

04 Feb, 2025

Customer 360 SaaS APIs: Configuration, Integration, and Best Practices

- Marmik Mishra, Senior Software Engineer, GCS
- Ashish Kumar, Lead Technical Support Engineer, GCS

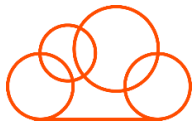
Where data & AI come to **LIFE**

Housekeeping Tips



- Today's Webinar is scheduled for **1 hour**
- The session will include a webcast and then your questions will be answered live at the end of the presentation
- All dial-in participants will be muted to enable the speakers to present without interruption
- Questions can be submitted to "All Panelists" via the **Q&A option** and we will respond at the end of the presentation
- The webinar is **being recorded** and will be available on our [Success Portal](#) - where you can download the **slide deck** for the presentation. The link to the recording will be emailed as well.
- Please take time to complete the **post-webinar survey** and provide your feedback and suggestions for upcoming topics.

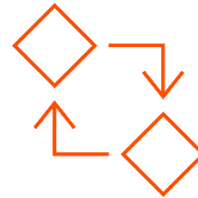
Feature Rich Success Portal



**Bootstrap trial and
POC Customers**



**Enriched Customer
Onboarding
experience**



**Product
Learning Paths
and Weekly
Expert Sessions**



**Informatica
Concierge**



**Tailored training
and content
recommendations**

More Information



Success Portal

<https://success.informatica.com>



Communities & Support

<https://network.informatica.com>



Documentation

<https://docs.informatica.com>



University

<https://www.informatica.com/in/services-and-training/informatica-university.html>

Safe Harbor

The information being provided today is for informational purposes only. The development, release, and timing of any Informatica product or functionality described today remain at the sole discretion of Informatica and should not be relied upon in making a purchasing decision.

Statements made today are based on currently available information, which is subject to change. Such statements should not be relied upon as a representation, warranty or commitment to deliver specific products or functionality in the future.



Comprehensive Overview of Business 360 REST API



Marmik Mishra

Senior Software Engineer



Ashish Kumar

Lead Technical Support Engineer

Where data & AI come to **LIFE**

Agenda

1 REST API Guidelines

3 Master and Source Record APIs

5 Merge and Unmerge APIs

7 Job Based APIs

2 Session ID APIs

4 Search and Search Match APIs

6 Relationships and Hierarchies APIs

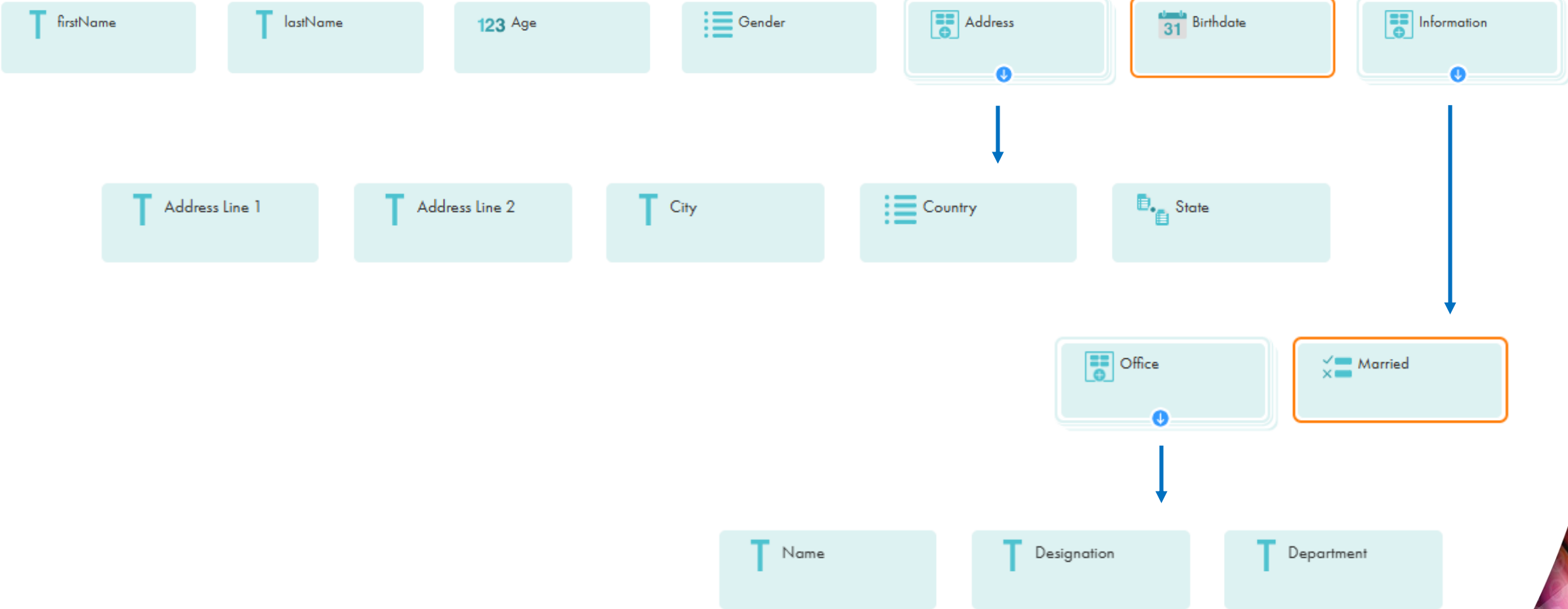
8 Best Practices around APIs and Search Before Create Example

REST API Guidelines

Consider the following guidelines when working with the Business 360 REST APIs:

- All resources and attributes are case sensitive.
- Request and response type is JSON by default.
- REST APIs aren't designed for batch operations due to performance impact.
- Performance depends on complexity & number of data quality rules.

Data model used as an example – A person's information



Person's Record in Source System

Person (Root) Details

| Field | Value |
|----------------------|---------------------------------|
| First Name | John |
| Last Name | Doe |
| Gender | Male |
| Age | 26 |
| Birthdate | 17th November 1998, 7:05 AM IST |
| Primary Key (Person) | 125 |

Information Child (Field Group) Details

| Field | Value |
|-------------|---------|
| Parent ID | 125 |
| Primary Key | I123456 |
| Married | Yes |

Address Child (Field Group) Details

| Field | Value |
|----------------|--------------|
| Parent ID | 125 |
| Primary Key | A123456 |
| Address Line 1 | 2100 |
| Address Line 2 | Seaport Blvd |
| City | Redwood City |
| State | California |
| Country | USA |

Office Grandchild (Nested Field Group) Details

| Field | Value |
|-------------|--------------------------|
| Parent ID | I123456 |
| Primary Key | O123456 |
| Name | Informatica |
| Designation | Senior Software Engineer |

Source Record vs Master Record

| Feature | Source Record | Master Record |
|--------------|--|--------------------------------------|
| Origin | External source systems (DB, ERP, CRM) | Derived from multiple source records |
| Data Quality | Raw and duplicated data | Cleansed, deduplicated and validated |
| Storage | XREF Collection | Master Collection |
| Uniqueness | May have duplicates of same entity | One consolidated version per entity |

Source Records :

| Source System | Customer Name | Email | Phone Number |
|----------------|---------------|--|--------------|
| CRM | John Doe | johndoe@example.com | 9876543210 |
| ERP | J. Doe | jdoe@example.com | 9876543210 |
| Support System | Jonathan Doe | johndoe@example.com | 987654321 |

Master Record (Golden) :

| Customer Name | Email | Phone Number |
|---------------|--|--------------|
| John Doe | johndoe@example.com | 9876543210 |

Multidomain MDM consolidates the variations and resolves conflicts to create a **single trusted record**.

Session ID API - Authentication

- HTTP authentication method to authenticate users.
- IDS-SESSION-ID header for subsequent requests.
- Expires in 30 minutes.

