



Feature at a Glance

Master Data Retrieval API

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Target GA: November, 2020

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Feature at a Glance

Introducing: Master Data Retrieval API

Ease of implementation  High-Touch
Geographic relevance  Global

Customer challenge

Today, SAP Ariba allows customers to load master data into their SAP Ariba systems, but there is no way to extract this information via a REST API to ensure that it is in sync with other cloud solutions that use this data.

Meet that challenge with

SAP Ariba

This feature introduces the Master Data Retrieval API to read data that has been consumed by the Master Data Service database. Using this REST API customers can retrieve master data from their site to and use it to ensure other sites are aligned. They can create a client application on the SAP Ariba Developer Portal and use it to call the API, filter the master data, and download it.

Experience key benefits

With this feature, customers can pull master data using a REST API to ensure the data matches and is up to date in all systems. This data is returned in a near real time fashion and has many filters that can be added to pull only the exact data you are looking for. This is being leveraged to check that the master data from SAP Ariba can be used in SAP Fieldglass as an example.

Solution area

- SAP Ariba APIs
- SAP Ariba developer portal
- SAP Ariba Buying and Invoicing
- SAP Ariba Buying
- SAP Ariba Invoice Management
- SAP Ariba Sourcing
- SAP Ariba Sourcing
- SAP Ariba Contracts
- SAP Ariba Supplier Lifecycle and Performance
- SAP Ariba Strategic Sourcing Suite

Implementation information

This feature is automatically on for all customers with the applicable solutions but requires **customer configuration**.

Prerequisites and Restrictions

- In order to create an application and request access to use the SAP Ariba APIs relevant to this feature, you must have access to the SAP Ariba developer portal. For details see “Steps to begin using the SAP Ariba APIs” in the help for The SAP Ariba Developer Portal.
- All queries made to this API must be authenticated using OAuth authentication. For details see “Developer Portal Authentication” in the help for The SAP Ariba Developer Portal.

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Detailed feature information

(sample calls below are specific to the US datacenter. Please consult the developer portal to find your appropriate runtime URL for other datacenters.)

Workflow

1. The SAP Ariba solution logs master data in the master data service.
2. The client application sends a request to retrieve all available master data entities, passing the locale and the realm for which the master data entities need to be retrieved in the request header.
 - Sample GET URL: <https://openapi.ariba.com/api/mds-search/v1/prod/entityTypes?realm=mytestrealm>
3. The client application can then drill into this master data using additional filters.
 - Sample GET URL: [https://openapi.ariba.com/api/mds-search/v1/prod/entities/companycodes?\\$top=100&\\$skip=0&\\$orderby=UniqueName,PasswordAdapter&\\$includeInactive=false&\\$includeFlexFields=true&\\$count=true&\\$includeNullValues=true](https://openapi.ariba.com/api/mds-search/v1/prod/entities/companycodes?$top=100&$skip=0&$orderby=UniqueName,PasswordAdapter&$includeInactive=false&$includeFlexFields=true&$count=true&$includeNullValues=true)

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Detailed feature information – Endpoints

1. **GET/entityTypes** – Fetches all possible entity types in the Master Data Service to query upon.
2. **GET/entityTypes/{entityName}** – Fetches metadata for a specific entity.
3. **GET/entities/{entityName}** – Searches an entity based on specified filters and returns the data.
4. **GET/entities/{entityName}\$/count** – Counts the number of results that will be returned.

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Detailed feature information – Query Parameters

Query Parameters

1. **\$EntityName** - The name of the master data entity for which master data details need to be retrieved.
2. **\$select** - The fields needed in the output. Multiple fields can be specified as comma separated values.
3. **\$expand** - The entities to be expanded. Multiple entities can be specified as comma separated values. Expansion is supported only at the first level of association. For one-to-one associations, all direct fields will be expanded. For one-to-many associations, only key fields will be expanded.
4. **\$filter** - The OData filter criteria to identify the details to retrieve for the specified master data entity. The filter supports the use of all the fields supported in \$select, in the query.
5. **\$top** - The number of records to be returned in the response.
6. **\$skip** - The number of records to be skipped from the beginning of the search results.
7. **\$orderby** - The field of the master data entity, based on which the results will be ordered.
8. **\$includeInactive** - Includes all the inactive records also in the output. The default value is false.
9. **\$includeFlexFields** - Includes all the flex fields in the output. The default value is false.
10. **\$count** - Includes count in the output along with data, if set to true.
11. **\$includeNullValues** - Includes attributes in the response, even if those attributes do not have values.

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Detailed feature information – Sample output

GET ▼ https://openapi.ariba.com/api/mds-search/v1/prod/entityTypes?

Params ● Authorization ● Headers (11) Body Pre-request Script

Body Cookies (1) Headers (28) Test Results

Pretty Raw Preview Visualize JSON ▼ ↻

```
2 {
3   "EntityName": "groups",
4   "Name": "Group"
5 },
6 {
7   "EntityName": "users",
8   "Name": "User"
9 },
10 {
11   "EntityName": "uoms",
12   "Name": "UnitOfMeasure"
13 },
14 {
15   "EntityName": "localeids",
16   "Name": "LocaleID"
17 }
```

GET ▼ https://openapi.ariba.com/api/mds-search/v1/prod/entities/users?\$filter=substringof(Unic

Params ● Authorization ● Headers (12) Body Pre-request Script Tests Settings

Body Cookies (1) Headers (27) Test Results 🌐 200 OK

Pretty Raw Preview Visualize JSON ▼ ↻

```
9 },
10   "Name_en": "Irene",
11   "SystemId": "AN01003217061-T",
12   "PasswordAdapter": "SourcingSupplierUser",
13   "TimeUpdated": "2015-09-28 06:42:16.0",
14   "EmailAddress": "istathis@ariba.com",
15   "Created": "2015-09-28 06:42:16.0",
16   "TimeCreated": "2015-09-28 06:42:16.0",
```

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Potential Use-Cases

- Customers may choose to read Master Data to ensure that it is in sync with other purchasing systems such as SAP Fieldglass.
- Customers may use the Master Data Retrieval API to automatically populate a user's accounting information when creating a requisition from a chatbot or external system.
- Master data can be read to allow systems to identify a user, for instance, if a customer's SSO to one site uses a different userID than what is in SAP Ariba, the Master Data API can be called using the user's email address to identify what userID needs to be used to identify them in SAP Ariba.

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SAP Ariba Extensibility Community

- Have questions about an API? The below link provides a forum for customers, partners, and SAP Ariba to:
 - Discuss potential use cases
 - Idea share
 - Ask and answer questions
 - View documentation on SAP Ariba APIs (as well as other extensibility features)
 - View and listen to videos and podcasts about SAP Ariba extensibility (APIs)
 - Find out more information on becoming an SAP Ariba Partner
 - Find out more about what types of extension applications partners are offering today
- <https://community.sap.com/topics/ariba-extensibility>