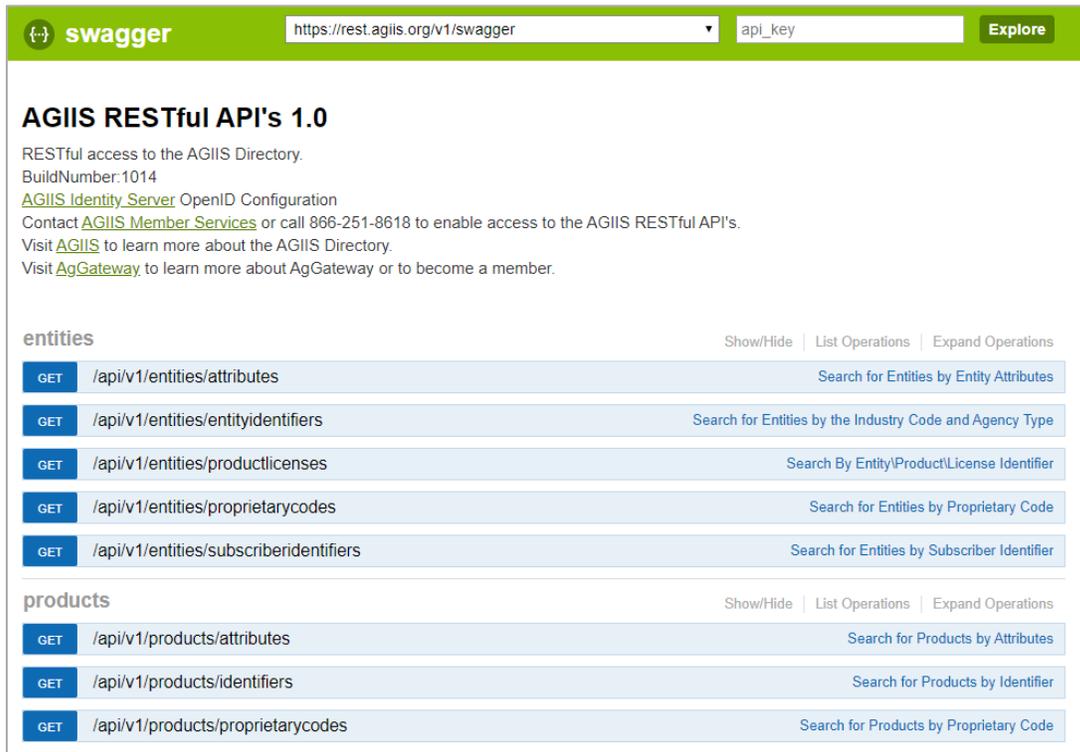


## Using AGIIS REST API with Swagger

Use the following steps to use the AGIIS RESTful API's to perform a Product Search by GTIN using SWAGGER.

### Steps

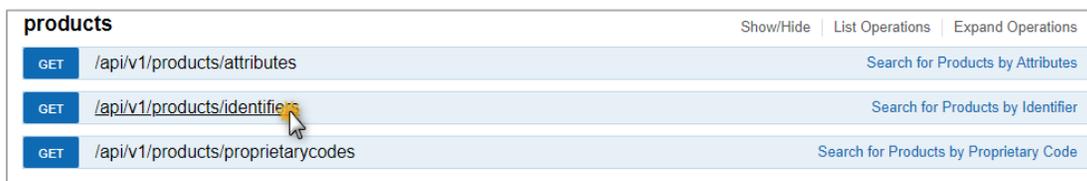
1. Open the url <https://rest.agiis.org/swagger/ui/index>. The SWAGGER documentation page will appear.



The screenshot shows the Swagger UI interface for the AGIIS RESTful API's 1.0. The page title is "AGIIS RESTful API's 1.0" and it provides RESTful access to the AGIIS Directory. The interface includes a search bar with the URL "https://rest.agiis.org/v1/swagger" and an "api\_key" field. Below the header, there are two main sections: "entities" and "products". Each section lists several API endpoints with their respective HTTP methods and descriptions. The "products" section is highlighted, and the "GET /api/v1/products/identifiers" endpoint is selected.

Method	Endpoint	Description
GET	/api/v1/entities/attributes	Search for Entities by Entity Attributes
GET	/api/v1/entities/entityidentifiers	Search for Entities by the Industry Code and Agency Type
GET	/api/v1/entities/productlicenses	Search By Entity/Product/License Identifier
GET	/api/v1/entities/proprietarycodes	Search for Entities by Proprietary Code
GET	/api/v1/entities/subscriberidentifiers	Search for Entities by Subscriber Identifier
<b>products</b>		
GET	/api/v1/products/attributes	Search for Products by Attributes
GET	/api/v1/products/identifiers	Search for Products by Identifier
GET	/api/v1/products/proprietarycodes	Search for Products by Proprietary Code

2. For this example, click on the "GET /api/v1/products/identifiers" section to Search for Products by Identifier



This close-up screenshot shows the "products" section of the Swagger UI. The "GET /api/v1/products/identifiers" endpoint is highlighted, and a mouse cursor is pointing at it. The other endpoints in the section are "GET /api/v1/products/attributes" and "GET /api/v1/products/proprietarycodes".

