloudcommons.com:8443/Insight_API/json/SMI/0.5/service/99500098-c4b9-11df-bbd8-6b395a4ff3f3/capability/10c34ce0-bf63-11df-903a-4b5b5b7d47ea?&key=df3936ec01c5d3adf9f0048116cd5b84&secret=13f6232ebf484e57103cd4ac234a22aa
```

Sample output of successful execution:

```
{
  "result":
    {
      "returnCode": "0",
      "errorMessage": "Operation Successful.",
      "resultCount": 0,
    }
}
```

Assign a Capability to a Service by Name

This web service assigns a capability to a specified service using the name of the service and capability. Once a service has been assigned all the required capabilities of a category, the service is automatically assigned to the category. A service may be part of multiple categories.

HTTP Type

POST

Restriction

Limited. Open to all public users with the following limitation:

As a public user you may only assign capabilities to a service that you have created. That service must not yet be approved by the Cloud Commons Consortium. You may not assign capabilities to a service that has already been approved, unless you are an administrator.

URI

{type}/SMI/{version}/service/{serviceName}/capability/{capabilityName}

Parameter	Description
-----------	-------------

{serviceName}	The name of the service you want to assign the capability.
---------------	--

{capabilityName}	The name of the capability to assign to the service.
------------------	--

&key	The API Key that is provided when your application has been registered.
&secret	The Shared Secret that is provided when your application has been registered.

Example:

The following URI sets the capability "Reporting" to the service "TestReportingService".

```
https://smi.cloudcommons.com:8443/Insight_API/json/SMI/0.5/service/TestReportingService/capability/Reporting?&key=df3936ec01c5d3adf9f0048116cd5b84&secret=13f6232ebf484e57103cd4ac234a22aa
```

Sample output of successful execution:

```
{
  "result":
    {
      "returnCode": "0",
      "errorMessage": "Operation Successful.",
      "resultCount": 0,
    }
}
```

Assign a List of Capabilities to a Service by Name

This web service assigns a list of capabilities to a specified service using the name of the service and capability. Once a service has been assigned all the required capabilities of a category, the service is automatically assigned to the category. A service may be part of multiple categories.

HTTP Type

POST

Restriction

Limited. Open to all public users with the following limitation:

As a public user you may only assign capabilities to a service that you have created. That service must not yet be approved by the Cloud Commons Consortium. You may not assign capabilities to a service that has already been approved, unless you are an administrator.

URI

{type}/SMI/{version}/service/{serviceName}/setCapabilityList

Parameter	Description
-----------	-------------

{serviceName}	The name of the service you want to assign the capability.
---------------	--

&capabilityList	The list of capability names, delimited by a comma.
&key	The API Key that is provided when your application has been registered.
&secret	The Shared Secret that is provided when your application has been registered.

Example:

The following URI sets five capabilities to the service "TestService".

```
https://smi.cloudcommons.com:8443/Insight_API/json/SMI/0.5/service/TestService/setCapabilityList?capabilityList=Send%20and%20Receive%20Email,Reporting,Inventory%20Management,Integrations,Persistent%20Instance&key=52dale089a5a8ee3d3ccf38254f5e8b8&secret=9a31daab4f41ac1897c102339283e303
```

Sample output of successful execution:

```
{
  "result":
  {
    "returnCode": "0",
    "errorMessage": "Operation Successful.",
    "resultCount": 0,
  }
}
```

Remove a Capability from a Service

This web service removes a capability from being assigned to a specific service.

HTTP Type

DELETE

Restriction

Administrator Only.

URI

{type}/SMI/{version}/service/{serviceUUID}/capability/delete

Parameter	Description
{serviceUUID}	UUID of the category to which the capability is to be removed.
&key	The API Key that is provided when your application has been registered.
&secret	The Shared Secret that is provided when your application has been registered.

&capabilityU UUID of the capability to be deleted from the service.
UID

Example:

```
https://smi.cloudcommons.com:8443/Insight_API/json/SMI/0.5/service/e7bcd896-de63-40d3-8b4f-1c648e746ce2/capability/delete?capabilityUUID=b32aa92e-64b7-48ef-bf83-859f85c611b9&key=95bf5da46010b6ddaa8baca04fd94e73&secret=7ec5680d8ac7f03c919dad7770381358
```

Sample output of successful execution:

```
{
  "result":
    {
      "returnCode": "0",
      "errorMessage": "Operation Successful.",
      "resultCount": 0,
    }
}
```

Update a Service Provider by UUID

This web service reassigns the service to another provider using the UUID of the service and provider.

HTTP Type

PUT

Restriction

Administrator Only

URI

{type}/SMI/{version}/service/{serviceUUID}/update

Parameter	Description
-----------	-------------

{serviceUUID}	The UUID of the service you want to assign to another provider.
}	

&key	The API Key that is provided when your application has been registered.
------	---

&secret	The Shared Secret that is provided when your application has been registered.
---------	---

&providerU UID	Defines the provider associated with the service.
-------------------	---

Example:

This following URI will set the provider of the defined service.

```
https://smi.cloudcommons.com:8443/Insight_API/json/SMI/0.5/service/d8ac0e1e-e1f4-11df-ac36-7f5dc3222b39/update?providerUUID=4a8371c6-5447-11df-9b3f-cf4ee8f3ff49&key=4f400a9b486c764d3a6ec5f86fe0a2aa&secret=e320f8f11cb88b5ab346d9ab34033d95
```

Sample output of successful execution:

```
{
  "result":
    {
      "returnCode": "0",
      "errorMessage": "Operation Successful.",
      "resultCount": 0,
    }
}
```

Update a Service Provider by Name

This web service reassigns the service to another provider using the name of the service and provider.

HTTP Type

PUT

Restriction

Administrator Only

URI

{type}/SMI/{version}/service/{serviceName}/updateByName

Parameter	Description
{serviceName}	The name of the service you want to assign to another provider.
&key	The API Key that is provided when your application has been registered.
&secret	The Shared Secret that is provided when your application has been registered.
&providerName	Defines the provider associated with the service.

Example:

This following URI will assign Service1 to the Google provider.

```
https://smi.cloudcommons.com:8443/Insight_API/json/SMI/0.5/service/Service1/updateByName?providerName=Google&key=4f400a9b486c764d3a6ec5f86fe0a2aa&secret=e320f8f11cb88b5ab346d9ab34033d95
```

Sample output of successful execution:

```
{
  "result":
    {
      "returnCode": "0",
      "errorMessage": "Operation Successful.",
      "resultCount": 0,
    }
}
```

Approve a Service

This web service allows an administrator to approve or reject a service. When a service is created by an administrator, it does not require approval. When a public user creates a service, that service requires approval from an administrator. Until a service is approved, it is not included in any category comparisons (SMI score calculations).

HTTP Type

PUT

Restriction

Administrator Only.

This web service is restricted to the global Cloud Commons DB only. This web service is restricted from being used on a local integrated DB.

URI

{type}/SMI/{version}/service/{serviceUUID}/approve

Parameter	Description
-----------	-------------

{serviceUUID}	The UUID of the service to approve or reject.
}	

&key	The API Key that is provided when your application has been registered.
------	---

&secret	The Shared Secret that is provided when your application has been registered.
---------	---

&reject	Valid values are "true" or "false". Use true to approve the service, or false to reject the service. When not specified, the default value is false.
---------	--

Example:

In this example, the service specified by the UUID is approved.

`https://smi.cloudcommons.com:8443/Insight_API/json/SMI/0.5/service/a8d68cdf-71c6-4007-abab-8a609d17307a/approve?key=95bf5da46010b6ddaa8baca04fd94e73&secret=7ec5680d8ac7f03c919dad7770381358`

Sample output of successful execution:

```
{
  "result":
    {
      "returnCode": "0",
      "errorMessage": "Service has been approved Successfully.",
      "resultCount": 1,
      "Bean-List": {
        "ResourceService-Bean": [
          { "uuid": "a8d68cdf-71c6-4007-abab-8a609d17307a", "name":
            "InsDemoNow3", "description": "Test", "provider": "GoDaddy", "providerUUID":
            "50fc741c-5447-11df-a06a-c7daeae07f53", "categoryName": "null", "naturalScore":
            "null", "group": "null", "label": "null", "createdOn": "2011-02-08 19:50:12",
            "needsApproval": "No", "createdBy": "public2" }
        ]
      }
    }
}
```

Categorize a Service

This web service automatically categorizes a service to a specific category. This web service uses name rather than UUID. When a service is categorized using this web service, the service is automatically assigned all the required capabilities of the category.

HTTP Type

POST

Restriction

Limited. Open to all public users with the following limitation:

As a public user you may only assign capabilities to a service that you have created. That service must not yet be approved by the Cloud Commons Consortium. You may not assign capabilities to a service that has already been approved, unless you are an administrator.

URI

{type}/SMI/{version}/categorize_service

Parameter	Description
&key	The API Key that is provided when your application has been registered.
&secret	The Shared Secret that is provided when your application has been registered.
&service	The name of the service to categorize.
&category	The name of the category to which you want to assign the service.

Example:

In this example Service1 is categorized under a category called TestCategory

```
https://smi.cloudcommons.com:8443/Insight_API/json/SMI/0.5/categorize_service?service=Service1&category=TestCategory&key=98ce4910fc7f6fdb7af270ea9b3162b6&secret=afe362499eceed24b3092ec12853590
```

Sample output of successful execution:

```
{
  "result":
  {
    "returnCode": "0",
    "errorMessage": "Operation Successful.",
    "resultCount": 0,
  }
}
```

Delete a Service

This web service deletes a service.

HTTP Type

DELETE

Restriction

Administrator Only.

This web service is restricted to the global Cloud Commons DB only. This web service is restricted from being used on a local integrated DB.

URI

{type}/SMI/{version}/service/{serviceUUID}/delete

Parameter	Description
-----------	-------------

{serviceUUID}	UUID of the service to delete.
---------------	--------------------------------

&key	The API Key that is provided when your application has been registered.
------	---

&secret	The Shared Secret that is provided when your application has been registered.
---------	---

Example:

```
https://smi.cloudcommons.com:8443/Insight_API/json/SMI/0.5/service/857c5626-e8a4-470a-a43d-8c5da794713a/delete?key=98ce4910fc7f6fdb7af270ea9b3162b6&secret=eafe362499eecd24b3092ec12853590
```

Sample output of successful execution:

```
{
  "result":
    {
      "returnCode": "0",
      "errorMessage": "Operation Successful.",
      "resultCount": 0,
    }
}
```

Move Raw Data

This web service allows the administrator to move all raw metric data and indicator data from one service to another. The service you are moving the data to should already exist.

HTTP Type

PUT

Restriction

Administrator Only.

URI

{type}/SMI/{version}/move_rawdata

Parameter	Description
&key	The API Key that is provided when your application has been registered.
&secret	The Shared Secret that is provided when your application has been registered.
&fromname	The name of the service from which you are moving all the raw data.
&toname	The name of the service to which you are moving the raw data.

Example:

In this example, all raw data is moved from service1 to service2.

```
https://smi.cloudcommons.com:8443/Insight_API/json/SMI/0.5/move_rawdata?key=98ce4910fc7f6fdb7af270ea9b3162b6&secret=eafe362499e2ad24b3092ec12853590&fromname=service1&toname=service2
```

Sample output of successful execution:

```
{
  "result":
    {
      "returnCode": "0",
      "errorMessage": "Operation Successful.",
      "resultCount": 0,
    }
}
```

Show All Services that need Approval

This web service allows the administrator to view all services that still require approval or rejection.

The “needsApproval” in the output of a service listing tells an administrator if the service needs approval (1) or does not need approval (0).

HTTP Type

GET

Restriction

Administrator Only.

This web service is restricted to the global Cloud Commons DB only. This web service is restricted from being used on a local integrated DB.

URI

{type}/SMI/{version}/services/needsApproval

Parameter	Description
&key	The API Key that is provided when your application has been registered.
&secret	The Shared Secret that is provided when your application has been registered.
&page	The page number to display.
&rows	The number of records to display per page.

Example:

`https://smi.cloudcommons.com:8443/Insight_API/json/SMI/0.5/services/needsApproval?page=1&rows=20&key=95bf5da46010b6ddaa8baca04fd94e73&secret=7ec5680d8ac7f03c919dad7770381358`

Sample output of successful execution:

```
{
  "result":
    {
      "returnCode": "0",
      "errorMessage": "Operation Successful.",
      "resultCount": 9,
      "Bean-List": {
        "ResourceService-Bean":[
          { "uuid": "be7c67f1-a906-4c47-bfea-9bd41c55965c", "name":
"StevenTestNow1", "description": "This is a test", "provider": "GoDaddy",
"providerUUID": "50fc741c-5447-11df-a06a-c7daeae07f53", "categoryName": "null",
"naturalScore": "null", "group": "null", "label": "null", "createdOn": "2011-02-08
19:49:54", "needsApproval": "Yes", "createdBy": "null" },
```