POST ▼ <https://dmp-us.informaticacloud.com/saas/public/core/v3/login>

Params Authorization Headers (11) **Body** ● Scripts Settings

none form-data x-www-form-urlencoded raw binary GraphQL

```
1
2 {
3   "username": "*****",
4   "password": "*****"
5 }
```

```
1 {
2   "products": [
3     {
4       "name": "Integration Cloud",
5       "baseApiUrl": "https://usw1.dmp-us.informaticacloud.com/saas"
6     }
7   ],
8   "userInfo": {
9     "sessionId": "4e6ug4yj9akjaD7eFye22u",
10    "id": "jBMD7TR4I6R1Vbfwp8zR8n",
11    "name": "marmik_june",
12    "parentOrgId": "1ImXZAYcZtSkNUChrww9UX",
13    "orgId": "hVAxYiTrIQdbcLdAsx9QA8",
14    "orgName": "Marmik Org",
15    "groups": {},
16    "status": "Active"
17  }
18 }
```

REST API Integration in MDM SaaS

Record exists in
Source

— Create same record in MDM —>

Create
Master/Source
Record

Master Create (POST)

- Use the business entity record APIs to create master records.
- Response contains businessId of the record created.

John Doe

Record Details

Source Records

Source Records | 1 of 1 source records

| John Doe Master Record Preview | John Doe Informatica Customer 360 |
|-----------------------------------|--------------------------------------|
| System Fields | |
| Business ID : 98765432 | 98765432 |
| ID : 679bbe273568b5... | 125 |

```
1 {
2   "approvalRequired": false,
3   "id": "98765432",
4   "businessId": "98765432"
5 }
```

POST <baseApiUrl> /business-entity/public/api/v1/entity/api_demo?sourceSystem=c360.default.system&sourcePKey=125&businessId=98765432

```
1 {
2   "firstname": "John",
3   "lastname": "Doe",
4   "age": 26,
5   "gender":
6     {
7       "Name": "Males",
8       "Code": "M"
9     },
10  "dateofbirth": 911289101000,
11  "address":
12    [
13      {
14        "_id": "A123456",
15        "address_line_1": "2100",
16        "address_line_2": "Seaport Blvd",
17        "city": "Redwood City",
18        "state": {
19          "Name": "California",
20          "Code": "CA"
21        },
22        "country": {
23          "Name": "United States",
24          "Code": "US"
25        }
26      }
27    ],
28  "information":
29    [
30      {
31        "_id": "I123456",
32        "married": true,
33        "office":
34          [
35            {
36              "_id": "O123456",
37              "name": "Informatica",
38              "designation": "Senior Software Engineer"
39            }
40          ]
41      }
42    ]
43 }
```

Master Create with Source Last Update Date

Add `_contentMeta` section in the body and define source last update to the root and field groups where Source LastUpdateDate is enabled

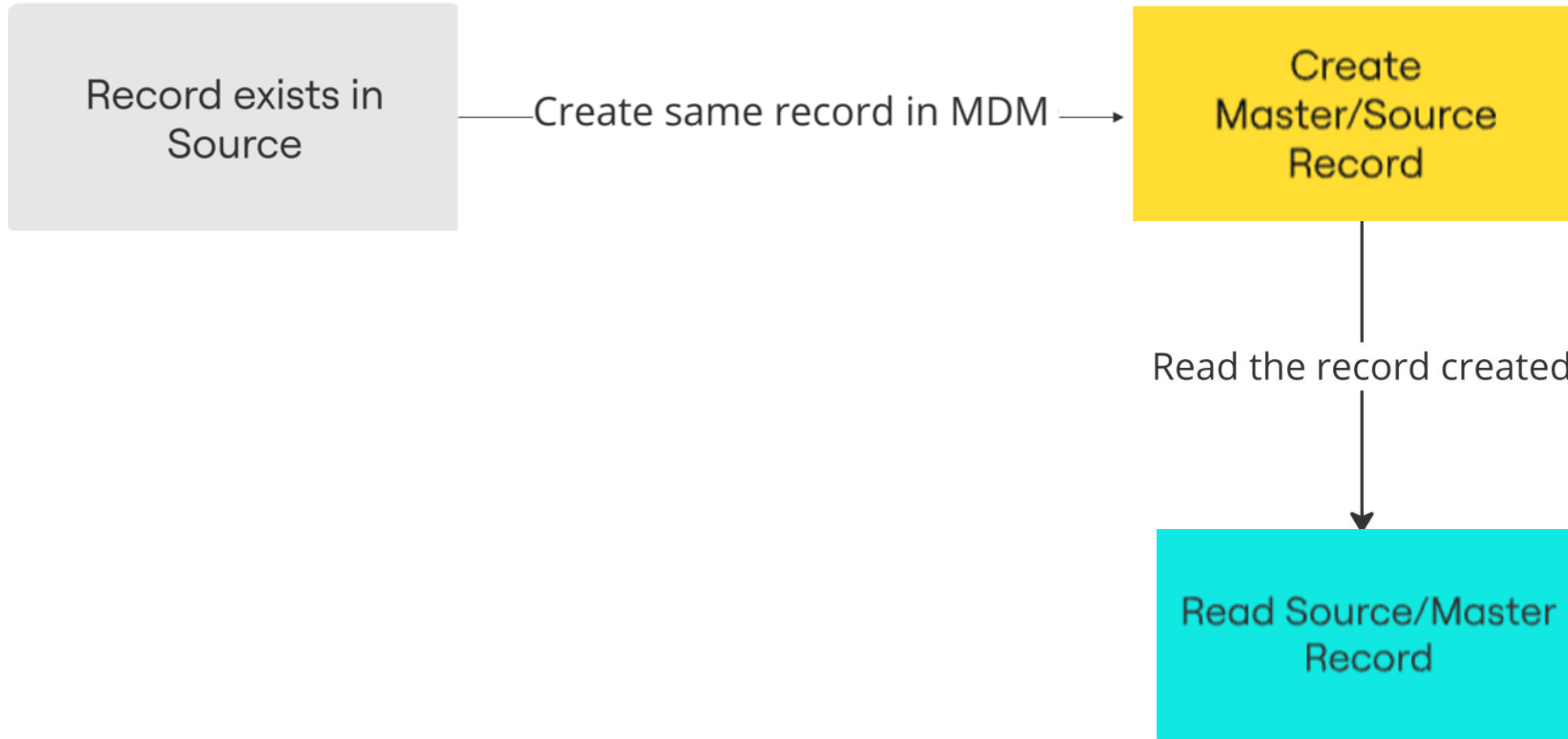
API Demo | Valid

The screenshot shows the Informatica Data Quality interface. At the top, there are tabs for 'Model', 'Data Flow', and 'Consumption'. Under 'Data Flow', there are sub-tabs for 'Data Quality', 'Match', 'Survivorship', and 'Events'. The 'Data Quality' tab is active, and the 'Address' field is selected. The 'Properties: Address' panel is open, showing the following configuration:

- General:** Display Name: Address
- Data Quality:** Internal ID: address
- Survivorship:** Description: (empty)
- Uniqueness Criteria:** This has been moved to the survivorship area and renamed Deduplication. [Go to Survivorship](#)
- Source Last Update Date:** Enable

```
23  "_contentMeta":{
24    "trust": {
25      "fieldData": [
26        {
27          "fieldRef": "/",
28          "sourceLastUpdateDate": 1735826392000
29        },
30        {
31          "fieldRef": "address[A1234]",
32          "sourceLastUpdateDate": 1735826392000
33        }
34      ]
35    }
36  }
37 }
```

REST API Integration in MDM SaaS



Master Read API (GET) by businessId or sourcePkey

- To retrieve master record via sourcePkey

GET <baseApiURL>/business-entity/public/api/v1/entity/api_demo/c360.default.system/125

```
1  {
2    "firstname": "John",
3    "lastname": "Doe",
4    "age": 26,
5    "dateofbirth": 911289101000,
6    "gender": {
7      "Code": "M",
8      "Name": "Males"
9    },
10   "address": [
11     {
12       "_id": "A123456",
13       "address_line_1": "2100",
14       "address_line_2": "Seaport Blvd",
15       "city": "Redwood City",
16       "state": {
17         "Code": "CA",
18         "Name": "California"
19       },
20       "country": {
21         "Code": "US",
22         "Name": "United States"
23       }
24     }
25   ]
26 }
```