Method	Endpoint	Description
GET	/api/v1/products/attributes	Search for Products by Attributes
GET	/api/v1/products/identifiers	Search for Products by Identifier
GET	/api/v1/products/proprietarycodes	Search for Products by Proprietary Code

- This will open to display more information about this API, showing a description, the input parameters, responses, and a web-based form that can be used to test various inputs and display results.

products Show/Hide | List Operations | Expand Operations

**GET** /api/v1/products/attributes Search for Products by Attributes

**GET** /api/v1/products/identifiers Search for Products by Identifier

Implementation Notes

Search for Products by Identifier

[AGIS Identity Server](#) - Required Scope: agisrest

Response Class (Status 200) !

OK

Model | Example Value

```
{
  "value": [
    {
      "id": 0,
      "correlationId": "string",
      "gtin": "string",
      "body": {
        "productSearchOutboundDetails": [
          {
            "companyInformation": {
              "contactName": "string"
            }
          }
        ]
      }
    }
  ]
}
```

Response Content Type

Parameters

Parameter	Value	Description	Parameter Type	Data Type
GTIN	<input type="text"/>	GTIN Identifier (e.g. '90410000002769'). The 14 digit GTIN uniquely identifies the package configuration for the search. The GTIN can be supplied with or without hyphens.	query	string

- Before a search is initiated the REST API must be authenticated. Click on the red exclamation button.

Implementation Notes

Search for Products by Identifier

[AGIS Identity Server](#) - Required Scope: agisrest

Response Class (Status 200)

OK

Model | Example Value

```
{
  "value": [
```

5. A pop-up window will appear. Select “**Basic auth**” in the dropdown list. Then enter your user name and password. Click the **Authorize** button.

Available authorizations

OAuth2.0

Client Credentials Grant Flow

Token URL: <https://identity.agiis.org/connect/token>

flow: application

Setup client authentication.

Type: **Basic auth**

ClientId: AGISRESTCLIENTID

Secret: [masked]

API requires the following scopes. Select which ones you want to grant to Swagger UI.

Scopes are used to grant an application different levels of access to data on behalf of the end user. Each API may declare one or more scopes. [Learn how to use](#)

Authorize

Cancel

6. Wait momentarily for the page to refresh.

If authorization succeeds a **blue** exclamation button will appear indicating *authentication succeeded*.

Implementation Notes

Search for Products by Identifier

[AGIS Identity Server](#) - Required Scope: agisrest

Response Class (Status 200)

OK

Model	Example Value
	<pre>{   "value": [     ] }</pre>

7. Test the Product Search by Identifiers by typing in a GTIN value, 9041000002769

The screenshot shows a web interface with a 'Parameters' section. At the top, there is a dropdown menu for 'Response Content Type' set to 'application/json'. Below it, the 'Parameters' section contains a table with the following data:

Parameter	Value	Description	Parameter Type	Data Type
GTIN	9041000002769	GTIN Identifier (e.g. '9041000002769'). The 14 digit GTIN uniquely identifies the package configuration for the search. The GTIN can be supplied with or without hyphens.	query	string
EBID		EBID value (e.g. '1100044641678')	query	string
ProductIdentifier		Product Identifier (e.g. '280.00'). Searching by Product Identifier requires both that value and an identifier of the company (e.g.	query	string

8. Click the **Try it out!** button at the bottom of the section.

The screenshot shows a web interface with a 'Response Messages' section. At the top, there is a 'ReportingIdentifier' field. Below it, the 'Response Messages' section contains a table with the following data:

HTTP Status Code	Reason	Response Model	Headers
204	Search was successfully processed by the server but no results were found.		
400	Search was attempted by the server but no results were found due to invalid input. Check Response Value field for additional information such as input requirements, validation failures encountered, etc.		
404	The requested resource does not exist on the server. Check endpoint, server connection, URL construction for correct syntax.		
500	An Internal error occurred processing the request.		

At the bottom of the section, there is a 'Try it out!' button with a mouse cursor pointing to it.

9. Scroll down the page and find the “Response Body”. There will be a JSON search result with 2 main sections, “header” and “body”. The search results will be contained in the “body” section. Scroll down in the “Response Body” to the “body” section and view the search results. Notice in the “Response Code” section a 200 value. This indicates a search result found.