```
        { "uuid": "f3f4eb6b-9a02-4809-8b98-7c4462c2319f", "name":  
          "pubbindInsightTestingService2", "description": "null", "provider": "null",  
          "providerUUID": "null", "categoryName": "null", "naturalScore": "null", "group":  
          "null", "label": "null", "createdOn": "2011-02-08 18:43:33", "needsApproval": "Yes",  
          "createdBy": "null" },  
        { "uuid": "c8dablec-0a40-4065-bb78-470fd6bc013f", "name":  
          "pubmetricInsightTestingService3", "description": "null", "provider": "null",  
          "providerUUID": "null", "categoryName": "null", "naturalScore": "null", "group":  
          "null", "label": "null", "createdOn": "2011-02-08 18:43:32", "needsApproval": "Yes",  
          "createdBy": "null" },  
        { "uuid": "93929af8-b642-4caa-9fa6-046f79e3f4b3", "name":  
          "Hosted Exchange", "description": "null", "provider": "SherWeb", "providerUUID":  
          "57886b5f-a74d-4099-b4ec-9a1b9d057c4b", "categoryName": "null", "naturalScore":  
          "null", "group": "null", "label": "null", "createdOn": "2011-02-08 13:54:55",  
          "needsApproval": "Yes", "createdBy": "null" },  
        { "uuid": "aable8ec-60f6-4735-86b9-3647e64113c6", "name":  
          "pubbindInsightTestingService1", "description": "null", "provider": "null",  
          "providerUUID": "null", "categoryName": "null", "naturalScore": "null", "group":  
          "null", "label": "null", "createdOn": "2011-02-08 18:43:33", "needsApproval": "Yes",  
          "createdBy": "null" },  
        { "uuid": "f82fdb4-6da1-48a3-ae3c-16b8753500d5", "name":  
          "pubmetricInsightTestingService2", "description": "null", "provider": "null",  
          "providerUUID": "null", "categoryName": "null", "naturalScore": "null", "group":  
          "null", "label": "null", "createdOn": "2011-02-08 18:43:32", "needsApproval": "Yes",  
          "createdBy": "null" },  
        { "uuid": "a8d68cdf-71c6-4007-abab-8a609d17307a", "name":  
          "InsDemoNow3", "description": "Test", "provider": "GoDaddy", "providerUUID":  
          "50fc741c-5447-11df-a06a-c7daae07f53", "categoryName": "null", "naturalScore":  
          "null", "group": "null", "label": "null", "createdOn": "2011-02-08 19:50:12",  
          "needsApproval": "Yes", "createdBy": "null" },  
        { "uuid": "503477f2-104b-4976-aa06-cfd31073fd9a", "name":  
          "pubmetricInsightTestingService1", "description": "null", "provider": "null",  
          "providerUUID": "null", "categoryName": "null", "naturalScore": "null", "group":  
          "null", "label": "null", "createdOn": "2011-02-08 18:43:32", "needsApproval": "Yes",  
          "createdBy": "null" },  
        { "uuid": "5d369f6e-2339-472b-a33a-d188e76dcd73", "name":  
          "InsDemoNow2", "description": "Test", "provider": "GoDaddy", "providerUUID":  
          "50fc741c-5447-11df-a06a-c7daae07f53", "categoryName": "null", "naturalScore":  
          "null", "group": "null", "label": "null", "createdOn": "2011-02-08 19:50:11",  
          "needsApproval": "Yes", "createdBy": "null" }  
      ]  
    }  
  }  
}
```

Update Service Information

This web service updates service information.

HTTP Type

PUT

Restriction

Administrator Only.

This web service is restricted to the global Cloud Commons DB only. This web service is restricted from being used on a local integrated DB.

URI

{type}/SMI/{version}/service/update

Parameter	Description
&key	The API Key that is provided when your application has been registered.
&secret	The Shared Secret that is provided when your application has been registered.
&fromname	The existing service name.
&toname	Updated name of the service.
&todes	Updated description of the service.

Example:

```
https://smi.cloudcommons.com:8443/Insight_API/json/SMI/0.5/service/update?key=98c
e4910fc7f6fdb7af270ea9b3162b6&secret=eafe362499eceed24b3092ec12853590&fromname=Te
stServic&toname=NewTestService&todes=This%20is%20a%20new%20description
```

Sample output of successful execution:

```
{
  "result":
    {
      "returnCode": "0",
      "errorMessage": "Operation Successful.",
      "resultCount": 1,
      "Bean-List": {
        "ResourceService-Bean": [
          { "uuid": "0f2b5610-ff58-4dca-a727-b9c5339e2c64", "name":
            "NewTestService", "description": "This is a new description", "provider": "null",
            "providerUUID": "null", "categoryName": "null", "naturalScore": "null", "group":
            "null", "label": "null", "createdOn": "2011-03-24 21:59:38.0", "needsApproval":
            "No", "createdBy": "testadmin@ca.com" }
        ]
      }
    }
}
```

Chapter 8: MDRs

This section contains the following topics:

[Get All MDRs](#) (see page 85)

[Create an MDR](#) (see page 86)

[Approve an MDR](#) (see page 88)

[Certify a Metric for an MDR](#) (see page 89)

[Show MDRs Not Yet Approved](#) (see page 90)

[Delete an MDR](#) (see page 91)

Get All MDRs

This web service obtains a list of all available MDRs.

HTTP Type

GET

Restriction

Limited. Open to all public users with the following limitation:

This web service only lists MDRs approved by the Cloud Commons Consortium. MDRs created by the user making the request are also listed, even if the MDR has not been approved.

URI

{type}/SMI/{version}/mdrs

Parameter	Description
&key	The API Key that is provided when your application has been registered.
&secret	The Shared Secret that is provided when your application has been registered.
&page	Defines the page number to display.
&rows	Defines the number of records to display per page.

Example:

This URI displays all available MDRs defined in the global SMI DB. The data returned shows the UUID, name and description for the MDR.

`https://smi.cloudcommons.com:8443/Insight_API/json/SMI/0.5/mdrs?page=1&rows=20&key=df3936ec01c5d3adf9f0048116cd5b84&secret=13f6232ebf484e57103cd4ac234a22aa`

Sample output of successful execution:

```
{
  "result":
    {
      "returnCode": "0",
      "errorMessage": "Operation Successful.",
      "resultCount": 2,
      "Bean-List": {
        "ResourceMdr-Bean": [
          { "uuid": "e17cf9cf-2085-4cc7-b68f-fb82a39ce756", "name":
            "TestMDR", "description": "This is a test", "certify": "null", "createdBy":
            "adminUser@ca.com", "creationDate": "2011-03-15 15:00:36.0", "needsApproval": "No"
          },
          { "uuid": "9d624a06-a03a-42a9-816d-a7aa5ebe5d9a", "name":
            "Oblicore", "description": "null", "certify": "null", "createdBy": "SMIGLOBAL",
            "creationDate": "2011-03-09 12:44:01.0", "needsApproval": "Yes" }
        ]
      }
    }
}
```

Create an MDR

This web service creates an MDR.

HTTP Type

POST

Restriction

None. Open to all public users.

URI

`{type}/SMI/{version}/mdr/create`

Parameter	Description
-----------	-------------

<code>&key</code>	The API Key that is provided when your application has been registered.
-----------------------	---

&secret	The Shared Secret that is provided when your application has been registered.
&name	Name of the resource being created.
&desc	Description of the resource being created.

Example:

The following URI creates an MDR called testMDR in the global SMI DB. The UUID of the newly created MDR is returned. It will also show if the MDR is certified (1) or not (0).

`https://smi.cloudcommons.com:8443/Insight_API/json/SMI/0.5/mdr/create?name=testMDR&desc=This%20is%20a%20test&key=df3936ec01c5d3adf9f0048116cd5b84&secret=13f6232ebf484e57103cd4ac234a22aa`

Sample output of successful execution:

```
{
  "result":
  {
    "returnCode": "0",
    "errorMessage": "Operation Successful.",
    "resultCount": 1,
    "Bean-List": {
      "ResourceMdr-Bean": [
        { "uuid": "3ec30f7f-7241-4b79-9f1a-d61a3669ff6d", "name":
"TestMDR", "description": "This is a test", "certify": "null", "createdBy": "public",
"creationDate": "2011-02-08 19:58:14.0", "needsApproval": "Yes" }
        ]
      }
    }
  }
```

Approve an MDR

This web service approves an MDR by name.

HTTP Type

PUT

Restriction

Administrator Only.

This web service is restricted to the global Cloud Commons DB only. This web service is restricted from being used on a local integrated DB.

URI

{type}/SMI/{version}/mdr/{mdrName}/approve

Parameter	Description
-----------	-------------

{mdrName}	The name of the MDR to approve.
-----------	---------------------------------

&key	The API Key that is provided when your application has been registered.
------	---

&secret	The Shared Secret that is provided when your application has been registered.
---------	---

Example:

In this example, the TestDemo MDR is approved.

`https://smi.cloudcommons.com:8443/Insight_API/json/SMI/0.5/mdr/TestDemo/approve?key=95bf5da46010b6ddaa8baca04fd94e73&secret=7ec5680d8ac7f03c919dad7770381358`

Sample output of successful execution:

```
{
  "result":
    {
      "returnCode": "0",
      "errorMessage": "MDR has been approved Successfully.",
      "resultCount": 1,
      "Bean-List": {
        "ResourceMdr-Bean": [
          { "uuid": "b025d883-dacd-42f9-aae1-9136cae56582", "name":
            "TestDemo", "description": "Test", "certify": "null", "createdBy": "public2",
            "creationDate": "2011-02-08 19:50:14.0", "needsApproval": "No" }
        ]
      }
    }
}
```

Certify a Metric for an MDR

This web service certifies a specific metric for an MDR.

HTTP Type

PUT

Restriction

Administrator Only

URI

{type}/SMI/{version}/mdr/{mdrName}/metric/{metricName}/update

Parameter	Description
{mdrName}	The name of the MDR for which the metric will be certified.
{metricName}	The name of the metric certified to the MDR.
	}
&key	The API Key that is provided when your application has been registered.
&secret	The Shared Secret that is provided when your application has been registered.
&certify	Valid values are 1 or 0. 1 indicates to certify the metric. 0 indicates to uncertify the metric.

Example:

In this example, you certify the measure total downtime for the MDR testMDR as an administrator.

```
https://smi.cloudcommons.com:8443/Insight_API/json/SMI/0.5/mdr/testMDR/metric/Total
downtime/update?certify=1&key=95bf5da46010b6ddaa8baca04fd94e73&secret=7ec5680d8ac
7f03c919dad7770381358
```

Sample output of successful execution:

```
{
  "result":
  {
    "returnCode": "0",
    "errorMessage": "Operation Successful.",
    "resultCount": 0,
  }
}
```

Show MDRs Not Yet Approved

This web service shows all MDRs not yet approved.

The “needsApproval” in the output of an MDR listing tells an administrator if the MDR needs approval (1) or does not need approval (0).

HTTP Type

GET

Restriction

Administrator Only.

This web service is restricted to the global Cloud Commons DB only. This web service is restricted from being used on a local integrated DB.

URI

{type}/SMI/{version}/mdrs/needsApproval

Parameter	Description
&key	The API Key that is provided when your application has been registered.
&secret	The Shared Secret that is provided when your application has been registered.
&page	Defines the page number to display.
&rows	Defines the number of records to display per page.

Example:

```
https://smi.cloudcommons.com:8443/Insight_API/json/SMI/0.5/mdrs/needsApproval?page=1&rows=20&key=95bf5da46010b6ddaa8baca04fd94e73&secret=7ec5680d8ac7f03c919dad7770381358
```

Sample output of successful execution:

```
{
  "result":
    {
      "returnCode": "0",
      "errorMessage": "Operation Successful.",
      "resultCount": 8,
      "Bean-List": {
        "ResourceMdr-Bean": [
          { "uuid": "8f57ac04-980c-46ea-9576-9e1b5f083cf1", "name":
            "TestMDR", "description": "null", "certify": "null", "createdBy": "public",
            "creationDate": "2011-02-08 18:43:32.0", "needsApproval": "Yes" },
          { "uuid": "52dbbd67-fa44-4994-b5cb-9b2578557e39", "name":
            "Oblicore", "description": "null", "certify": "null", "createdBy": "SMIGLOBAL",
            "creationDate": "2011-02-08 13:54:34.0", "needsApproval": "Yes" }
        ]
      }
    }
}
```

Delete an MDR

This web service deletes an MDR.

HTTP Type

DELETE

Restriction

Limited. Open to all public users with the following limitation:

As a public user you may only delete an MDR that you created. That MDR must not yet be approved by the Cloud Commons Consortium. You may not delete an MDR that has already been approved, unless you are an administrator.

URI

```
{type}/SMI/{version}/mdr/{mdrUUID}/delete
```

Parameter	Description
{mdrUUID}	UUID of the MDR to delete.
&key	The API Key that is provided when your application has been registered.

&secret The Shared Secret that is provided when your application has been registered.

Example:

```
https://smi.cloudcommons.com:8443/Insight_API/json/SMI/0.5/mdr/373149ee-4893-4b22-bd59-c395b2498af0/delete?key=95bf5da46010b6ddaa8baca04fd94e73&secret=7ec5680d8ac7f03c919dad7770381358
```

Sample output of successful execution:

```
{
  "result":
  {
    "returnCode": "0",
    "errorMessage": "Operation Successful.",
    "resultCount": 0,
  }
}
```

Chapter 9: Surveys

This section contains the following topics:

[Get All Surveys](#) (see page 93)

[Create a Survey](#) (see page 94)

[Delete a Survey](#) (see page 96)

Get All Surveys

This web service lists all the available surveys.

HTTP Type

GET

Restriction

Administrator Only.

URI

{type}/SMI/{version}/surveys

Parameter	Description
&key	The API Key that is provided when your application has been registered.
&secret	The Shared Secret that is provided when your application has been registered.
&page	Defines the page number to display.
&rows	Defines the number of records to display per page.

Example:

The following URI displays all available surveys defined in the global SMI DB. The data returned shows the UUID, name and description for the survey.

`https://smi.cloudcommons.com:8443/Insight_API/json/SMI/0.5/surveys?key=df3936ec01c5d3adf9f0048116cd5b84&secret=13f6232ebf484e57103cd4ac234a22aa`

Sample output of successful execution:

```
{
  "result":
  {
    "returnCode": "0",
    "errorMessage": "Operation Successful.",
    "resultCount": 3,
    "Bean-List": {
      "ResourceSurvey-Bean": [
        { "uuid": "01e417fb-61aa-4790-af24-44953dd9cf74", "name":
"testSurvey1", "description": "This is a test", "createdBy": "$default$",
"creationDate": "2011-03-11 15:24:21.0" },
        { "uuid": "38c488ae-c2aa-4c87-bb78-a2185863885e", "name":
" testSurvey2", "description": "This is a test", "createdBy": "$default$",
"creationDate": "2011-03-11 15:25:03.0" },
        { "uuid": "65fd215e-1169-4fb4-9993-6eecd160bbf0", "name":
" testSurvey3", "description": "This is a test", "createdBy": "adminUser@ca.com",
"creationDate": "2011-03-15 15:00:37.0" }
      ]
    }
  }
}
```

Create a Survey

This web service creates a survey.

HTTP Type

POST

Restriction

Administrator Only.

URI

`{type}/SMI/{version}/survey/create`

Parameter	Description
&key	The API Key that is provided when your application has been registered.

&secret	The Shared Secret that is provided when your application has been registered.
&name	Name of the resource being created.
&desc	Description of the resource being created.

Example:

The following URI creates a survey called testSurvey in the global SMI DB. The UUID of the newly created survey is returned.

```
https://smi.cloudcommons.com:8443/Insight_API/json/SMI/0.5/survey/create?name=testSurvey&desc=This%20is%20a%20test&key=df3936ec01c5d3adf9f0048116cd5b84&secret=13f6232ebf484e57103cd4ac234a22aa
```

Sample output of successful execution:

```
{
  "result":
    {
      "returnCode": "0",
      "errorMessage": "Operation Successful.",
      "resultCount": 1,
      "Bean-List": {
        "ResourceSurvey-Bean": [
          { "uuid": "65fd215e-1169-4fb4-9993-6eecd160bbf0", "name":
            "testSurvey", "description": "This is a test", "createdBy": "adminUser@ca.com",
            "creationDate": "2011-03-15 15:00:37.0" }
        ]
      }
    }
}
```

Delete a Survey

This web service deletes a survey by UUID.

HTTP Type

DELETE

Restriction

Administrator Only.

URI

{type}/SMI/{version}/survey/{surveyUUID}/delete

Parameter	Description
-----------	-------------

{surveyUUID}	UUID of the survey to delete.
}	

&key	The API Key that is provided when your application has been registered.
------	---

&secret	The Shared Secret that is provided when your application has been registered.
---------	---

Example:

https://smi.cloudcommons.com:8443/Insight_API/json/SMI/0.5/survey/7a6f538d-b8a0-4040-99b9-e1b9459fb2ea/delete?key=95bf5da46010b6ddaa8baca04fd94e73&secret=7ec5680d8ac7f03c919dad7770381358

Sample output of successful execution:

```
{
  "result":
    {
      "returnCode": "0",
      "errorMessage": "Operation Successful.",
      "resultCount": 0,
    }
}
```

Chapter 10: Measures

This section contains the following topics:

[Get All Measures](#) (see page 97)

[Get All Measures for a Characteristic](#) (see page 99)

[Set a Metric Value to DB for a Service by UUID](#) (see page 101)

[Set a Metric Value to DB for a Service by Name](#) (see page 102)

[Send Metric Data via an XML Body](#) (see page 103)

Get All Measures

This web service lists all the available measures.

HTTP Type

GET

Restriction

None. Open to all public users.

URI

{type}/SMI/{version}/measures

Parameter	Description
&key	The API Key that is provided when your application has been registered.
&secret	The Shared Secret that is provided when your application has been registered.
&page	Defines the page number to display.
&rows	Defines the number of records to display per page.
&sort	Valid values are: "name" and "CreatedOn". If not defined, no sorting is performed.

Example:

The following URI displays all available measures defined in the global SMI DB. The data returned shows the measures UUID, name, description and the SMI characteristic it belongs to.

https://smi.cloudcommons.com:8443/Insight_API/json/SMI/0.5/measures?page=1&rows=10&key=df3936ec01c5d3adf9f0048116cd5b84&secret=13f6232ebf484e57103cd4ac234a22aa

Sample output of successful execution:

```
{
  "result":
    {
      "returnCode": "0",
      "errorMessage": "Operation Successful.",
      "resultCount": 10,
      "Bean-List": {
        "ResourceMeasure-Bean": [
          { "uuid": "c791d9e0-9980-11df-b747-93be55be4ac3", "name":
            "Total service time", "description ": "Total service time spent", "characteristic ":
            "Maintainability" },
          { "uuid": "c7943c44-9980-11df-acf9-9be0fbb4d52a", "name":
            "Total downtime", "description ": "Total time system is record as unavailable",
            "characteristic ": "Maintainability" },
          { "uuid": "c79b6366-9980-11df-a03c-5f160c90627c", "name":
            "Number of configuration changes", "description ": "Total number of configuration
            changes", "characteristic ": "Maintainability" },
          { "uuid": "c79dc5ca-9980-11df-b45d-0b301f73f3eb", "name":
            "Avg resolution time for priority 1 incidents", "description ": "The average response
            time of priority 1 tickets (Service Down)", "characteristic ": "Supportability" },
          { "uuid": "c79dc5ca-9980-11df-ad6f-6f46d45ebfba", "name":
            "Avg resolution time for priority 2 incidents", "description ": "The average response
            time of priority 2 tickets (Service Severely impacted)", "characteristic ":
            "Supportability" },
          { "uuid": "c7a28a88-9980-11df-a896-bbb8d90be3ff", "name":
            "Percentage time spend with priority x in open status (1 and 2)", "description ": "An
            indication of severity as based on set rules", "characteristic ": "Supportability"
          },
          { "uuid": "c7a4ecec-9980-11df-a5c7-3b9e241e3821", "name":
            "Number of records (incidents...problems...changes) where a continuity plan was put
            in place", "description ": "Identification of work related to continuity",
            "characteristic ": "Service Continuity" },
          { "uuid": "c7a4ecec-9980-11df-b057-33d3fa5f59b0", "name":
            "Percent of service availability (all times)", "description ": "Percent of
            availability based on specific timeframe", "characteristic ": "Reliability" },
          { "uuid": "c7a74f50-9980-11df-a87d-9321b6f8ffcd", "name":
            "MTBF (Mean Time Between Failures or Sev or Pri 1)", "description ": "Time between
            failures (system is down not just compromised)", "characteristic ": "Reliability"
          },
        ]
      }
    }
}
```

```
        { "uuid": "c7a9b1aa-9980-11df-a952-732b9938e15f", "name":  
          "Percentage of Service Availability (Planned times)", "description ": "Total mount  
          of outage time (system down)", "characteristic ": "Reliability" }  
        ]  
      }  
    }  
  }
```

Get All Measures for a Characteristic

This web service obtains all measures for a specific characteristic.

HTTP Type

GET

Restriction

None. Open to all public users.

URI

{type}/SMI/{version}/measure/{characteristic}

Parameter	Description
{characteristic}	The name of the SMI characteristic to start from. This can be defined as a hierarchical model.
&key	The API Key that is provided when your application has been registered.
&secret	The Shared Secret that is provided when your application has been registered.
&page	Defines the page number to display.
&rows	Defines the number of records to display per page.

Example:

The following URI displays all available measures defined in the global SMI DB to a specific characteristic.

https://smi.cloudcommons.com:8443/Insight_API/json/SMI/0.5/measure/Maintainability?key=df3936ec01c5d3adf9f0048116cd5b84&secret=13f6232ebf484e57103cd4ac234a22aa

Sample output of successful execution:

```
{
  "result":
  {
    "returnCode": "0",
    "errorMessage": "Operation Successful.",
    "resultCount": 8,
    "Bean-List": {
      "ResourceMeasure-Bean": [
        { "uuid": "c791d9e0-9980-11df-b747-93be55be4ac3", "name":
"Total service time", "description": "Total service time spent", "characteristic":
"Maintainability" },
        { "uuid": "c7943c44-9980-11df-acf9-9be0fbb4d52a", "name":
"Total downtime", "description": "Total time system is record as unavailable",
"characteristic": "Maintainability" },
        { "uuid": "c79b6366-9980-11df-a03c-5f160c90627c", "name":
"Number of configuration changes", "description": "Total number of configuration
changes", "characteristic": "Maintainability" },
        { "uuid": "0e8a7dd2-3e53-48c0-9e09-9e16e90e7e91", "name":
"TotalServiceTimeInPercent", "description": "Total amount of planned service time for
resource (Percentage)", "characteristic": "Maintainability" },
        { "uuid": "5640296d-aad9-48b1-84a2-2a22fb49953c", "name":
"OutagePercent", "description": "Total amount of planned or unplanned outage time for
resource (Percentage)", "characteristic": "Maintainability" },
        { "uuid": "0019d745-ea8d-4da6-b39f-1c707ff99414", "name":
"ConfigurationChangesCount", "description": "Total number of configuration changes",
"characteristic": "Maintainability" },
        { "uuid": "6438c81d-9d45-4191-99ca-c6458a90bd3d", "name":
"ClosedPriority1ChangesInPercent", "description": "Total number of Priority 1
changes that are closed (Percentage)", "characteristic": "Maintainability" },
        { "uuid": "fcl1a8c97-af98-467b-8586-8735b36b17da", "name":
"ClosedPriority2ChangesInPercent", "description": "Total number of Priority 2
changes that are closed (Percentage)", "characteristic": "Maintainability" }
      ]
    }
  }
}
```

Set a Metric Value to DB for a Service by UUID

This web service sets aggregated metric data for a single metric.

HTTP Type

POST

Restriction

None. Open to all public users.

URI

{type}/SMI/{version}/service/{serviceUUID}/measures/{metricUUID}

Parameter	Description
{serviceUUID}	UUID of the service to which the metric data will be sent.
{metricUUID}	UUID of the metric for which the aggregated data is applicable.
&key	The API Key that is provided when your application has been registered.
&secret	The Shared Secret that is provided when your application has been registered.
&metricValue	Defines the aggregated metric data value.
&updateTime	When setting metric data, specifies the time when the MDR retrieved the aggregated data value. The format of the date is YYYY-MM-DD-hh-mm-ss.
&mdr	When setting aggregated metric data, defines the UUID of the source MDR.

Example:

This URI sets metric data for the specified service for the specified measure from the specified MDR.

```
https://smi.cloudcommons.com:8443/Insight_API/json/SMI/0.5/service/99500098-c4b9-11df-bbd8-6b395a4ff3f3/metric/c791d9e0-9980-11df-b747-93be55be4ac3?key=df3936ec01c5d3adf9f0048116cd5b84&secret=13f6232ebf484e57103cd4ac234a22aa&updateTime=2010-08-20-19-32-05&metricValue=1&mdr=d5c63c4a-c4b9-11df-9ffc-63cfe0917981
```

Sample output of successful execution:

```
{
  "result":
    {
      "returnCode": "0",
      "errorMessage": "Operation Successful.",
      "resultCount": 0,
    }
}
```

Set a Metric Value to DB for a Service by Name

This web service sets aggregated metric data for a single metric.

HTTP Type

POST

Restriction

None. Open to all public users.

URI

```
{type}/SMI/{version}/service/{serviceName}/MDR/{mdrName}/metric/{metricName}
```

Parameter	Description
-----------	-------------

{serviceName}	Name of the service to which the metric data will be sent.
---------------	--

{metricName}	Name of the metric for which the aggregated data is applicable.
--------------	---

{mdrName}	Name of the MDR that is the source of the metric data.
-----------	--

&key	The API Key that is provided when your application has been registered.
------	---

&secret	The Shared Secret that is provided when your application has been registered.
---------	---

&metricValue Defines the aggregated metric data value.

&updateTime When setting metric data, specifies the time when the MDR retrieved the aggregated data value. The format of the date is YYYY-MM-DD-hh-mm-ss.

Example:

The following example will set metric data for the “Total downtime” metric for the TestService service. The metric data is from the MDR TestMDR.