- To retrieve master record via BID

GET <baseApiURL>/business-entity/public/api/v1/**entity**/api_demo/98765432

```
26   "information": [
27     {
28       "_id": "I123456",
29       "married": true,
30       "office": [
31         {
32           "_id": "O123456",
33           "name": "Informatica",
34           "designation": "Senior Software Engineer"
35         }
36       ]
37     }
38   ],
39   "_meta": {
40     "id": "98765432",
41     "businessEntity": "api_demo",
42     "businessId": "98765432",
43     "state": "ACTIVE",
44     "validation": "PENDING",
45     "consolidation": "MATCH_INDEXED",
46     "createdBy": "marmik_june",
47     "creationDate": 1738260007651,
48     "updatedBy": "marmik_june",
49     "lastUpdateDate": 1738260007651
50   }
51 }
```

Master Read - GET Response showContentMeta

- To fetch metadata associated with the record such as trust score.
- Default is false.
- **GET** <baseApiURL>/business-entity/public/api/v1/entity/api_demo/98765432?_showContentMeta=true

```
34     "_contentMeta": {
35         "trust": {
36             "fieldData": [
37                 {
38                     "fieldRef": "/",
39                     "lastUpdatedDate": 1735827937379,
40                     "manualOverride": false,
41                     "sourcePrimaryKey": "125",
42                     "sourceSystem": "c360.default.system",
43                     "trustRule": "SourceRanking",
44                     "trustScore": 0.0
45                 }
46             ]
47         }
48     }
```

Source (XREF) API – Read (GET)

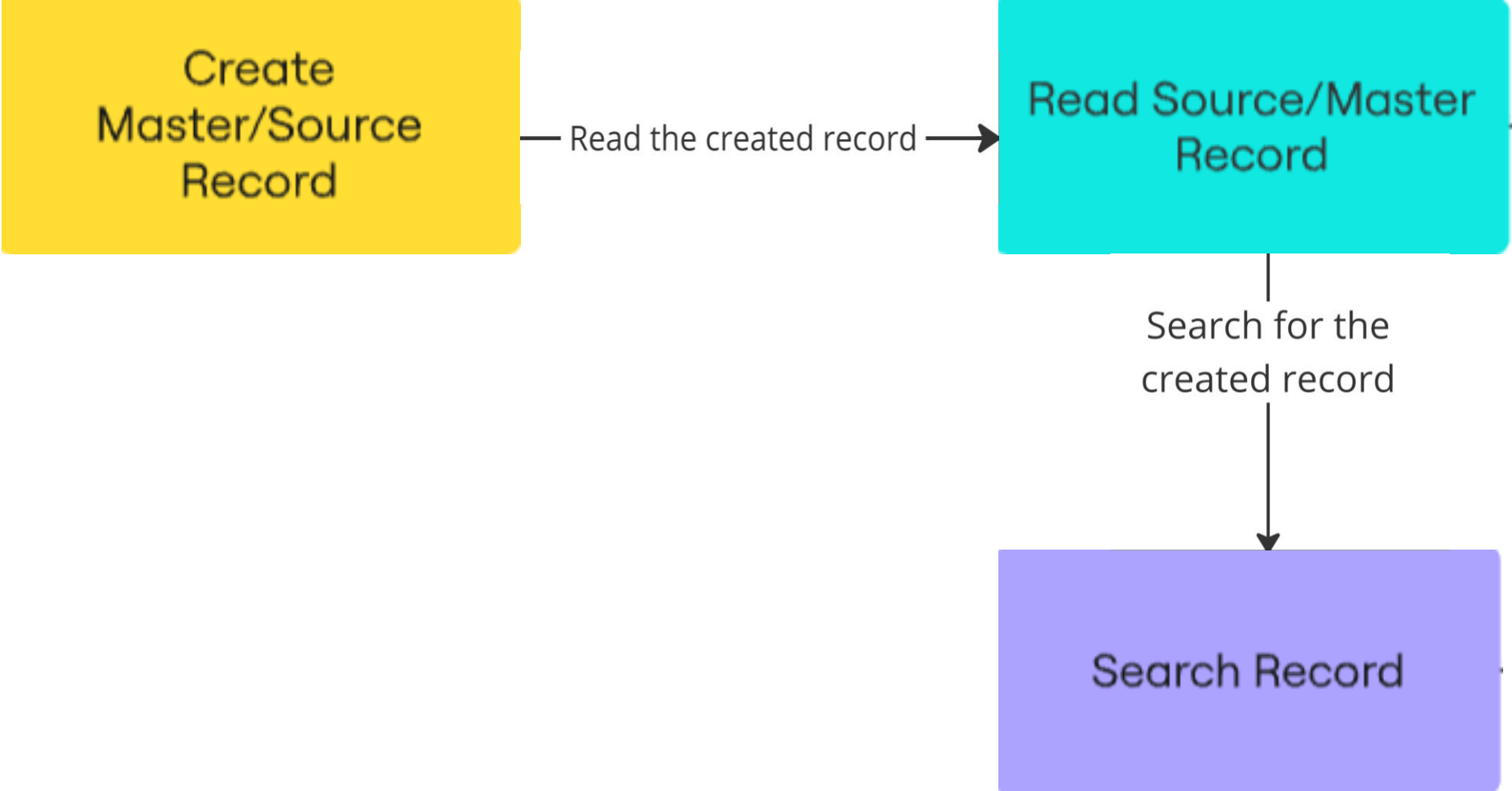
- Retrieves source record based on the source system and the primary key.

GET <baseApiURL>/business-entity/public/api/v1/entity-xref/api_demo/c360.default.system/125

```
1  {
2  |   "firstname": "John",
3  |   "lastname": "Doe",
4  |   "age": 26,
5  |   "gender": {
6  |     |   "Code": "M",
7  |     |   "Name": "Males"
8  |   },
9  |   "dateofbirth": 911289101000,
10 |   "address": [
11 |     |   {
12 |     |     |   "_id": "A123456",
13 |     |     |   "address_line_1": "2100",
14 |     |     |   "address_line_2": "Seaport Blvd",
15 |     |     |   "city": "Redwood City",
16 |     |     |   "state": {
17 |     |     |     |   "Code": "CA",
18 |     |     |     |   "Name": "California"
19 |     |     |   },
20 |     |     |   "country": {
21 |     |     |     |   "Code": "US",
22 |     |     |     |   "Name": "United States"
23 |     |     |   }
24 |     |   }
25 |   ],
26 |   "information": [
27 |     |   {
28 |     |     |   "_id": "I123456",
29 |     |     |   "married": true,
30 |     |     |   "office": [
31 |     |     |     |   {
32 |     |     |     |     |   "_id": "O123456",
33 |     |     |     |     |   "name": "Informatica",
34 |     |     |     |     |   "designation": "Senior Software Engineer"
35 |     |     |     |   }
36 |     |     |   ]
37 |     |   }
38 |   ],
39 |   "_meta": {
40 |     |   "id": "98765432",
41 |     |   "businessId": "98765432",
42 |     |   "businessEntity": "api_demo",
43 |     |   "createdBy": "marmik_june",
44 |     |   "creationDate": 1738259676335,
45 |     |   "updatedBy": "marmik_june",
46 |     |   "lastUpdateDate": 1738259676335,
47 |     |   "states": {
48 |     |     |   "base": "ACTIVE",
49 |     |     |   "consolidation": "CONSOLIDATION_INDEXED",
50 |     |     |   "searchIndex": "SEARCH_DIRTY",
51 |     |     |   "validation": "PENDING"
52 |     |   },
53 |     |   "sourceSystem": "c360.default.system",
54 |     |   "sourcePrimaryKey": "125",
55 |     |   "xrefType": "DATA"
56 |   }
57 }
```



REST API Integration in MDM SaaS



Search

API

- Searches for records that match search criteria.