Try it out! [Hide Response](#)

**Curl**

```
curl -X GET --header 'Accept: application/json' --header 'Authorization: Bearer eyJhbGciOiJSUzI1NiIsInR5cCI6IkpXVCJ9.eyJ1bmYiOiJlN...
```

**Request URL**

```
https://rest.agiis.org/api/v1/products/identifiers?GTIN=9041000002769
```

**Response Body**

```
{
  "thisDocumentDateTime": {
    "dateTime": {
      "dateTimeQualifier": "On",
      "value": "20191126T124847"
    }
  },
  "from": {
    "partnerInformation": {
      "partnerName": "CSC",
      "partnerIdentifier": {
        "agency": "EBID",
        "value": "1324108090000"
      }
    },
    "contactInformation": {
      "contactName": "AGIIS Member Services",
      "emailAddress": "helpdesk@agiis.org",
      "telephoneNumber": {
        "nationalTelephoneNumber": "(866)251-8618"
      }
    }
  }
}
```

**Response Code**

```
200
```

**Response Headers**

```
{
  "api-supported-versions": "1.0",
}
```

10. Simulate a not found search result by inputting a GTIN value that does not exist, for example 9041000002760. Click the “Try it out!” button and look at the “Response Body” and “Response Code”. Notice the “Response Code” value.

11. The Response section details the Status Codes(other than 200 OK) that can be returned

Response Messages		
HTTP Status Code	Reason	Response Model
204	Search was successfully processed by the server but no results were found.	
400	Search was attempted by the server but no results were found due to invalid input. Check Response Value field for additional information such as input requirements, validation failures encountered, etc.	
404	The requested resource does not exist on the server. Check endpoint, server connection, URL construction for correct syntax.	
500	An Internal error occurred processing the request.	

[Try it out!](#) [Hide Response](#)

12. Try a product search with no parameters. Notice the “Response Code” and the **Value** in the Response Body indicates a missing parameter.

[Try it out!](#) [Hide Response](#)

**Curl**

```
curl -X GET --header 'Accept: application/json' --header 'Authorization: Bearer eyJhbGciOiJSUzI1NiIsInR5cCI6IkpXVCJ9.eyJ1bmViojE1N
```

**Request URL**

```
https://rest.agiis.org/api/v1/products/identifiers
```

**Response Body**

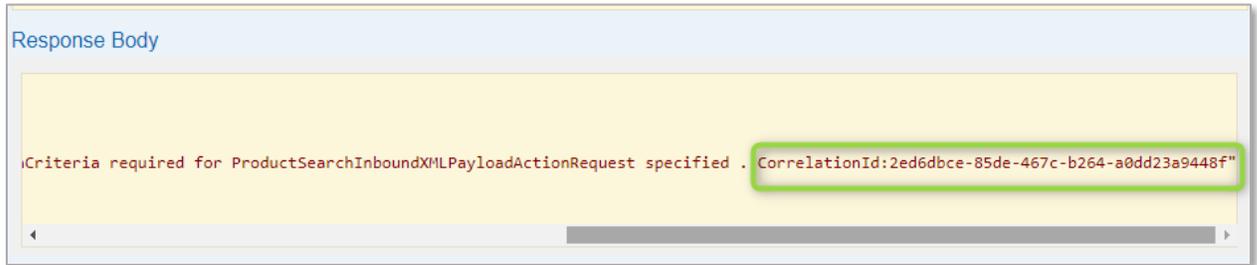
```
{
  "@odata.context": "https://rest.agiis.org/api/v1/$metadata#Edm.String",
  "value": "Error: Required XML element for operation requested is missing. XML Element: ProductSearchCriteria required for Pro
}
```

**Response Code**

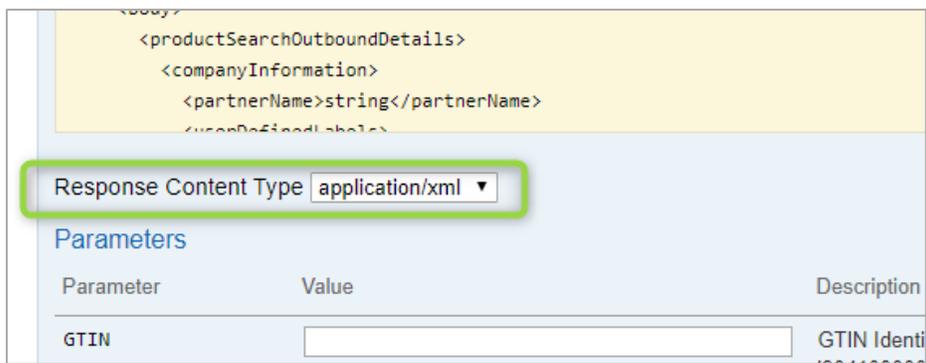
```
400
```

13. NOTE: The **Value** in the response will contain more information regarding the search results and can be used to determine why no search results were returned.

14. A unique **CorrelationId** for this specific API call will also be included and can be used in reference and for troubleshooting with end users.



15. To receive an XML search response instead of a JSON formatted response, select the "Response Content Type" dropdown list, "application/xml", then click the "Try it out!" button.



## Additional References

The AGIIS Identity Server configuration can be accessed at <https://identity.agiis.org/.well-known/openid-configuration>.

If you need assistance, please contact the AGIIS help desk at 866-251-8618 or email at [member.services@agateway.org](mailto:member.services@agateway.org).