```
https://smi.cloudcommons.com:8443/Insight_API/json/SMI/0.5/service/TestService/MDR/TestMDR/metric/Totaldowntime?updateTime=2011-1-8-20-9-35&metricValue=98&key=d63ccf3b9f3aa275b81588ee8d7b55ee&secret=10dd676e423a88c73673674c1b6d4860
```

Sample output of successful execution:

```
{
  "result":
    {
      "returnCode": "0",
      "errorMessage": "Operation Successful.",
      "resultCount": 0,
    }
}
```

Send Metric Data via an XML Body

This web service sets aggregated metric data for a bulk of metrics using an XML body. It is important to note that the size of the URI is limited to about 8192 bytes. Due to the increased size of the URI because of the added xml body, please ensure that the URI is kept under this limit.

HTTP Type

POST

Restriction

None. Open to all public users.

URI

{type}/SMI/{version}/setMetric

Parameter	Description
-----------	-------------

&key	The API Key that is provided when your application has been registered.
------	---

&secret The Shared Secret that is provided when your application has been registered.

&xmlData Defines the XML body that contains the metric data.

Example:

See the section on [XML Data Input](#) (see page 139) in this document for more information.

Sample output of successful execution:

```
{
  "result":
  {
    "returnCode": "0",
    "errorMessage": "Operation Successful.",
    "resultCount": 0,
  }
}
```

Chapter 11: Indicators

This section contains the following topics:

[Get All Indicators](#) (see page 105)

[Get All Indicators for a Characteristic](#) (see page 107)

[Set an Indicator Value](#) (see page 109)

[Send Indicator Data via an XML Body](#) (see page 110)

Get All Indicators

This web service lists all available indicators.

HTTP Type

GET

Restriction

None. Open to all public users.

URI

{type}/SMI/{version}/indicators

Parameter	Description
&key	The API Key that is provided when your application has been registered.
&secret	The Shared Secret that is provided when your application has been registered.
&page	Defines the page number to display.
&rows	Defines the number of records to display per page.

Example:

The following URI displays all available indicators defined in the global SMI DB. The data returned shows the indicators UUID, name, description and the SMI characteristic that it belongs to.

https://smi.cloudcommons.com:8443/Insight_API/json/SMI/0.5/indicators?page=1&rows=10&key=df3936ec01c5d3adf9f0048116cd5b84&secret=13f6232ebf484e57103cd4ac234a22aa

Sample output of successful execution:

```
{
  "result":
    {
      "returnCode": "0",
      "errorMessage": "Operation Successful.",
      "resultCount": 10,
      "Bean-List": {
        "ResourceIndicator-Bean": [
          { "name ": "Replaceability_indOne", "uuid ":
            "22bf2cc0-bbfd-11df-9a25-730ee79770d0", "description ": "If you have moved your ~QHV~
            service to another provider, indicate how easy or difficult the move proceeded. If
            you not have moved, please indicate how you think the experience might be.",
            "characteristic ": "Replaceability", },
          { "name ": "Business_stability_indOne", "uuid ":
            "22c18f1a-bbfd-11df-9bd4-e308693ca350", "description ": "How confident are you in the
            business stability of the ~QHV~ service provider and its ability to continue to provide
            these services?", "characteristic ": "Business Stability", },
          { "name ": "contract_sla_verification_indOne", "uuid ":
            "22c3f174-bbfd-11df-894f-db4a97be2e43", "description ": "In your experience, please
            rate the ~QHV~ service providers ability to provide SLA metrics or indicators.",
            "characteristic ": "Contract or SLA Verification", },
          { "name ": "Replaceability_indTwo", "uuid ":
            "837f1e5d-160b-47ee-b389-a9e3a6f5a834", "description ": "If you have moved your
            service to another provider, indicate how easy or difficult the move proceeded.",
            "characteristic ": "Replaceability", },
          { "name ": "Replaceability_indThree", "uuid ":
            "3fb70aeb-1bc0-4122-83ad-ba13d825043d", "description ": "If question above >=6 then
            question: For those that have moved this service to another provider, please select
            the characteristis that have created significant challenges and disruptions in
            business operations.", "characteristic ": "Replaceability", },
          { "name ": "Business_stability_indTwo", "uuid ":
            "de1836fd-f927-412c-9445-26dba6af5cdc", "description ": "Please indicate the
            relationship of the service provider, and enter the latest annual gross revenue. For
            internal providers, please use annual budget as the measure for gross revenue.",
            "characteristic ": "Business Stability", },
          { "name ": "Ceritication_indOne", "uuid ":
            "61c5907e-3c2f-4fe7-b9b2-2ec91a85a377", "description ": "Please indicate the service
            providers status regarding certificaitions.", "characteristic ": "Certifications", },
```

```

        { "name ": "Ceritication_indTwo", "uuid ":
"eaa3f982-c35f-40e3-abc8-0d1fa2c9b28e", "description ": "Please indicate the
certifications held by the organization:", "characteristic ": "Certifications", },
        { "name ": "Acontract_sla_verification_indTwo", "uuid ":
"e9bfla27-461a-47c4-8919-c5fe5ff4f287", "description ": "Please select the level
below that matches the Contract and SLA verification that the service provides:",
"characteristic ": "Contract or SLA Verification", },
        { "name ": "Supply_Chain_indOne", "uuid ":
"6f7868fc-31ab-42c1-8ee0-bbb294b5b556", "description ": "Please select the level of
control the service provider has on its supply chain.", "characteristic ": "Supply
Chain", }
    ]
}
}
}

```

Get All Indicators for a Characteristic

This web service lists all indicators for a specific characteristic.

HTTP Type

GET

Restriction

None. Open to all public users.

URI

{type}/SMI/{version}/indicator/{characteristic}

Parameter	Description
{characteristic}	The name of the SMI characteristic from which you want to start. This can be defined as a hierarchical structure, like the structure of a directory.
&key	The API Key that is provided when your application has been registered.
&secret	The Shared Secret that is provided when your application has been registered.
&page	Defines the page number to display.
&rows	Defines the number of records to display per page.

Example:

This URI displays all available indicators defined in the global SMI DB to a specific characteristic.

```
https://smi.cloudcommons.com:8443/Insight_API/json/SMI/0.5/indicator/Overall/Quality/Serviceability/Maintainability?page=1&rows=20&key=df3936ec01c5d3adf9f0048116cd5b84&secret=13f6232ebf484e57103cd4ac234a22aa
```

Sample output of successful execution:

```
{
  "result":
    {
      "returnCode": "0",
      "errorMessage": "Operation Successful.",
      "resultCount": 3,
      "Bean-List": {
        "ResourceIndicator-Bean": [
          { "name ": "Maintainability_indOne", "uuid ":
            "22bcca66-bbfd-11df-b5c1-8372b9264e5c", "description ": "For ~QHV~, does the
            provider respond to needed changes in a timely manner? + For ~QHV~, does the provider
            respond to needed changes in a timely manner?", "characteristic ": "Maintainability",
          },
          { "name ": "Maintainability_indTwo", "uuid ":
            "a062b79f-5d45-45e3-a921-2e95d9874f74", "description ": "For the service, does the
            provider respond to needed changes in a timely manner?", "characteristic ":
            "Maintainability", },
          { "name ": "Maintainability_indThree", "uuid ":
            "4ec939a4-8bb4-4960-8cc8-655e0d9c307e", "description ": "If Yes How would you rate
            the impact of changes made by the provider on the overall service?", "characteristic
            ": "Maintainability", }
        ]
      }
    }
}
```

Set an Indicator Value

This web service sets indicator data for a single indicator using UUID.

HTTP Type

POST

Restriction

None. Open to all public users.

URI

{type}/SMI/{version}/service/{serviceUUID}/indicator/{indicatorUUID}

Parameter	Description
-----------	-------------

{serviceUUID}	UUID of the service you are setting indicator data for.
---------------	---

{indicatorUUID}	UUID of the indicator that the data is associated with
-----------------	--

&key	The API Key that is provided when your application has been registered.
------	---

&secret	The Shared Secret that is provided when your application has been registered.
---------	---

&indicatorValue	Defines the indicator value.
-----------------	------------------------------

&surveyUUID	When setting indicator data, this defines the UUID of the source survey.
-------------	--

&updateTime	When setting indicator data, this specifies the time when the survey retrieved the value. The format of the date is YYYY-MM-DD-hh-mm-ss.
-------------	--

Example:

The following URI sets indicator data for the specified service for the specified indicator from the specified survey.

```
https://smi.cloudcommons.com:8443/Insight_API/json/SMI/0.5/service/99500098-c4b9-11df-bbd8-6b395a4ff3f3/indicator/22bcca66-bbfd-11df-b5c1-8372b9264e5c?indicatorValue=10&surveyUUID=d5d6ecca-c4b9-11df-abdf-6f1bf8a95be4&updateTime=2010-08-20-19-32-05&key=df3936ec01c5d3adf9f0048116cd5b84&secret=13f6232ebf484e57103cd4ac234a22aa
```

Sample output of successful execution:

```
{
  "result":
    {
      "returnCode": "0",
      "errorMessage": "Operation Successful.",
      "resultCount": 0,
    }
}
```

Send Indicator Data via an XML Body

This web service sets indicator data for a bulk of indicators using an XML body. It is important to note that the size of the URI is limited to about 8192 bytes. Due to the increased size of the URI because of the added xml body, please ensure that the URI is kept under this limit.

HTTP Type

POST

Restriction

None. Open to all public users.

URI

{type}/SMI/{version}/setIndicator

Parameter	Description
&key	The API Key that is provided when your application has been registered.
&secret	The Shared Secret that is provided when your application has been registered.
&xmlData	Defines the XML body that contains the indicator data.

Example:

See the section on [XML Data Input](#) (see page 139) in this document for more information.

Sample output of successful execution:

```
{
  "result":
    {
      "returnCode": "0",
      "errorMessage": "Operation Successful.",
      "resultCount": 0,
    }
}
```


Chapter 12: Scores

This section contains the following topics:

[Get the Natural SMI Score of a Service](#) (see page 113)

[Get the Natural Score by Characteristic](#) (see page 115)

[Get the Weighted Score of a Service](#) (see page 117)

[Get the Weighted Score by Characteristic](#) (see page 119)

[Get the Service Score by Category](#) (see page 121)

[Get the Service Score by Provider](#) (see page 123)

[Get the Demographic Score](#) (see page 125)

[Provide Information for Demographic Score Calculation](#) (see page 127)

Get the Natural SMI Score of a Service

This web service lists the natural SMI score of the service. The natural score is the SMI score of the service in comparison to other services in the same category.

HTTP Type

GET

Restriction

None. Open to all public users.

URI

{type}/SMI/{version}/category/{categoryUUID}/service/{serviceUUID}/naturalScore

Parameter	Description
-----------	-------------

{categoryUUID}	UUID of the category the service belongs to. Note that a service may belong to multiple categories.
----------------	---

{serviceUUID}	UUID of the service for which the score is being obtained.
---------------	--

&key	The API Key that is provided when your application has been registered.
------	---

&secret	The Shared Secret that is provided when your application has been registered.
---------	---

&page	Defines the page number to display.
-------	-------------------------------------

&rows	Defines the number of records to display per page.
-------	--

&childInfo	May be set to "true" to show the score of all sub-characteristic, or set to "false" to show only the score of the specified characteristic. If &childInfo is not defined, the value is true.
------------	--

Example:

The following URI gets all the natural scores for the SMI model for the service “Merchant Solutions” that belongs to the category “E-Commerce”.

```
https://smi.cloudcommons.com:8443/Insight_API/json/SMI/0.5/category/ab986674-8291-11df-b78a-f765177ca478/service/99500098-c4b9-11df-bbd8-6b395a4ff3f3/naturalScore?page=1&rows=20&key=df3936ec01c5d3adf9f0048116cd5b84&secret=13f6232ebf484e57103cd4ac234a22aa&page=1&rows=10
```

Sample output of successful execution:

```
{
  "result":
    {
      "returnCode": "0",
      "errorMessage": "Operation Successful.",
      "resultCount": 10,
      "Bean-List": {
        "ResourceScore-Bean":[
          { "characteristics": "Adaptability",
            "parentCharacteristics": "Agility", "score": "99", "confidence": "null" },
          { "characteristics": "Agility_measure",
            "parentCharacteristics": "Agility", "score": "null", "confidence": "null" },
          { "characteristics": "Awareness or Visibility",
            "parentCharacteristics": "Agility", "score": "77", "confidence": "null" },
          { "characteristics": "Capacity or Elasticity",
            "parentCharacteristics": "Agility", "score": "45", "confidence": "null" },
          { "characteristics": "Flexibility",
            "parentCharacteristics": "Agility", "score": "40", "confidence": "null" },
          { "characteristics": "Availability_measure",
            "parentCharacteristics": "Availability", "score": "null", "confidence": "null" },
          { "characteristics": "Reliability",
            "parentCharacteristics": "Availability", "score": "99", "confidence": "null" },
          { "characteristics": "Resiliency or Fault Tolerance",
            "parentCharacteristics": "Availability", "score": "74", "confidence": "null" },
          { "characteristics": "Stability", "parentCharacteristics":
            "Availability", "score": "39", "confidence": "null" },
          { "characteristics": "Auditability",
            "parentCharacteristics": "Compliance", "score": "null", "confidence": "null" }
        ]
      }
    }
}
```

Get the Natural Score by Characteristic

This web service lists the natural SMI score of the service for a specific characteristic. The natural score is the SMI score of the service in comparison to other services in the same category.

HTTP Type

GET

Restriction

None. Open to all public users.

URI

{type}/SMI/{version}/category/{categoryUUID}/service/{serviceUUID}/naturalScore/{characteristic}

Parameter	Description
{categoryUUID}	UUID of the category the service belongs to. Note that a service may belong to multiple categories.
{serviceUUID}	UUID of the service for which the score is being obtained.
{characteristic}	The name of the SMI characteristic to start from. This can be defined as a hierarchical model, like a directory structure.
&key	The API Key that is provided when your application has been registered.
&secret	The Shared Secret that is provided when your application has been registered.
&page	Defines the page number to display.
&rows	Defines the number of records to display per page.
&childInfo	May be set to "true" to show the score of all sub-characteristics, or set to "false" to show only the score of the specified characteristic. If &childInfo is not defined, the value is true.

Example:

The following URI gets the natural scores for the service “Merchant Solutions” that belongs to the category “E-Commerce” for the specified SMI characteristic.