POST <baseApiUrl>/search/public/api/v1/search

```
1 {
2   "entityType": "api_demo",
3   "search": "John*"
4 }
```

Body Cookies Headers (22) Test Results ↻

{ } JSON ▾ ▶ Preview 🔄 Visualize ▾

```
1 {
2   "searchResult": {
3     "hits": 2,
4     "pageSize": 0,
5     "pageOffset": 0,
6     "recordsToReturn": 0,
7     "recordOffset": 0,
8     "maxRecords": 10000,
9     "records": [
10      {
11        "api_demo.firstname": "John",
12        "api_demo.lastname": "Doe",
13        "api_demo.gender": {
14          "Code": "M",
15          "Name": "Males"
16        },
17        "_meta": {
18          "score": 5.1987,
19          "updatedBy": "marmik_june",
20          "createdBy": "marmik_june",
21          "lastUpdateDate": "1738259676335",
22          "businessId": "98765432",
23          "businessEntity": "api_demo",
24          "id": "98765432",
25          "type": "api_demo",
26          "creationDate": "1738259676335",
27          "states": {
28            "recordStateIndicator": "ACTIVE",
29            "validation": "PENDING"
30          },
31          "status": "ACTIVE"
32        },
33        "api_demo.age": 26,
34        "api_demo.information": {
35          {
36            "office": [
```

POST <baseApiUrl>/search/public/api/v1/search

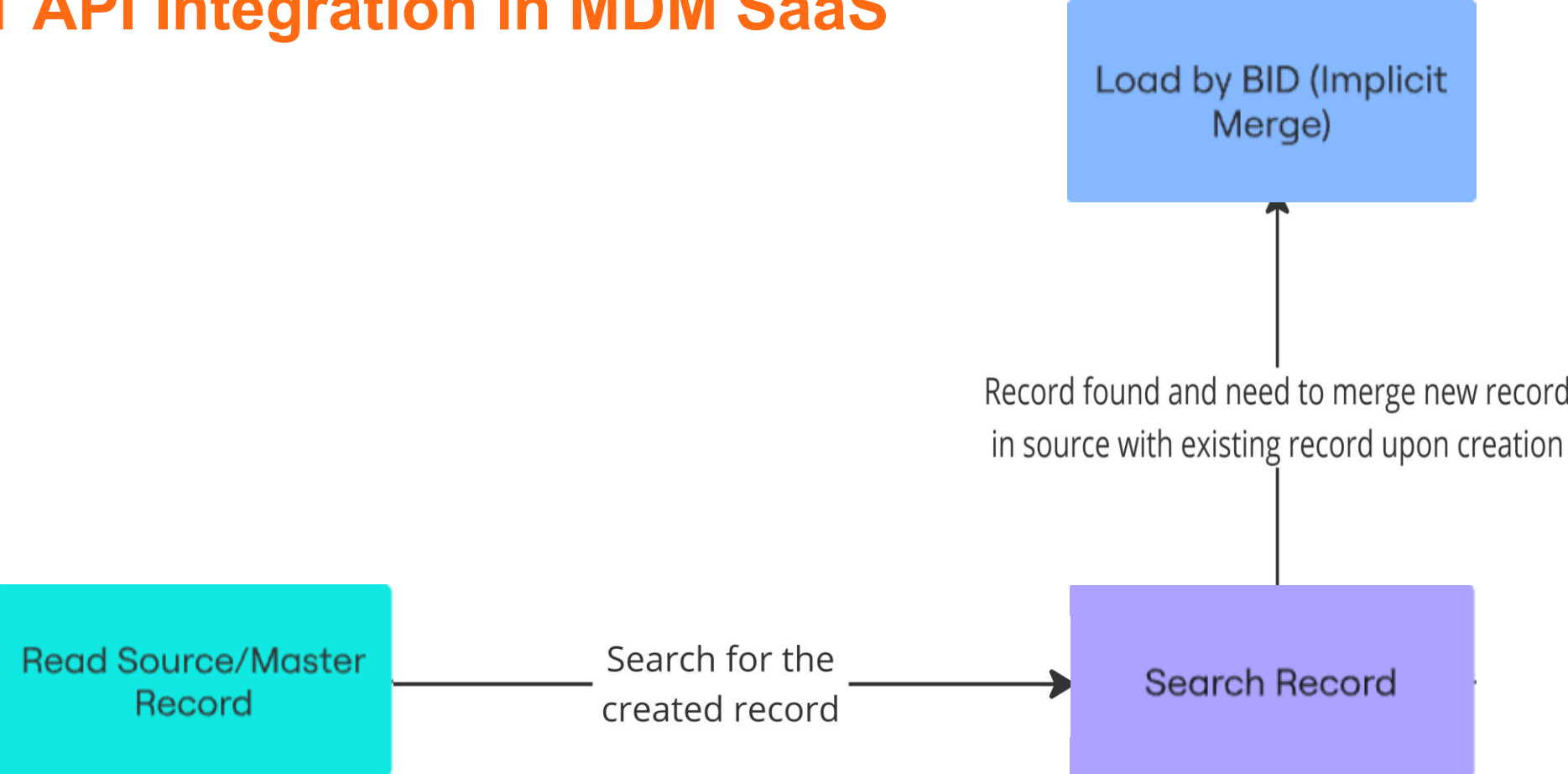
```
1 {
2   "entityType": "api_demo",
3   "fields":
4     {
5       "api_demo.firstname": "John"
6     },
7   "filters":
8     {
9       "filter": [{
10        "comparator": "EQUALS",
11        "fieldName": "api_demo.gender.Name",
12        "fieldValue": "Female"
13      }]
14     }
15 }
```

Body Cookies Headers (22) Test Results ↻

{ } JSON ▾ ▶ Preview 🔄 Visualize ▾

```
1 {
2   "searchResult": {
3     "hits": 1,
4     "pageSize": 0,
5     "pageOffset": 0,
6     "recordsToReturn": 0,
7     "recordOffset": 0,
8     "maxRecords": 10000,
9     "records": [
10      {
11        "api_demo.firstname": "John",
12        "api_demo.gender": {
13          "Code": "F",
14          "Name": "Female"
15        },
16        "_meta": {
17          "score": 5.1987,
18          "updatedBy": "marmik_june",
19          "createdBy": "marmik_june",
20          "lastUpdateDate": "1738259785209",
21          "businessId": "MDM0000000MXMJ",
22          "businessEntity": "api_demo",
23          "id": "MDM0000000MXMJ",
24          "type": "api_demo",
25          "creationDate": "1738259785209",
```

REST API Integration in MDM SaaS



Load by BID example

- Achieved using the **Create Master API**.
- Performs implicit merge.

- `POST <baseApiURL>/business-entity/public/api/v1/entity/api_demo?sourceSystem=oracle&sourcePKey=126&businessId=98765432`