```
https://smi.cloudcommons.com:8443/Insight_API/json/SMI/0.5/category/ab986674-8291-11df-b78a-f765177ca478/service/99500098-c4b9-11df-bbd8-6b395a4ff3f3/naturalScore/Overall/Quality?page=1&rows=10&childInfo=true&key=df3936ec01c5d3adf9f0048116cd5b84&secret=13f6232ebf484e57103cd4ac234a22aa
```

Sample output of successful execution:

```
{
  "result":
    {
      "returnCode": "0",
      "errorMessage": "Operation Successful.",
      "resultCount": 36,
      "Bean-List": {
        "ResourceScore-Bean": [
          { "characteristics": "Availability_measure",
            "parentCharacteristics": "Availability", "score": "71", "confidence": "null" },
          { "characteristics": "Reliability",
            "parentCharacteristics": "Availability", "score": "71", "confidence": "null" },
          { "characteristics": "Resiliency or Fault Tolerance",
            "parentCharacteristics": "Availability", "score": "71", "confidence": "null" },
          { "characteristics": "Stability", "parentCharacteristics":
            "Availability", "score": "71", "confidence": "null" },
          { "characteristics": "Contracting Experience",
            "parentCharacteristics": "Effectiveness", "score": "28", "confidence": "null" },
          { "characteristics": "Effectiveness_measure",
            "parentCharacteristics": "Effectiveness", "score": "28", "confidence": "null" },
          { "characteristics": "Efficiency",
            "parentCharacteristics": "Effectiveness", "score": "28", "confidence": "null" },
          { "characteristics": "Usability", "parentCharacteristics":
            "Effectiveness", "score": "28", "confidence": "null" },
          { "characteristics": "Value", "parentCharacteristics":
            "Effectiveness", "score": "28", "confidence": "null" },
          { "characteristics": "Carbon Footprint",
            "parentCharacteristics": "Efficiency", "score": "13", "confidence": "null" }
        ]
      }
    }
}
```

Get the Weighted Score of a Service

This web service lists the weighted SMI score score of the service. The weighted score is the SMI score of the service in comparison to other services in the same category, with the specified weight set applied.

HTTP Type

GET

Restriction

None. Open to all public users.

URI

{type}/SMI/{version}/category/{categoryUUID}/service/{serviceUUID}/weightedScore

Parameter	Description
{categoryUUID}	UUID of the category the service belongs to. Note that a service may belong to multiple categories.
{serviceUUID}	UUID of the service for which the score is being obtained.
&key	The API Key that is provided when your application has been registered.
&secret	The Shared Secret that is provided when your application has been registered.
&weightSetName	The name of the weight set used in obtaining a weighted score, weight set query, or updates.
&page	Defines the page number to display.
&rows	Defines the number of records to display per page.

Example:

The following URI gets all the weighted scores for the SMI model for the service “Merchant Solutions” that belongs to the category “E-Commerce”.

```
https://smi.cloudcommons.com:8443/Insight_API/json/SMI/0.5/category/ab986674-8291-11df-b78a-f765177ca478/service/99500098-c4b9-11df-bbd8-6b395a4ff3f3/weightedScore?weightSetName=weight1&key=df3936ec01c5d3adf9f0048116cd5b84&secret=13f6232ebf484e57103cd4ac234a22aa
```

Sample output of successful execution:

```
{
  "result":
    {
      "returnCode": "0",
      "errorMessage": "Operation Successful.",
      "resultCount": 10,
      "Bean-List": {
        "ResourceScore-Bean":[
          { "characteristics": "Adaptability",
            "parentCharacteristics": "Agility", "score": "99", "confidence": "null" },
          { "characteristics": "Agility_measure",
            "parentCharacteristics": "Agility", "score": "null", "confidence": "null" },
          { "characteristics": "Awareness or Visibility",
            "parentCharacteristics": "Agility", "score": "77", "confidence": "null" },
          { "characteristics": "Capacity or Elasticity",
            "parentCharacteristics": "Agility", "score": "45", "confidence": "null" },
          { "characteristics": "Flexibility",
            "parentCharacteristics": "Agility", "score": "40", "confidence": "null" },
          { "characteristics": "Availability_measure",
            "parentCharacteristics": "Availability", "score": "null", "confidence": "null" },
          { "characteristics": "Reliability",
            "parentCharacteristics": "Availability", "score": "99", "confidence": "null" },
          { "characteristics": "Resiliency or Fault Tolerance",
            "parentCharacteristics": "Availability", "score": "74", "confidence": "null" },
          { "characteristics": "Stability", "parentCharacteristics":
            "Availability", "score": "39", "confidence": "null" },
          { "characteristics": "Auditability",
            "parentCharacteristics": "Compliance", "score": "null", "confidence": "null" }
        ]
      }
    }
}
```

Get the Weighted Score by Characteristic

This web service lists the weighted SMI score of the service for a specific characteristic. The weighted score is the SMI score of the service in comparison to other services in the same category, with the specified weight set applied.

HTTP Type

GET

Restriction

None. Open to all public users.

URI

{type}/SMI/{version}/category/{categoryUUID}/service/{serviceUUID}/weightedScore/{characteristic}

Parameter	Description
-----------	-------------

{categoryUUID}	UUID of the category the service belongs to. Note that a service may belong to multiple categories.
----------------	---

{serviceUUID}	UUID of the service for which the score is being obtained.
---------------	--

{characteristic}	The name of the SMI characteristic to start from. This can be defined as a hierarchical model, like a directory structure.
------------------	--

&key	The API Key that is provided when your application has been registered.
------	---

&secret	The Shared Secret that is provided when your application has been registered.
---------	---

&weightSetName	The name of the weight set used in obtaining a weighted score, weight set query, or updates.
----------------	--

&page	Defines the page number to display.
-------	-------------------------------------

&rows	Defines the number of records to display per page.
-------	--

&childInfo	May be set to "true" to show the score of all sub-characteristic, or set to "false" to show only the score of the specified characteristic. If &childInfo is not defined, the value is true.
------------	--

Example:

The following URI gets all the weighted scores for the service “Merchant Solutions” that belongs to the category “E-Commerce” for the specified SMI characteristic.

```
https://smi.cloudcommons.com:8443/Insight_API/json/SMI/0.5/category/ab986674-8291-11df-b78a-f765177ca478/service/99500098-c4b9-11df-bbd8-6b395a4ff3f3/weightedScore/Overall?page=1&rows=20&weightSetName=weight1&childInfo=true&key=df3936ec01c5d3a-df9f0048116cd5b84&secret=13f6232ebf484e57103cd4ac234a22aa
```

Sample output of successful execution:

```
{
  "result":
    {
      "returnCode": "0",
      "errorMessage": "Operation Successful.",
      "resultCount": 36,
      "Bean-List": {
        "ResourceScore-Bean": [
          { "characteristics": "Availability_measure",
            "parentCharacteristics": "Availability", "score": "71", "confidence": "null" },
          { "characteristics": "Reliability",
            "parentCharacteristics": "Availability", "score": "71", "confidence": "null" },
          { "characteristics": "Resiliency or Fault Tolerance",
            "parentCharacteristics": "Availability", "score": "71", "confidence": "null" },
          { "characteristics": "Stability", "parentCharacteristics":
            "Availability", "score": "71", "confidence": "null" },
          { "characteristics": "Contracting Experience",
            "parentCharacteristics": "Effectiveness", "score": "28", "confidence": "null" },
          { "characteristics": "Effectiveness_measure",
            "parentCharacteristics": "Effectiveness", "score": "28", "confidence": "null" },
          { "characteristics": "Efficiency",
            "parentCharacteristics": "Effectiveness", "score": "28", "confidence": "null" },
          { "characteristics": "Usability", "parentCharacteristics":
            "Effectiveness", "score": "28", "confidence": "null" },
          { "characteristics": "Value", "parentCharacteristics":
            "Effectiveness", "score": "28", "confidence": "null" },
          { "characteristics": "Carbon Footprint",
            "parentCharacteristics": "Efficiency", "score": "13", "confidence": "null" }
        ]
      }
    }
}
```

Get the Service Score by Category

This web service lists the natural score of all the services that belong to a specific category.

HTTP Type

GET

Restriction

Limited. Open to all public users with the following limitation:

This web service only lists services approved by the Cloud Commons Consortium. Services created by the user making the request are also listed, even if the service has not been approved.

URI

{type}/SMI/{version}/category/{category_name}/services_and_naturalscore

Parameter	Description
{category_name}	The name of the category being queried.
&key	The API Key that is provided when your application has been registered.
&secret	The Shared Secret that is provided when your application has been registered.

Example:

https://smi.cloudcommons.com:8443/Insight_API/json/SMI/0.5/category/E-mail/services_and_naturalscore?key=98ce4910fc7f6fdb7af270ea9b3162b6&secret=eafe362499eacad24b3092ec12853590

Sample output of successful execution:

```
{
  "result":
  {
    "returnCode": "0",
    "errorMessage": "Operation Successful.",
    "resultCount": 10,
    "Bean-List": {
      "ResourceServiceNaturalScore-Bean":[
        { "serviceName": "AOL Mail", "overallScore": "47",
"qualityScore": "43", "agilityScore": "65", "riskScore": "48", "capabilityScore":
"10", "costScore": "67", "securityScore": "0", },
        { "serviceName": "Comcast-Business Class", "overallScore":
"null", "qualityScore": "null", "agilityScore": "null", "riskScore": "null",
"capabilityScore": "null", "costScore": "null", "securityScore": "null", },
        { "serviceName": "Cox Business", "overallScore": "48",
"qualityScore": "53", "agilityScore": "48", "riskScore": "44", "capabilityScore":
"51", "costScore": "41", "securityScore": "53", },
        { "serviceName": "Easy Mail", "overallScore": "null",
"qualityScore": "null", "agilityScore": "null", "riskScore": "null",
"capabilityScore": "null", "costScore": "null", "securityScore": "null", },
        { "serviceName": "Expresso", "overallScore": "52",
"qualityScore": "51", "agilityScore": "53", "riskScore": "52", "capabilityScore":
"50", "costScore": "58", "securityScore": "48", },
        { "serviceName": "Gmail", "overallScore": "47",
"qualityScore": "47", "agilityScore": "50", "riskScore": "54", "capabilityScore":
"50", "costScore": "38", "securityScore": "43", },
        { "serviceName": "IBM Lotus Domino Notes", "overallScore":
"null", "qualityScore": "null", "agilityScore": "null", "riskScore": "null",
"capabilityScore": "null", "costScore": "null", "securityScore": "null", },
        { "serviceName": "Java System Messenger Express",
"overallScore": "null", "qualityScore": "null", "agilityScore": "null", "riskScore":
"null", "capabilityScore": "null", "costScore": "null", "securityScore": "null", },
        { "serviceName": "LotusLive", "overallScore": "54",
"qualityScore": "54", "agilityScore": "0", "riskScore": "0", "capabilityScore": "0",
"costScore": "0", "securityScore": "0", },
        { "serviceName": "Microsoft Exchange Online",
"overallScore": "null", "qualityScore": "null", "agilityScore": "null", "riskScore":
"null", "capabilityScore": "null", "costScore": "null", "securityScore": "null", }
      ]
    }
  }
}
```

Get the Service Score by Provider

This web service lists the natural score of all the services that belong to a specific provider.

HTTP Type

GET

Restriction

Limited. Open to all public users with the following limitation:

This web service only lists services approved by the Cloud Commons Consortium. Services created by the user making the request are also listed, even if the service has not been approved.

URI

{type}/SMI/{version}/provider/{provider_name}/services_and_naturalscore

Parameter	Description
{provider_name}	The name of the provider being queried.
&key	The API Key that is provided when your application has been registered.
&secret	The Shared Secret that is provided when your application has been registered.

Example:

`https://smi.cloudcommons.com:8443/Insight_API/json/SMI/0.5/provider/Google/services_and_naturalscore?key=98ce4910fc7f6fdb7af270ea9b3162b6&secret=eafe362499eacad24b3092ec12853590`

Sample output of successful execution:

```
{
  "result":
    {
      "returnCode": "0",
      "errorMessage": "Operation Successful.",
      "resultCount": 3,
      "Bean-List": {
        "ResourceServiceNaturalScore-Bean":[
          { "serviceName": "AppEngine", "overallScore": "49",
            "qualityScore": "51", "agilityScore": "45", "riskScore": "48", "capabilityScore":
            "51", "costScore": "46", "securityScore": "51", },
          { "serviceName": "Expresso", "overallScore": "52",
            "qualityScore": "51", "agilityScore": "53", "riskScore": "52", "capabilityScore":
            "50", "costScore": "58", "securityScore": "48", },
          { "serviceName": "Gmail", "overallScore": "47",
            "qualityScore": "47", "agilityScore": "50", "riskScore": "54", "capabilityScore":
            "50", "costScore": "38", "securityScore": "43", }
        ]
      }
    }
}
```

Get the Demographic Score

This web service lists the calculated demographic score of a service. A user must have previously provided the demographic information of the service in the `calculate_demographicscore` web service to obtain a requested which is a required parameter for the `get_demographic_score` web service.

HTTP Type

PUT

Restriction

Open to all public users on the global Cloud Commons DB.

This web service is restricted to the global Cloud Commons DB only. This web service is restricted from being used on a local integrated DB.

URI

{type}/SMI/{version}/get_demographic_score

Parameter	Description
&key	The API Key that is provided when your application has been registered.
&secret	The Shared Secret that is provided when your application has been registered.
&requestid	The request ID received from the <code>calculate_demographicscore</code> web service.

Example:

`https://smi.cloudcommons.com:8443/Insight_API/xml/SMI/0.5/get_demographic_score?requestid=1300895623230&key=f2f55b1243b3a317a698b2aff26e4685&secret=f6a321d2237d7e61599d56f6538280c7`

Sample output of successful execution:

```
<?xml version='1.0' encoding='utf-8'?>
<result>
  <returnCode>0</returnCode>
  <errorMessage>Operation Successful.</errorMessage>
  <resultCount>67</resultCount>
  <Bean-List>
    <Version>8.0</version>
    <REQUEST_ID>1300895623230</REQUEST_ID>
    <CATEGORY_ID>E-mail</CATEGORY_ID>
    <ResourceDemographicScoreCalculate-Bean>
      <SERVICE>Gmail</SERVICE>
      <SMI_ID>2000</SMI_ID>
      <NATURAL_SCORE>50</NATURAL_SCORE>
      <CONFIDENCE>null</CONFIDENCE>
      <OBSERVATION_NUMBER>780</OBSERVATION_NUMBER>
      <OBSERVATION_AVG_AGE>30</OBSERVATION_AVG_AGE>
      <SCORED_CHILD_NUMBER>66</SCORED_CHILD_NUMBER>
      <TOTAL_CHILD_NUMBER>79</TOTAL_CHILD_NUMBER>
      <SLA_METHOD>Average</SLA_METHOD>
      <DESCRIPTION>null</DESCRIPTION>
      <CREATE_DATE>2011-03-23 11:53:43.0</CREATE_DATE>
      <CREATE_BY>SMIGLOBAL</CREATE_BY>
      <UPDATE_DATE>2011-03-23 11:53:44.0</UPDATE_DATE>
      <UPDATE_BY>null</UPDATE_BY>
    </ResourceDemographicScoreCalculate-Bean>
    <ResourceDemographicScoreCalculate-Bean>
      <SERVICE>Gmail</SERVICE>
      <SMI_ID>2001</SMI_ID>
      <NATURAL_SCORE>48</NATURAL_SCORE>
      <CONFIDENCE>null</CONFIDENCE>
      <OBSERVATION_NUMBER>370</OBSERVATION_NUMBER>
      <OBSERVATION_AVG_AGE>30</OBSERVATION_AVG_AGE>
      <SCORED_CHILD_NUMBER>32</SCORED_CHILD_NUMBER>
      <TOTAL_CHILD_NUMBER>35</TOTAL_CHILD_NUMBER>
      <SLA_METHOD>Average</SLA_METHOD>
      <DESCRIPTION>null</DESCRIPTION>
      <CREATE_DATE>2011-03-23 11:53:43.0</CREATE_DATE>
      <CREATE_BY>SMIGLOBAL</CREATE_BY>
      <UPDATE_DATE>2011-03-23 11:53:44.0</UPDATE_DATE>
      <UPDATE_BY>null</UPDATE_BY>
```

```
</ResourceDemographicScoreCalculate-Bean>
<ResourceDemographicScoreCalculate-Bean>
  <SERVICE>Gmail</SERVICE>
  <SMI_ID>2002</SMI_ID>
  <NATURAL_SCORE>39</NATURAL_SCORE>
  <CONFIDENCE>null</CONFIDENCE>
  <OBSERVATION_NUMBER>90</OBSERVATION_NUMBER>
  <OBSERVATION_AVG_AGE>29</OBSERVATION_AVG_AGE>
  <SCORED_CHILD_NUMBER>4</SCORED_CHILD_NUMBER>
  <TOTAL_CHILD_NUMBER>4</TOTAL_CHILD_NUMBER>
  <SLA_METHOD>Average</SLA_METHOD>
  <DESCRIPTION>null</DESCRIPTION>
  <CREATE_DATE>2011-03-23 11:53:44.0</CREATE_DATE>
  <CREATE_BY>SMIGLOBAL</CREATE_BY>
  <UPDATE_DATE>2011-03-23 11:53:44.0</UPDATE_DATE>
  <UPDATE_BY>null</UPDATE_BY>
</ResourceDemographicScoreCalculate-Bean>
.
. <More Data>
.
</Bean-List>
</result>
```

Provide Information for Demographic Score Calculation

This web service can be used to provide an XML body that contains demographic information on a service. This demographic information will be passed through a calculation engine and produce a demographic score. A request ID is returned back that can later be used to get the demographic score of a service using the `get_demographic_score` web service.

HTTP Type

POST

Restriction

Open to all public users on the global Cloud Commons DB.

This web service is restricted to the global Cloud Commons DB only. This web service is restricted from being used on a local integrated DB.

URI

{type}/SMI/{version}/calculate_demographic_score

Parameter	Description
-----------	-------------

&key	The API Key that is provided when your application has been registered.
------	---

<code>&secret</code>	The Shared Secret that is provided when your application has been registered.
<code>&xmlData</code>	Provides the demographic information required for calculating a comparison score in XML format.

Example:

In this example, demographic information is provided to the Gmail service.

`https://smi.cloudcommons.com:8443/Insight_API/xml/SMI/0.5/calculate_demographic_score?xmlData=`

```
<Demographic>
  <Version>8.0</Version>
  <Criteria>
    <Category>Compute</Category>
    <Company_Size>600-10000 employees</Company_Size>
    <Company_Revenue>abcde</Company_Revenue>
    <Company_Zipcode>11747</Company_Zipcode>
    <Company_Industry>Aerospace</Company_Industry>
    <Company_Country>United_States</Company_Country>
  </Criteria>
  <Services>Gmail</Services>
</Demographic>&key=f2f55b1243b3a317a698b2aff26e4685&secret=f6a321d2237d7e61599d56f6538280c7
```

Sample output of successful execution:

```
<?xml version='1.0' encoding='utf-8'?>
<result>
  <returnCode>0</returnCode>
  <errorMessage>Operation Successful.</errorMessage>
  <resultCount>1</resultCount>
  <Bean-List>
    <ResourceDemographicScoreCalculate-Bean>
      <requestId>1300895623230</requestId>
      <category>Compute</category>
      <services>Gmail</services>
    </ResourceDemographicScoreCalculate-Bean>
  </Bean-List>
</result>
```

Chapter 13: Weight Sets

This section contains the following topics:

[Create a Weight Set](#) (see page 129)

[Get All Public Weight Sets](#) (see page 130)

[Get All User Weight Sets](#) (see page 131)

[Get a Weight Set by UUID](#) (see page 133)

[Get the Scale for a Weight Set](#) (see page 134)

[Update the Scale for a Weight Set](#) (see page 136)

[Delete a Weight Set](#) (see page 137)

Create a Weight Set

This web service creates a weight set. When it is created, the weight set is given a default scale that is equal throughout all sibling lists. Basically if used now to get a score, it will not be different from the natural score. So a user must now define the scale for this weight set.

HTTP Type

POST

Restriction

None. Open to all public users.

URI

{type}/SMI/{version}/weightset/create

Parameter	Description
&key	The API Key that is provided when your application has been registered.
&secret	The Shared Secret that is provided when your application has been registered.
&name	Name of the resource being created.
&desc	Description of the resource being created.

Example:

The following URI creates a weight set called TestWS. A default scale will be applied to this weight et automatically.

```
https://smi.cloudcommons.com:8443/Insight_API/json/SMI/0.5/weightset/create?name=TestWS&desc=This%20is%20a%20test&key=4f400a9b486c764d3a6ec5f86fe0a2aa&secret=e320f8f11cb88b5ab346d9ab34033d95
```

Sample output of successful execution:

```
{
  "result":
    {
      "returnCode": "0",
      "errorMessage": "Operation Successful.",
      "resultCount": 1,
      "Bean-List": {
        "ResourceWeightSet-Bean": [
          { "name": "WSTest", "uuid":
            "0e4bddc9-e1ae-4768-97c8-27c91e2721c8", "userId": "5", "public": "0", "versionId":
            "0.5", "publishDate": "null", "desc": "This is a test.", "createDate": "2011-03-17
            22:41:31.0", "createdBy": "adminUser@ca.com" }
          ]
        }
      }
    }
}
```

Get All Public Weight Sets

This web service lists all weight sets that are public

HTTP Type

GET

Restriction

None. Open to all public users.

URI

{type}/SMI/{version}/weightset/public

Parameter	Description
&key	The API Key that is provided when your application has been registered.
&secret	The Shared Secret that is provided when your application has been registered.
&page	Defines the page number to display.

&rows Defines the number of records to display per page.

Example:

The following URI lists all public weight sets defined in the SMI database.
`https://smi.cloudcommons.com:8443/Insight_API/json/SMI/0.5/weightset/public?page=1&rows=20&key=4f400a9b486c764d3a6ec5f86fe0a2aa&secret=e320f8f11cb88b5ab346d9ab34033d95`

Sample output of successful execution:

```
{
  "result":
  {
    "returnCode": "0",
    "errorMessage": "Operation Successful.",
    "resultCount": 1,
    "Bean-List": {
      "ResourceWeightSet-Bean": [
        { "name": "WSTestPublic", "uuid":
"0e4bddc9-e1ae-4768-97c8-27c91e2721c8", "userId": "null", "public": "1",
"versionId": "null", "publishDate": "2011-03-17 22:41:27.0", "desc": "null",
"createDate": "2011-03-16 23:41:27.0", "createdBy": "testadmin@ca.com" }
        ]
      }
    }
  }
}
```

Get All User Weight Sets

This web service lists all public and non public weight sets that were created by the user. The user is determined by the key and secret provided.

HTTP Type

GET

Restriction

Limited. Open to all public users with the following limitation:

This web service only lists services created by the user making the request.

URI

`{type}/SMI/{version}/weightset/user`

Parameter	Description
-----------	-------------

&key	The API Key that is provided when your application has been registered.
-----------------	---

<code>&secret</code>	The Shared Secret that is provided when your application has been registered.
<code>&page</code>	Defines the page number to display.
<code>&rows</code>	Defines the number of records to display per page.

Example:

The following URI lists all user weight sets defined in the SMI database. The key and secret are used to determine the user.

```
https://smi.cloudcommons.com:8443/Insight_API/json/SMI/0.5/weightset/user?page=1&rows=20&key=4f400a9b486c764d3a6ec5f86fe0a2aa&secret=e320f8f11cb88b5ab346d9ab34033d95
```

Sample output of successful execution:

```
{
  "result":
  {
    "returnCode": "0",
    "errorMessage": "Operation Successful.",
    "resultCount": 1,
    "Bean-List": {
      "ResourceWeightSet-Bean":[
        { "name": "WSTest", "uuid":
"0e4bddc9-e1ae-4768-97c8-27c91e2721c8", "userId": "null", "public": "null",
"versionId": "null", "publishDate": "null", "desc": "null", "createDate":
"2011-03-17 22:41:31.0", "createdBy": "adminUser@ca.com" }
        ]
      }
    }
  }
}
```

Get a Weight Set by UUID

This web service obtains information on the specified weight set.

HTTP Type

GET

Restriction

None. Open to all public users.

URI

{type}/SMI/{version}/weightset/{weightSetUUID}

Parameter	Description
-----------	-------------

{weightSetUUID}	UUID of the weight set to query.
-----------------	----------------------------------

&key	The API Key that is provided when your application has been registered.
------	---

&secret	The Shared Secret that is provided when your application has been registered.
---------	---

Example:

The following URI lists details of the weight set.

`https://smi.cloudcommons.com:8443/Insight_API/json/SMI/0.5/weightset/1c3c37f4-e6b8-11df-9332-b37f9d26f570?&key=4f400a9b486c764d3a6ec5f86fe0a2aa&secret=e320f8f11cb88b5ab346d9ab34033d95`

Sample output of successful execution:

```
{
  "result":
  {
    "returnCode": "0",
    "errorMessage": "Operation Successful.",
    "resultCount": 1,
    "Bean-List": {
      "ResourceWeightSet-Bean":[
        { "name": "WSTest", "uuid":
"0e4bddc9-e1ae-4768-97c8-27c91e2721c8", "userId": "5", "public": "0", "versionId":
"0.5", "publishDate": "null", "desc": "This is a test.", "createDate": "2011-03-17
22:41:31.0", "createdBy": "adminUser@ca.com" }
      ]
    }
  }
}
```

Get the Scale for a Weight Set

This web service obtains the scale for the specified weight set.

HTTP Type

GET

Restriction

None. Open to all public users.

URI

{type}/SMI/{version}/weightSetScale/{weightSetUUID}

Parameter	Description
{weightSetU UID}	UUID of the weight set to query.
&key	The API Key that is provided when your application has been registered.
&secret	The Shared Secret that is provided when your application has been registered.

Example:

The following URI lists all the scalar values for this weight set.

```
https://smi.cloudcommons.com:8443/Insight_API/json/SMI/0.5/weightSetScale/1c3c37f4-e6b8-11df-9332-b37f9d26f570?&key=4f400a9b486c764d3a6ec5f86fe0a2aa&secret=e320f8f11cb88b5ab346d9ab34033d95
```

Sample output of successful execution:

```
{
  "result":
  {
    "returnCode": "0",
    "errorMessage": "Operation Successful.",
    "resultCount": 79,
    "Bean-List": {
      "ResourceWeightSetScaleBean-Bean": [
        { "name": "WSTest", "scale": "0.2", "characteristic":
"Awareness or Visibility", "createdBy": "adminUser@ca.com", "creationDate":
"2011-03-17 22:41:31.0" },
        { "name": "WSTest", "scale": "0.2", "characteristic":
"Flexibility", "createdBy": "adminUser@ca.com", "creationDate": "2011-03-17
22:41:31.0" },
        { "name": "WSTest", "scale": "0.333", "characteristic":
"Portability", "createdBy": "adminUser@ca.com", "creationDate": "2011-03-17
22:41:31.0" },
        { "name": "WSTest", "scale": "0.333", "characteristic":
"Replaceability", "createdBy": "adminUser@ca.com", "creationDate": "2011-03-17
22:41:31.0" },
        { "name": "WSTest", "scale": "0.2", "characteristic":
"Adaptability", "createdBy": "adminUser@ca.com", "creationDate": "2011-03-17
22:41:31.0" },
        { "name": "WSTest", "scale": "0.2", "characteristic":
"Capacity or Elasticity", "createdBy": "adminUser@ca.com", "creationDate":
"2011-03-17 22:41:31.0" },
        { "name": "WSTest", "scale": "0.143", "characteristic":
"Risk", "createdBy": "adminUser@ca.com", "creationDate": "2011-03-17 22:41:31.0" },
        { "name": "WSTest", "scale": "0.25", "characteristic":
"Provider", "createdBy": "adminUser@ca.com", "creationDate": "2011-03-17
22:41:31.0" },
        { "name": "WSTest", "scale": "0.167", "characteristic":
"Business Stability", "createdBy": "adminUser@ca.com", "creationDate": "2011-03-17
22:41:31.0" },
        { "name": "WSTest", "scale": "0.167", "characteristic":
"Certifications", "createdBy": "adminUser@ca.com", "creationDate": "2011-03-17
22:41:31.0" }
      ]
    }
  }
}
```

```
}  
}
```

Update the Scale for a Weight Set

This web service defines the scale for a sibling list for the specified weight set. A sibling list is a list of siblings that shares the same parent characteristic. All siblings must have their scale defined at the same time. The scale of the sibling list must equal 1.

HTTP Type

PUT

Restriction

Limited. Open to all public users with the following limitation:

This web service only updates the scale for a weight created by the user making the request.

URI

{type}/SMI/{version}/weightset/{weightSetUUID}/update

Parameter	Description
{weightSetUUID}	UUID of the weight set for which you want to set the scale.
&key	The API Key that is provided when your application has been registered.
&secret	The Shared Secret that is provided when your application has been registered.
&Scale	Defines the scalar values of the SMI characteristic sibling list. The values of the sibling list must equal 1. For example: Quality,0.25,Agility,0.1,Risk,0.1,Capability,0.1,Cost,0.25,Security,0.1,Overall_measure,0.1.

Example:

The following URI updates a weight set with new scalar values. In this example, the following sibling list is set:
Quality,0.25,Agility,0.1,Risk,0.1,Capability,0.1,Cost,0.25,Security,0.1,Overall_measure,0.1.

`https://smi.cloudcommons.com:8443/Insight_API/json/SMI/0.5/weightset/1c3c37f4-e6b8-11df-9332-b37f9d26f570/update?Scale=Quality,0.25,Agility,0.1,Risk,0.1,Capability,0.1,Cost,0.25,Security,0.1,Overall_measure,0.1&key=4f400a9b486c764d3a6ec5f86fe0a2aa&secret=e320f8f11cb88b5ab346d9ab34033d95`

Sample output of successful execution:

```
{
  "result":
    {
      "returnCode": "0",
      "errorMessage": "Operation Successful.",
      "resultCount": 0,
    }
}
```

Delete a Weight Set

This web service deletes a weight set.

HTTP Type

PUT

Restriction

Limited. Open to all public users with the following limitation:

This web service only deletes a weight set created by the requesting user.

URI

`{type}/SMI/{version}/weightset/{weightSetUUID}`

Parameter	Description
{weightSetUUID}	UUID of the weight set to delete.
&key	The API Key that is provided when your application has been registered.
&secret	The Shared Secret that is provided when your application has been registered.

Example:

`https://smi.cloudcommons.com:8443/Insight_API/json/SMI/0.5/weightset/042c0fcd-e30d-43b5-9a0b-1d313aae12d3/delete?key=95bf5da46010b6ddaa8baca04fd94e73&secret=7ec5680d8ac7f03c919dad7770381358`

Sample output of successful execution:

```
{
  "result":
    {
      "returnCode": "0",
      "errorMessage": "Operation Successful.",
      "resultCount": 0,
    }
}
```

Chapter 14: XML Data Input

There are currently two web services that accept XML Data as input. These are to set raw aggregated metric data and to set indicator data from a survey. The XML Data as input allows for the web service to set bulk data instead of having to make many web service calls for each metric or indicator. The format for the XML data is different between metric and indicators. This section explains what the XML data should look like.

It is important to note that the size of the URI is limited to about 8192 bytes. Due to the increased size of the URI because of the added xml body, please ensure that the URI is kept under this limit.

This section contains the following topics:

[Setting Aggregated Metric Data](#) (see page 140)

[Setting Indicator Data](#) (see page 143)

Setting Aggregated Metric Data

The following web service call sets aggregated metric data for two metrics (“Total service time” and “Total downtime”). You will notice that each are listed four times. This is because the metric data is for two different services (TestService1 and TestService2) and the data is coming from two different MDRs (TestMDR1 and TestMDR2). If the MDR does not exist then it will automatically be created. When created, the MDR will require administrator approval. However, you should still be able to send metric data into it.

https://smi.cloudcommons.com:8443/Insight_API/json/SMI/0.5/setMetric?key=11ffa9e24a7892679c8446daf6b166ea&secret=bb1b6c3d57d221dcfdc402e06ad18310&xmlData=

```
<Resource-Metric>

  <metric>

    <name>Total service time</name>

    <service>TestService1</service>

    <metricValue>70</metricValue>

    <mdr>TestMDR1</mdr>

    <updateTime>2011-2-3-17-4-37 </updateTime>

  </metric>

  <metric>

    <name>Total service time</name>

    <service>TestService1</service>

    <metricValue>76</metricValue>

    <mdr>TestMDR2</mdr>

    <updateTime>2011-2-3-17-4-37 </updateTime>

  </metric>

  <metric>

    <name>Total service time</name>

    <service>TestService2</service>

    <metricValue>60</metricValue>

    <mdr>TestMDR1</mdr>

    <updateTime>2011-2-3-17-4-37 </updateTime>
```

```
</metric>

<metric>

    <name>Total service time</name>

    <service>TestService2</service>

    <metricValue>24</metricValue>

    <mdr>TestMDR2</mdr>

    <updateTime>2011-2-3-17-4-37 </updateTime>

</metric>

<metric>

    <name>Total downtime</name>

    <service>TestService1</service>

    <metricValue>61</metricValue>

    <mdr>TestMDR1</mdr>

    <updateTime>2011-2-3-17-4-37 </updateTime>

</metric>

<metric>

    <name>Total downtime</name>

    <service>TestService1</service>

    <metricValue>82</metricValue>

    <mdr>TestMDR2</mdr>

    <updateTime>2011-2-3-17-4-37 </updateTime>

</metric>

<metric>

    <name>Total downtime</name>

    <service>TestService2</service>

    <metricValue>3</metricValue>

    <mdr>TestMDR1</mdr>

    <updateTime>2011-2-3-17-4-37 </updateTime>
```

```
</metric>
<metric>
  <name>Total downtime</name>
  <service>TestService2</service>
  <metricValue>9</metricValue>
  <mdr>TestMDR2</mdr>
  <updateTime>2011-2-3-17-4-37 </updateTime>
</metric>
</Resource-Metric>
```

Setting Indicator Data

The following web service call sets indicator data for three different users (user1@test.com, user2@test.com and user3@test.com). If the user does not exist then the user will be created. In this example the three users belong to the same organization (TestOrg). These three users are sending in data for the same survey (TestSurvey). You will notice that user2 is sending in indicator data for a different service. So, in the xml body, each of the user's responses may be for a different service. For the indicator data specified, the name of the indicator, its value, and the time of when the survey retrieved the information is provided.

https://smi.cloudcommons.com:8443/Insight_API/json/SMI/0.5/setIndicator?key=98ce4910fc7f6fdb7af270ea9b3162b6&secret=eafe362499eacad24b3092ec12853590&xmlData=

```
<Resource-Survey>

  <organization>TestOrg</organization>

  <survey>TestSurvey</survey>

  <User-Answers>

    <user>User1@test.com</user>

    <service>TestService1</service>

    <indicator>

      <name>Suitability_ind0ne</name>

      <indicatorValue>9</indicatorValue>

      <updateTime>2011-3-11-16-1-3</updateTime>

    </indicator>

    <indicator>

      <name>Interoperability_ind0ne</name>

      <indicatorValue>0</indicatorValue>

      <updateTime>2011-3-11-16-1-3</updateTime>

    </indicator>

    <indicator>

      <name>Availability_measure_ind0ne</name>

      <indicatorValue>9</indicatorValue>

      <updateTime>2011-3-11-16-1-3</updateTime>
```

```
</indicator>

<indicator>
    <name>Operability_indOne</name>
    <indicatorValue>3</indicatorValue>
    <updateTime>2011-3-11-16-1-3</updateTime>
</indicator>
</User-Answers>
<User-Answers>
    <user>User2@test.com</user>
    <service>TestService1</service>
    <indicator>
        <name>Suitability_indOne</name>
        <indicatorValue>4</indicatorValue>
        <updateTime>2011-3-11-16-1-3</updateTime>
    </indicator>
    <indicator>
        <name>Interoperability_indOne</name>
        <indicatorValue>3</indicatorValue>
        <updateTime>2011-3-11-16-1-3</updateTime>
    </indicator>
    <indicator>
        <name>Availability_measure_indOne</name>
        <indicatorValue>3</indicatorValue>
        <updateTime>2011-3-11-16-1-3</updateTime>
    </indicator>
    <indicator>
        <name>Operability_indOne</name>
        <indicatorValue>6</indicatorValue>
```