John Doe

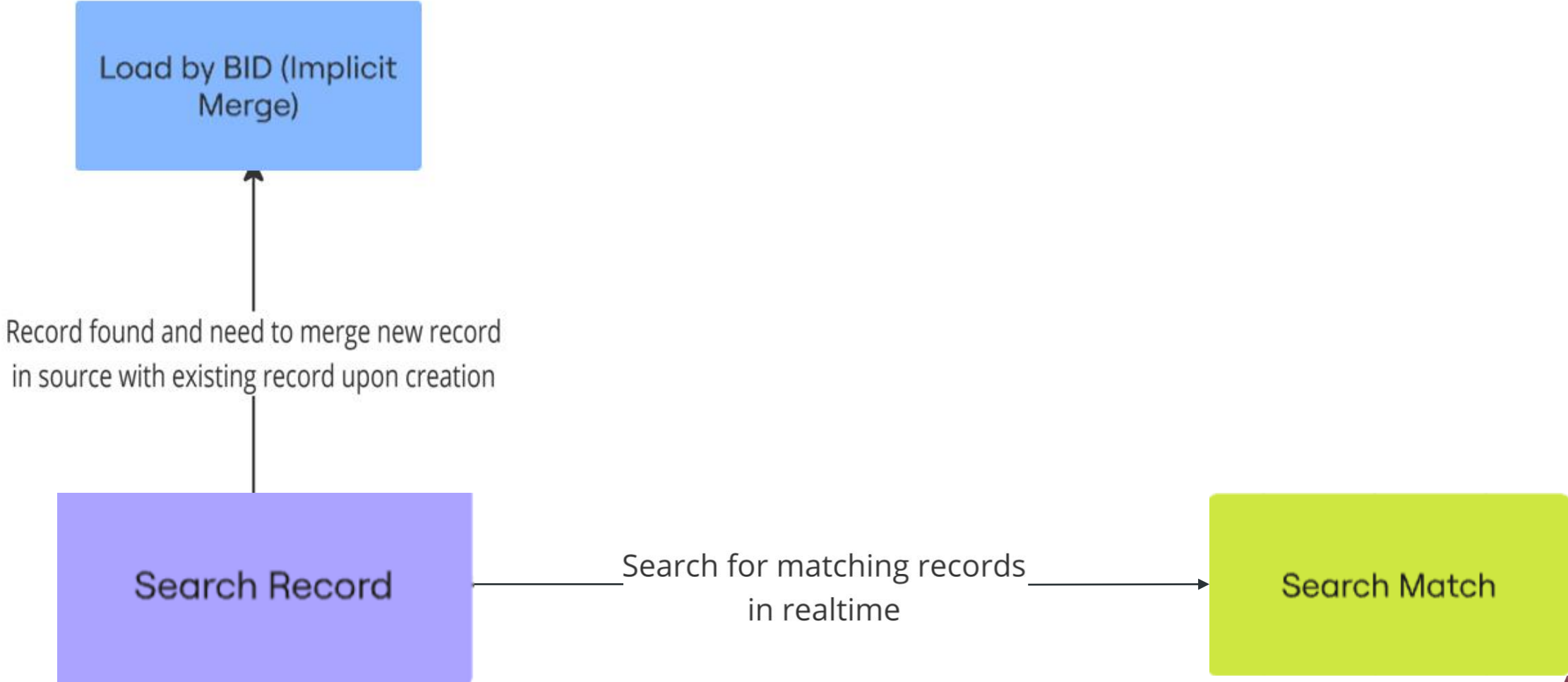
Record Details **Source Records**

Source Records | 2 of 2 source records

| John Doe Master Record Preview | John Doe Informatica Customer 360 | John Doe Oracle |
|-----------------------------------|--------------------------------------|--------------------|
| System Fields | | |
| Business ID : 98765432 | 98765432 | MDM0000000MXMK |
| ID : 679bc34f3568b5... | 125 | 126 |
| Updated On : 01/30/2025 | 01/30/2025 | 01/30/2025 |
| Updated By : marmik_june | marmik_june | marmik_june |
| Record State Indic... : ACTIVE | ACTIVE | ACTIVE |
| Population : | | |
| Not Ready For Mat... : | False | False |

```
1  {
2    "firstname": "John",
3    "lastname": "Doe",
4    "age": 26,
5    "gender" :
6      {
7        "Name": "Males",
8        "Code": "M"
9      },
10   "dateofbirth": 911289101000,
11   "address":
12     [
13       {
14         "_id": "A1234567",
15         "address_line_1": "209",
16         "address_line_2": "Shores Pkwy",
17         "city": "Redwood City",
18         "state": {
19           "Name": "California",
20           "Code": "CA"
21         },
22         "country": {
23           "Name": "United States",
24           "Code": "US"
25         }
26       }
27     ],
28   "information":
29     [
30       {
31         "_id": "I1234567",
32         "married": false,
33         "office":
34           [
35             {
36               "_id": "O123456",
37               "name": "Informatica",
38               "designation": "Associate Software Engineer"
39             }
40           ]
41       }
42     ]
43   }
```

REST API Integration in MDM SaaS



Search Match API

- Searches for matching records based on the published match model.

The screenshot shows the Informatica Business 360 Console interface. On the left is a navigation sidebar with options like New..., Home, Explore, My Import/Exp..., Business Events, Localization, My Jobs, Security, and Global Settings. The main area is titled 'API Demo > Match Model 1' and has three tabs: Model Configuration (selected), Declarative Rules, and Machine Learning Model. The 'Model Configuration' section displays the following details:

- Model Name: Match Model 1
- Model ID: 772952d8-65e2-4d8b-a8d5-db4131f7c83f
- Model Description:
- Model Objective: Resolve Duplicates
- Default Population: Usa
- About Population: Created by: (c)2000-2021 Informatica LLC. All rights reserved. Last change: 28 Jul 2021 USA Standard - v10.2.0HF1-28Jul21 This population uses a that supports ISO-LATIN-1 The population rules support the typical identity data found in the United States.

Below this is the 'Candidate Selection Criteria' section, which contains a table:

| Field Name | Field Type |
|------------|-------------|
| lastname | Person_Name |
| firstname | Person_Name |

The screenshot shows the Informatica Business 360 Console interface. At the top, it says 'Business 360 Console' and 'Marmik Org'. Below that, there's a 'Valid' status indicator and a 'Save' button. The main area is titled 'API Demo' and has three tabs: Model (selected), Data Flow, and Consumption. Under the 'Model' tab, there are sub-tabs: Attributes, Data Quality, Match (selected), Survivorship, and Events. The 'Match Models (2)' section displays a table with the following data:

| Name | Version | Objective | Updated On | Status | Model Description |
|---------------|---------|--------------------|--------------|-----------|-------------------|
| Match Model 1 | 1 | Resolve Duplicates | Jan 06, 2025 | Published | |
| Match Model 1 | 2 | Resolve Duplicates | Jan 15, 2025 | Published | |

At the bottom right, there is a 'Set as Default' button.

Search Match API - POST

With MatchModelId and MatchModelVersion provided

POST <baseApiUrl>match-ng-pair-gen/public/api/v1/searchmatch/api_demo?matchmodel=772952d8-65e2-4d8b-a8d5-db4131f7c83f&version=2

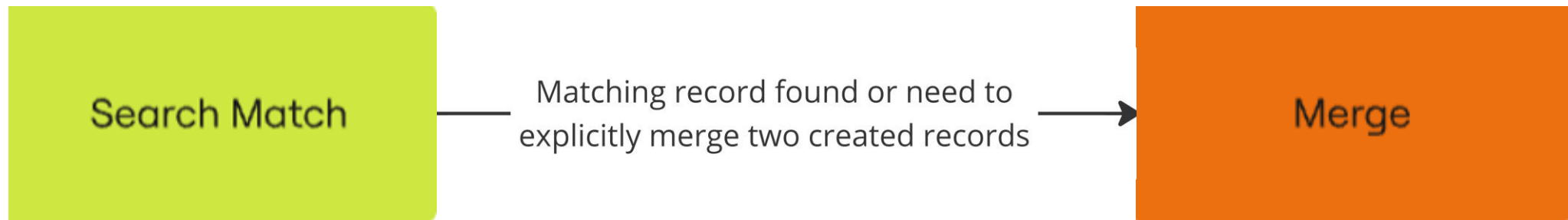
```
1  {
2    "searchControls": {
3      "maxRecordsToReturn": 20,
4      "searchLevel": "Typical",
5      "fileRecordLimit": 1000
6    },
7    "data": {
8      "searchRecord": {
9        "firstname": "John",
10       "lastname": "Doe"
11      }
12   }
```

Without MatchModelId and MatchModelVersion provided (Version 2 is marked as default)

POST <baseApiUrl>match-ng-pair-gen/public/api/v1/searchmatch/api_demo

```
1  {
2    "searchResult": {
3      "totalRecords": 2,
4      "fileRecordLimit": 1000,
5      "fileRecordCandidatesCount": 2,
6      "records": [
7        {
8          "_meta": {
9            "score": 100.0,
10           "rank": 1,
11           "matchRule": "1736937126004",
12           "businessId": "98765432",
13           "xrefSourceSystem": "c360.default.system",
14           "xrefSourcePKey": "125",
15           "population": "usa"
16         },
17         "data": {
18           "firstname": "John",
19           "lastname": "Doe"
20         }
21       },
22       {
23         "_meta": {
24           "score": 100.0,
25           "rank": 1,
26           "matchRule": "1736937126004",
27           "businessId": "MDM0000000MXMJ",
28           "xrefSourceSystem": "b360.default.system",
```

REST API Integration in MDM SaaS



Merge API – Merging using (businessId) or (sourceSystem and sourcePkey)

- Merges source records to form golden master record.