```
        <updateTime>2011-3-11-16-1-3</updateTime>
    </indicator>
</User-Answers>
<User-Answers>
    <user>User3@test.com</user>
    <service>TestService1</service>
    <indicator>
        <name>Suitability_ind0ne</name>
        <indicatorValue>0</indicatorValue>
        <updateTime>2011-3-11-16-1-3</updateTime>
    </indicator>
    <indicator>
        <name>Interoperability_ind0ne</name>
        <indicatorValue>3</indicatorValue>
        <updateTime>2011-3-11-16-1-3</updateTime>
    </indicator>
    <indicator>
        <name>Availability_measure_ind0ne</name>
        <indicatorValue>2</indicatorValue>
        <updateTime>2011-3-11-16-1-3</updateTime>
    </indicator>
    <indicator>
        <name>Operability_ind0ne</name>
        <indicatorValue>2</indicatorValue>
        <updateTime>2011-3-11-16-1-3</updateTime>
    </indicator>
</User-Answers>
</Resource-Survey>
```


Chapter 15: Return Codes and Messages

Upon a successful return of the web service you may see a number of different success related messages. The return code will be 0 upon a success.

This section contains the following topics:

[Status Code and Messages for Resulting Format](#) (see page 147)

[Status Codes and Messages for SMI](#) (see page 148)

[Status Codes and Messages for Version](#) (see page 148)

[Status Codes and Messages for Authorization, APIkey and Secret](#) (see page 148)

[Status Codes and Messages for Input Parameters](#) (see page 149)

[Status Codes and Messages for Configuration Errors](#) (see page 153)

[Properties Used for Logging Purposes](#) (see page 154)

Status Code and Messages for Resulting Format

The following status codes and messages display for resulting format.

Return Code	Message
INVALID_FORMAT_REQUEST_ERROR	101
INVALID_NULL_FORMAT_REQUEST_ERROR	102
INVALID_FORMAT_REQUEST_MESSAGE	You have requested invalid result format, please specify valid format. (API has these formats: XML, JSON, USM and Java Object).
INVALID_NULL_FORMAT_REQUEST_MESSAGE	You have requested invalid result format as null, please specify valid format. (API has these formats: XML, JSON, USM and Java Object).
INVALID_FORMAT_REQUEST_ERROR_REASON	You have requested invalid result format that is not available in application.
INVALID_NULL_FORMAT_REQUEST_ERROR_REASON	You have requested invalid resulting format as null that is not available in application.

Status Codes and Messages for SMI

The following status codes and messages display for SMI.

Return Code	Message
INVALID_SMI_ERROR	104
INVALID_SMI_MESSAGE	Please put SMI or smi in url.
INVALID_SMI_REASON	Invalid string.

Status Codes and Messages for Version

The following status codes and messages display for SMI.

Return Code	Message
INVALID_VERSION_ERROR	105
INVALID_VERSION_MESSAGE	Please input valid version number.
INVALID_VERSION_ERROR_REASON	Version is not available.

Status Codes and Messages for Authorization, APIkey and Secret

The following status codes and messages display for authorization, APIkey, and secret.

Return Code	Message
APIKEY_NULL_ERROR	106
APIKEY_NULL_MESSAGE	Invalid Key value.
APIKEY_NULL_REASON	Key value is missing.
SECRET_NULL_ERROR	107
SECRET_NULL_MESSAGE	Invalid Secret value.
SECRET_NULL_REASON	Secret value is missing
AUTHENTICATION_FAIL_ERROR	108
AUTHENTICATION_FAIL_MESSAGE	Un-Authorized to access this application, please check authentication details.
AUTHENTICATION_FAIL_REASON	The key and secret are not matched.

AUTHENTICATION_ADMIN_FAIL_REASON	You are not authorized to access this web service, only administrator can access this web service.
AUTHENTICATION_REGISTER_FAIL_REASON	You are not authorized to access this web service, only registration user can access this web service.
AUTHENTICATION_ADMINORPUB_FAIL_REASON	You are not authorized to access this web service, only public user or administrator can access this web service.
AUTHENTICATION_RE_REGISTER_FAIL_REASON	This name was not previously registered. Only the registered user can perform the re-registration service.

Status Codes and Messages for Input Parameters

The following status codes and messages display for input parameters

Return Code	Message
INVALID_NUMBER_ERROR	109
INVALID_NUMBER_MESSAGE	You have entered invalid parameter value
INVALID_CHILD_INFO_ERROR	110
INVALID_CHILD_INFO_MESSAGE	Please input valid child info value as true or false.
INVALID_CHILD_INFO_REASON	Invalid child info value.
INVALID_URL_PARAM_ERROR	111
INVALID_URL_PARAM_MESSAGE	Invalid URL Request.
INVALID_URL_PARAM_REASON	You have entered invalid parameter value(s);
NUMBER_FORMAT_ERROR	112
NUMBER_FORMAT_MESSAGE	Invalid parameter value entered
NUMBER_FORMAT_REASON	Unable to convert string into integer, please enter valid value.
INVALID_CHAR_IN_STRING_ERROR	113
INVALID_CHAR_IN_STRING_MESSAGE	Please put valid characters in
INVALID_CHAR_IN_STRING_REASON	Special character(s) found in
INVALID_ENCRYPT_DECRPIT_STRING_ERROR	114
INVALID_ENCRYPT_STRING_MESSAGE	Unable to encrypt the key.
INVALID_DECRYPT_STRING_MESSAGE	Unable to decrypt the key.
INVALID_SORT_STRING_ERROR	115
INVALID_SORT_STRING_MESSAGE	Invalid sort parameter request.

INVALID_SORT_STRING_REASON	Please input a valid value.
INVALID_SORT_NOT_AVAILABLE_ERROR	116
INVALID_SORT_NOT_AVAILABLE_MESSAGE	Sorting not available.
INVALID_SORT_NOT_AVAILABLE_REASON	API has implementation of sorting mechanism over these web services
SERVICE_APPROVE_ERROR	117
SERVICE_APPROVE_MESSAGE	Service request cannot proceed.
SERVICE_ALREADY_APPROVED	Requested service already approved.
MDR_APPROVE_ERROR	118
MDR_APPROVE_MESSAGE	MDR approval request cannot proceed.
MDR_ALREADY_APPROVED	Requested MDR already approved.
XML_DATA_MISSING_ERROR	119
XML_DATA_MISSING_MESSAGE	Undefined value for XML tag
XML_DATA_MISSING_REASON	Please provide valid data.
XML_TAG_MISSING_ERROR	120
XML_TAG_MISSING_MESSAGE	Invalid XML found! Tags are not defined properly.
XML_TAG_MISSING_REASON	Please add the tag.
INVALID_XML_ERROR	121
INVALID_XML_MESSAGE	Invalid XML data found.
INVALID_XML_METRIC_REASON	Please enter valid XML data with at least one root node. For example <code>\n<Resource-Metric>\n\t<metric>\n\t\t<name>Metric Name</name>\n\t\t<service>Service Name</service>\n\t\t<mdr>MDR Name</mdr>\n\t\t<metricValue>10</metricValue>\n\t\t<updateTime>yyyy-mm-dd-hh-mm-ss</updateTime>\n\t</metric>\n</Resource-Metric></code>
INVALID_XML_INDICATOR_REASON	Please enter valid XML data with at least one root node. For example <code>\n<Resource-Survey>\n\t<User-Answers>\n\t\t<user>User Name</user>\n\t\t<service>Service Name</service>\n\t\t<organization>Organization Name</organization>\n\t\t<indicator>\n\t\t\t<name>Indicator Name</name>\n\t\t\t<indicatorValue>60</indicatorValue>\n\t\t\t<updateTime>yyyy-mm-dd-hh-mm-ss</updateTime>\n\t\t</indicator>\n\t\t<survey>Survey Name</survey>\n\t</User-Answers>\n</Resource-Survey></code>

INVALID_XML_DEMOGRAPHIC_REASON	Please enter valid XML data with at least one root node. For example <pre>\n<Demographic>\n\t<Version>8.0</Version>\n\t<Criteria>\n\t\t<Category>Category Name</Category>\n\t\t<Company_Size>600-10000 employees</Company_Size>\n\t\t<Company_Revenue>Revenue</Company_Revenue>\n\t\t<Company_Zipcode>nnnnn</Company_Zipcode>\n\t\t<Company_Industry>Industry</Company_Industry>\n\t\t<Company_Country>United_States</Company_Country>\n\t\t<Criteria>\n\t\t\t<Services>Service Name</Services>\n</Demographic></pre>
REQ_DATA_DOES_NOT_EXIST_XML_ERROR	122
METRIC_DOES_NOT_EXIST_XML_MESSAGE	Requested metric does not exist in SMI DB. Please try with existing metric name.
METRIC_DOES_NOT_EXIST_XML_REASON	Metric is not found in SMI DB.
METRICS_DOES_NOT_EXIST_XML_MESSAGE	Requested metric(s) does not exist in SMI DB. Please try with existing metrics.
METRICS_DOES_NOT_EXIST_XML_REASON	Metric(s) are not found in SMI DB
INDICATOR_DOES_NOT_EXIST_XML_MESSAGE	Requested indicator(s) does not exist in SMI DB. Please try with existing indicators.
INDICATOR_DOES_NOT_EXIST_XML_REASON	Indicator(s) are not found in SMI DB.
SERVICE_DOES_NOT_EXIST_XML_MESSAGE	Requested service(s) does not exist in SMI DB. Please try with existing services.
SERVICE_DOES_NOT_EXIST_XML_REASON	Service(s) are not found in SMI DB.
UPDATE_TIME_PARSE_ERROR	123
UPDATE_TIME_PARSE_MESSAGE	Update Time format not supported.
UPDATE_TIME_PARSE_REASON	Time stamp for the update time is invalid, Please try with format: yyyy-MM-dd-HH-mm-ss.
MISSING_VALUE_ERROR	124
MISSING_VALUE_MESSAGE	Invalid or Missing value found in request.
MISSING_VALUE_REASON	Unable to process the request, Please input validate entry for the parameter.
MDR_DOES_NOT_EXIST_ERROR	125
MDR_DOES_NOT_EXIST_MESSAGE	Requested MDR does not exist in SMI DB. Please try with existing MDR name.
MDR_DOES_NOT_EXIST_REASON	MDR is not found in SMI DB.
SERVICE_DOES_NOT_EXIST_ERROR	126

SERVICE_DOES_NOT_EXIST_MESSAGE	Requested service does not exist in SMI DB or you are not the creator.
SERVICE_DOES_NOT_EXIST_REASON	Requested service does not exist in SMI DB or you are not the creator.
INVALID_IS_REQUIRED_ERROR	127
INVALID_IS_REQUIRED_MESSAGE	Invalid value found for isRequired parameter.
INVALID_IS_REQUIRED_REASON	Please input valid value for isRequired parameter as true or false. It's default value is true.
INVALID_URL_IN_STRING_ERROR	128
INVALID_URL_IN_STRING_MESSAGE	Please put valid URL in parameter.
INVALID_URL_IN_STRING_REASON	The URL format is incorrect.
ORG_DOES_NOT_EXIST_ERROR	129
ORG_DOES_NOT_EXIST_MESSAGE	Requested organization does not exist in SMI DB. Please try with existing organization.
ORG_DOES_NOT_EXIST_REASON	Organization is not found in SMI DB.
SURVEY_DOES_NOT_EXIST_ERROR	130
SURVEY_DOES_NOT_EXIST_MESSAGE	Requested survey does not exist in SMI DB. Please try with existing survey.
SURVEY_DOES_NOT_EXIST_REASON	Survey is not found in SMI DB.
INVALID_REJECT_ERROR	131
INVALID_REJECT_MESSAGE	Please input valid reject value as true or false.
INVALID_REJECT_REASON	Invalid reject value.
CAPABILITY_DOES_NOT_EXIST_ERROR	132
CAPABILITY_DOES_NOT_EXIST_REASON	Requested capability does not exist in SMI DB. Please try with existing capability.
CAPABILITY_DOES_NOT_EXIST_MESSAGE	Capability is not found in SMI DB.
CATEGORY_DOES_NOT_EXIST_ERROR	133
CATEGORY_DOES_NOT_EXIST_REASON	Requested category does not exist in SMI DB. Please try with existing category.
CATEGORY_DOES_NOT_EXIST_MESSAGE	Category is not found in SMI DB.
NOT_AUTHORIZED_ERROR	134
NOT_AUTHORIZED_REASON	The resource that you are trying to update is not owned by the user which you are using to update.
NOT_AUTHORIZED_MESSAGE	Not authorized to update this resource.
INVALID_EMAIL_IN_STRING_ERROR	135

INVALID_EMAIL_IN_STRING_MESSAGE	Please put valid email address in parameter.
INVALID_EMAIL_IN_STRING_REASON	The email address format is incorrect.
MISS_URL_PARAM_ERROR	136
MISS_URL_PARAM_MESSAGE	Invalid URL Request.
MISS_URL_PARAM_REASON	You missed some required parameter value(s):
DEMOGRAPHICSCORE_NOT_COMPLETE_MESSAGE	The demographic score calculation you requested is not complete
RUN_ON_GLOBAL_DB_ERROR	137
RUN_ON_GLOBAL_DB_MESSAGE	The DB type is incorrect.
RUN_ON_GLOBAL_DB_REASON	This service runs on global DB only, your back end is local DB.
DEMOGRAPHICSCORE_NOT_FOUND_MESSAGE	The demographic score request id is not found.
DATA_ALREADY_EXIST_ERROR	150
DATA_ALREADY_EXIST_MESSAGE	Requested data has already exist in SMI DB.
DATA_ALREADY_EXIST_REASON	Data has been found in SMI DB.
PROVIDER_DOES_NOT_EXIST_ERROR	151
PROVIDER_DOES_NOT_EXIST_MESSAGE	Requested PROVIDER does not exist in SMI DB. Please try with existing PROVIDER.
PROVIDER_DOES_NOT_EXIST_REASON	PROVIDER is not found in SMI DB.

Status Codes and Messages for Configuration Errors

The following status codes and messages display for configuration errors.

Return Code	Message
CONF_FILE_NOT_FOUND_ERROR	200
CONF_FILE_READING_ERROR	201
CONF_FILE_PROPERTY_ERROR	202
CONF_FILE_NOT_FOUND_MESSAGE	Configuration file not found, please check configuration file.
CONF_FILE_READING_ERROR_MESSAGE	Unable to read Configuration file, please check configuration file.
AUTHENTICATION_PROPERTY_MESSAGE	Invalid configuration file setup.
AUTHENTICATION_PROPERTY_REASON	"authorization" property is missing, please check configuration file.

Properties Used for Logging Purposes

The following properties are used for logging purposes and are not related to the above error codes.

Property	Description
PROPERTY_FOUND	Property found successfully.
PROPERTY_NOT_FOUND	Property not found.