POST <baseAPIUrl>/business-entity/public/api/v1/entity-group/api_demo

Merge using businessId

```
1  [
2  |  {
3  |    "businessId": "98765432"
4  |  },
5  |  {
6  |    "businessId": "MDM0000000MXMO"
7  |  }
8  ]
```

POST <baseAPIUrl>/business-entity/public/api/v1/entity-group/api_demo

Merge using sourcePkey and sourceSystem

```
1  [
2  |  {
3  |    "sourcePKey": "125",
4  |    "sourceSystem": "c360.default.system"
5  |  },
6  |  {
7  |    "sourcePKey": "679bbd493568b5053c39d7de",
8  |    "sourceSystem": "b360.default.system"
9  |  }
10 ]
```

REST API Integration in MDM SaaS

Search Match

Matching record found or need to explicitly merge two created records

Merge

Find all contributing source records to a master

Entity Member

Read Source Records by Master Record

- Identifies all the source records that contribute to a master record.

GET <baseApiURL>/business-entity/public/api/v1/entity-member/api_demo/98765432

```
Body Cookies Headers (21) Test Results | ↻
{} JSON v Preview Visualize | v
1 {
2   "content": [
3     {
4       "sourcePKey": "126",
5       "sourceSystem": "oracle"
6     },
7     {
8       "sourcePKey": "125",
9       "sourceSystem": "c360.default.system"
10    },
11    {
12      "sourcePKey": "679b619c204c2472cd217bd1",
13      "sourceSystem": "b360.default.system"
14    }
15  ]
16 }
```

John Doe

Record Details **Source Records**

Source Records | 3 of 3 source records

| John Doe Master Record Preview | John Doe Informatica Customer 360 | John Doe Oracle | John Doe Informatica Customer 360 |
|-----------------------------------|--------------------------------------|--------------------|--------------------------------------|
| System Fields | | | |
| Business ID : 98765432 | 98765432 | MDM0000000MPWU | MDM0000000MXMO |
| ID : 679c02e03568b5... | 125 | 126 | 679bbd493568b5053c39d7de |

REST API Integration in MDM SaaS



Unmerge API

- Unmerges source records from a master record.

POST <baseApiUrl>/business-entity/public/api/v1/entity-group/api_demo/98765432

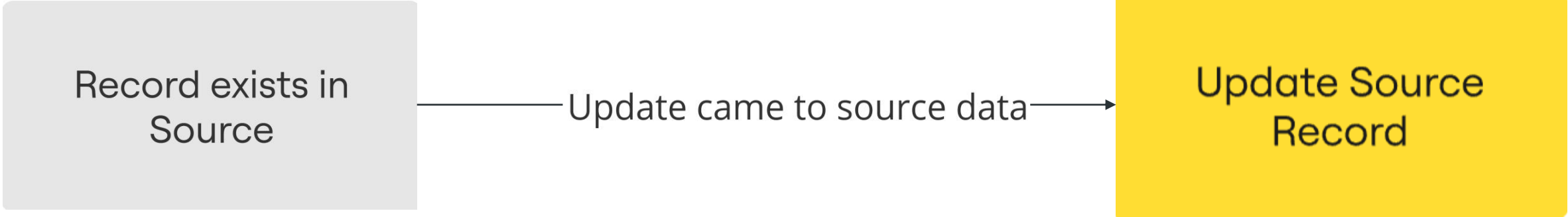
```
1  []
2  {
3    "sourcePKey": "679bbd493568b5053c39d7de",
4    "sourceSystem": "c360.default.system"
5  }
6  ]
```

Body Cookies Headers (22) Test Results | ↻

{ } JSON ▾ ▶ Preview 🔄 Visualize | ▾

```
1  {
2  |   "approvalRequired": false
3  }
```

REST API Integration in MDM SaaS



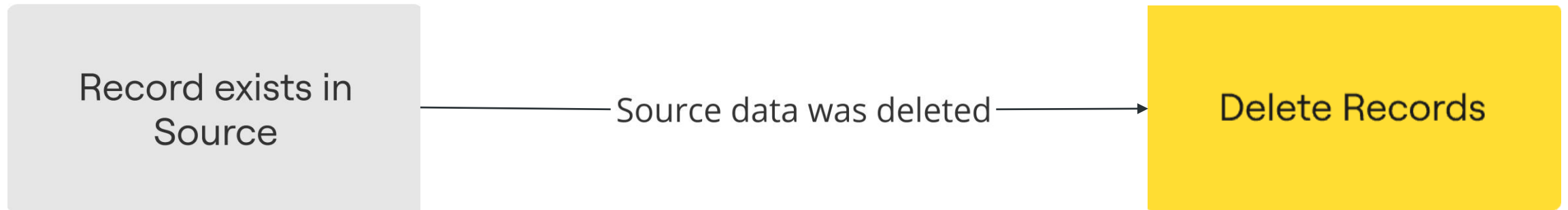
Source Update (PATCH) – Add, Replace & Remove Data attributes

- Add operation adds new data to the record.
- Replace operation updates data in the existing record.
- Remove operation removes data in the existing record.

PATCH <baseApiURL>/business-entity/public/api/v1/entity-xref/api_demo/c360.default.system/125

```
1  [
2  |   {
3  |     "op": "add",
4  |     "path": "information[I123456].office[0123456].department",
5  |     "value": "GCS-MDM"
6  |   },
7  |   {
8  |     "op": "replace",
9  |     "path": "address[A123456].address_line_2",
10 |     "value": "Mountain View"
11 |   },
12 |   {
13 |     "op": "remove",
14 |     "path": "dateofbirth"
15 |   }
16 ]
```

REST API Integration in MDM SaaS



Delete Source Record (DEL)

- Deletes a source record based on the primary key.
- Soft deletes the record.

DELETE <baseApiURL>/business-entity/public/api/v1/entity-xref/api_demo/c360.default.system/125

John Doe

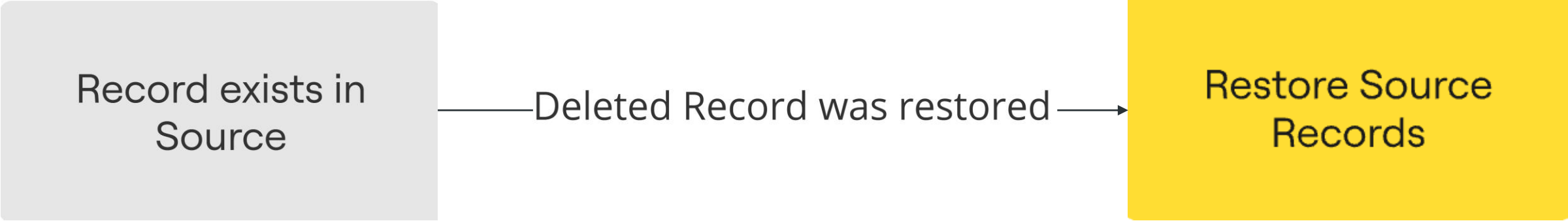
Record Details

Source Records

Source Records | 2 of 2 source records

| John Doe Master Record Preview | John Doe Oracle | John Doe Informatica Customer 360 |
|-----------------------------------|--------------------|--------------------------------------|
| System Fields | | |
| Business ID : 98765432 | MDM0000000MXMK | 98765432 |
| ID : 679bc34f3568b5... | 126 | 125 |
| Updated On : 01/31/2025 | 01/30/2025 | 01/31/2025 |
| Updated By : marmik_june | marmik_june | marmik_june |
| Record State Indic... : ACTIVE | ACTIVE | DELETED |

REST API Integration in MDM SaaS



Restore Source Record (PUT)

- Restores deleted source record.
- `_operationType=restore` parameter to be used.
- Body should be blank `{}`

PUT `<baseApiURL>/business-entity/public/api/v1/entity-xref/api_demo/c360.default.system/125?_operationType=restore`

```
1 {}
```

Body Cookies Headers (21) Test Results

Pretty Raw Preview Visualize JSON

```
1 {  
2   "approvalRequired": false  
3 }
```



John Doe

Record Details Source Records

Source Records | 2 of 2 source records

| John Doe Master Record Preview | John Doe Oracle | John Doe Informatica Customer 360 |
|-----------------------------------|--------------------|--------------------------------------|
| System Fields | | |
| Business ID : 98765432 | MDM0000000MXMK | 98765432 |
| ID : 679bc34f3568b5... | 126 | 125 |
| Updated On : 01/31/2025 | 01/30/2025 | 01/31/2025 |
| Updated By : marmik_june | marmik_june | marmik_june |
| Record State Indic... : ACTIVE | ACTIVE | DELETED |

John Doe

Record Details Source Records

Source Records | 2 of 2 source records

| John Doe Master Record Preview | John Doe Oracle | John Doe Informatica Customer 360 |
|-----------------------------------|--------------------|--------------------------------------|
| System Fields | | |
| Business ID : 98765432 | MDM0000000MXMK | 98765432 |
| ID : 679bc34f3568b5... | 126 | 125 |
| Updated On : 01/31/2025 | 01/30/2025 | 01/31/2025 |
| Updated By : marmik_june | marmik_june | marmik_june |
| Record State Indic... : ACTIVE | ACTIVE | ACTIVE |

forceUpdate parameter

- Forcefully updates source record even if Source LUD is older than current.

PATCH <baseApiURL>/business-entity/public/api/v1/entity-xref/api_demo/c360.default.system/125?_forceUpdate=true

```
1  [
2    {
3      "op": "replace",
4      "path": "address[A123456].address_line_2",
5      "value": "Cupertino"
6    },
7    {
8      "op": "setSourceLastUpdateDate",
9      "path": "address[A123456]",
10     "value": "1714579239000"
11   }
12 ]
```

notReadyForMatch parameter

- Determines whether a source record can participate in the match process.
- Default is False.

PATCH <baseApiURL>/business-entity/public/api/v1/entity-xref/api_demo/c360.default.system/125?notReadyForMatch=true

```
1  [
2    {
3      "op": "replace",
4      "path": "address[A123456].address_line_2",
5      "value": "Cupertino"
6    },
7    {
8      "op": "setSourceLastUpdateDate",
9      "path": "address[A123456]",
10     "value": "1706729316000"
11   }
12 ]
```



John Doe

Existing Record

Record Details

Source Records

Source Records | 2 of 2 source records

| John Doe Master Record Preview | John Doe Oracle | John Doe Informatica Customer 360 |
|-----------------------------------|--------------------|--------------------------------------|
| System Fields | | |
| Business ID : 98765432 | MDM0000000MPWU | 98765432 |
| ID : 679bf5ea204c24... | 126 | 125 |
| Updated On : 01/31/2025 | 01/31/2025 | 01/31/2025 |
| Updated By : marmik_june | marmik_june | marmik_june |
| Record State Indic... : ACTIVE | ACTIVE | ACTIVE |
| Population : | | |
| Not Ready For Mat... : | False | False |

John Doe

Record after Update

Record Details

Source Records

Source Records | 2 of 2 source records

| John Doe Master Record Preview | John Doe Oracle | John Doe Informatica Customer 360 |
|-----------------------------------|--------------------|--------------------------------------|
| System Fields | | |
| Business ID : 98765432 | MDM0000000MPWU | 98765432 |
| ID : 679bf5ea204c24... | 126 | 125 |
| Updated On : 01/31/2025 | 01/31/2025 | 01/31/2025 |
| Updated By : marmik_june | marmik_june | marmik_june |
| Record State Indic... : ACTIVE | ACTIVE | ACTIVE |
| Population : | | |
| Not Ready For Mat... : | False | True |

Agenda Continue..

1 REST API Guidelines

3 Master and Source Record APIs

5 Merge and Unmerge APIs

7 Job Based APIs

2 Session ID APIs

4 Search and Search Match APIs

6 Relationships and Hierarchies APIs

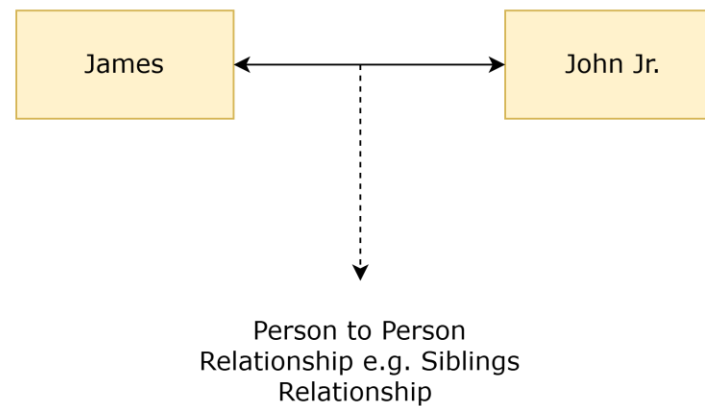
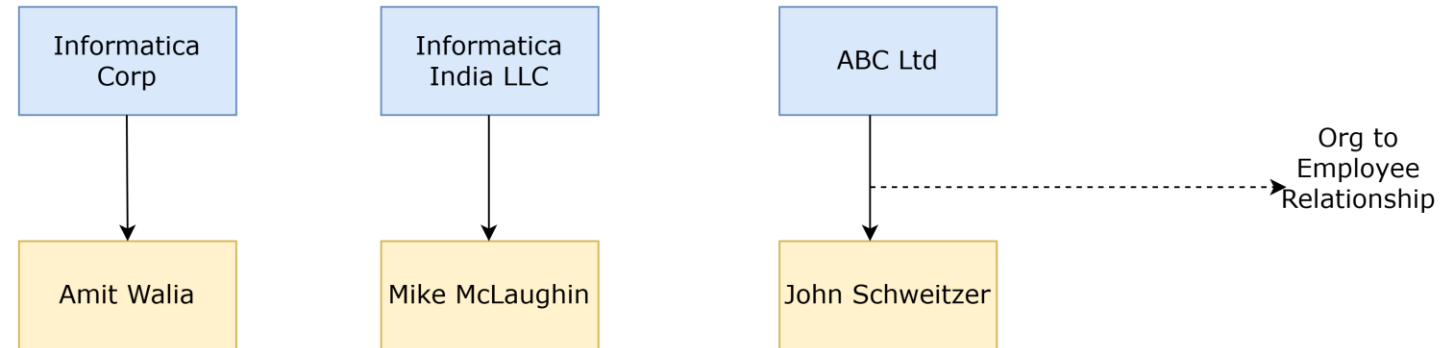
8 Best Practices around APIs and Search Before Create Example

Relationships in C360

Network Relationship:

Network Relationship can be of two types

- Directional
- Bidirectional



Network Relationships in B360

| | | | | | |
|-----------------|--------------------------|----------|-----------------------|-------------|---|
| My Jobs | <input type="checkbox"/> | Employee | Feb 5, 2024, 10:06 AM | Customer360 | Represents a business relationship where one |
| Security | <input type="checkbox"/> | Employs | Feb 5, 2024, 10:06 AM | Customer360 | Represents a business relationship where one |
| Global Settings | <input type="checkbox"/> | Guardian | Feb 5, 2024, 10:06 AM | Customer360 | Represents custodial relationship between two |

Relationship : Employs

Relationship Name:*

Internal ID:*

Business Entity 1:*

Business Entity 2:*

Direction:*

Location:*

Description:

Relationship : Sibling

Relationship Name:*

Internal ID:*

Business Entity 1:*

Business Entity 2:*

Direction:*

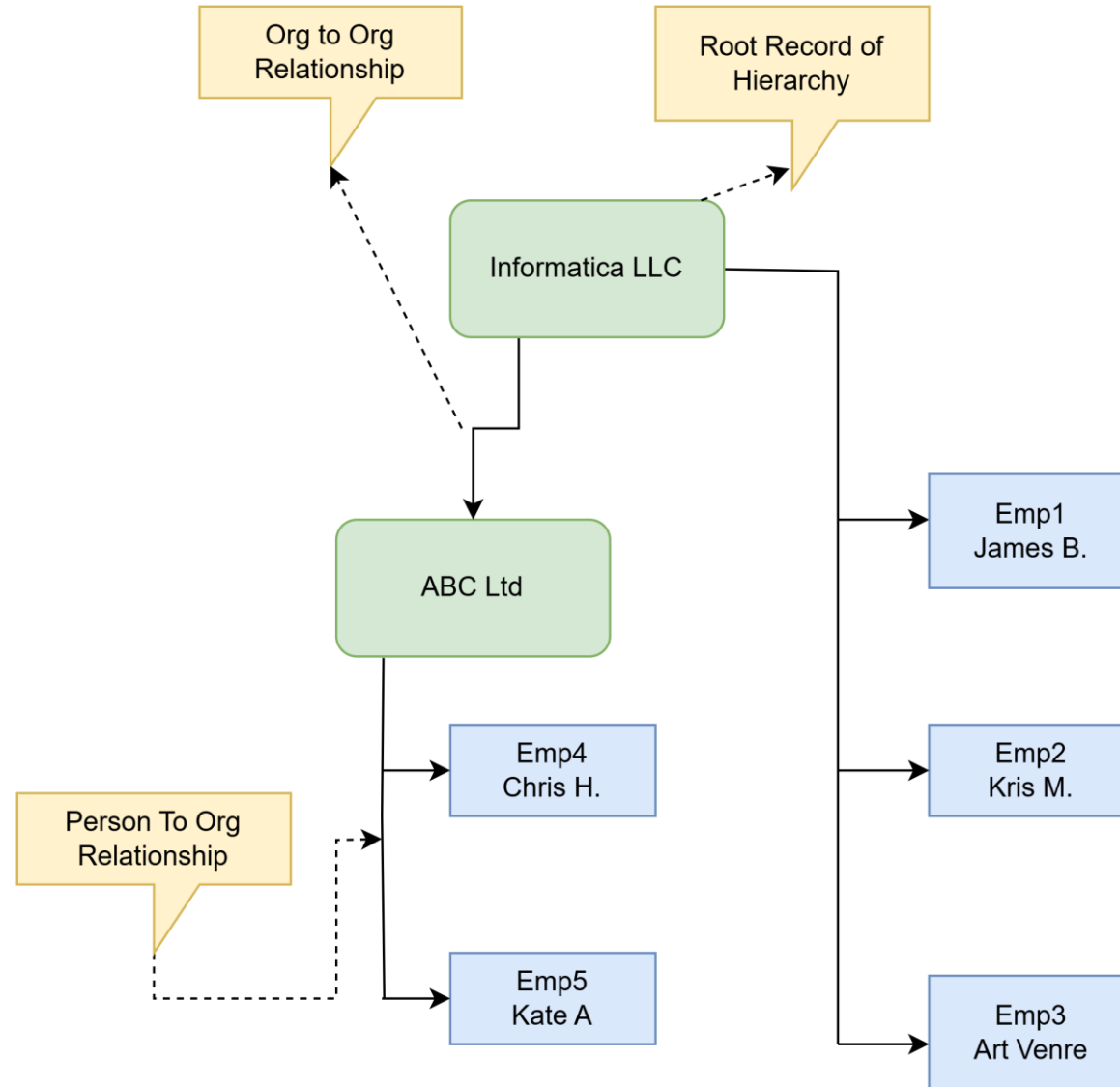
Location:*

Description:

Hierarchy Relationships

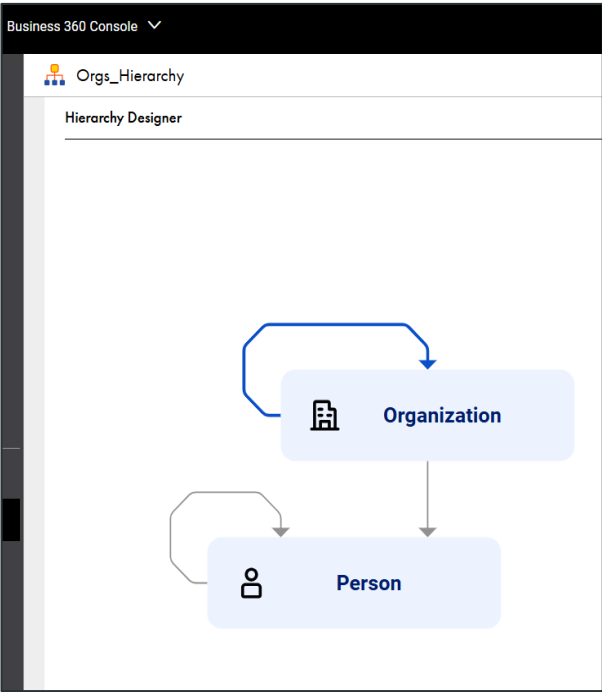
Example chart:

- Informatica LLC : Parent Root constraint
- ABC Ltd : Sub child Org Type Record
- Employees : Child Person Type Records



Hierarchical Relationship

MDM SaaS UI, How to create Relationship



Relationship Model



The screenshot shows the 'Informatica Customer 360' interface. The 'Hierarchies' section is active, displaying a list of hierarchy types. The 'Orgs_Hierarchy' and 'Org_Person_Hierarchy' items are highlighted in yellow. The list includes: Classification (0), Organization_Person (3), Orgs_Hierarchy (1), Org_Person_Hierarchy, Supplier Hierarchy (0), and Works for (0).

Hierarchy Relationship in C360



The screenshot shows the 'Customer 360' interface for the 'Org_Person_Hierarchy' section. It displays a 'Hierarchy' view with a 'Point in Time' and 'Current' filter. The list of records includes: Informatica LLC Multinational 2000, ABC LTD12 Multinational 5000, Art Venere, James Butt, Kris Marrier, and Sage Wieser.

Root Record

Relationship Metadata API

Format : GET <baseApiURL>/metadata/api/v2/objects/relationship/?name=<>

Response: 200 OK

```
Body Cookies Headers (22) Test Results | ↺
{} JSON ▾ ▶ Preview 🔄 Visualize ▾
1  {
2    "eClass": "http://informatica.com/mdm/v2/shm#//Hierarchy",
3    "guid": "orgs_hierarchy_hierarchy",
4    "frsID": "gJhmIGPQ9EchRNKnAKb4m4",
5    "name": "Orgs_Hierarchy",
6    "description": "Organization and People Hierarchy",
7    "levels": -1,
8    "businessEntityLifecycle": "EXISTS_OUTSIDE_OF_HIERARCHY_CONTEXT",
9    "_meta": {
10     "eClass": "http://informatica.com/mdm/v2/Core#//Meta",
11     "creationDate": 1736130799507,
12     "lastUpdatedDate": 1736130991605,
13     "createdByUser": "ahuligol_p01",
14     "lastUpdatedByUser": "ahuligol_p01",
15     "version": 4,
16     "references": [
17       {
18         "eClass": "http://informatica.com/mdm/v2/Core#//MetadataReference",
19         "referencePath": "//@relationship[guid='c360_organization_to_orgs_hierarchy']",
20         "elementPath": "//@relationshipSet[guid='orgs_hierarchy_hierarchy']/@relationshipSetMember.@"
21       },
22       {
23         "eClass": "http://informatica.com/mdm/v2/Core#//MetadataReference",
24         "referencePath": "//@relationship[guid='c360_person_to_c360_organization_1736130856']",
25         "elementPath": "//@relationshipSet[guid='orgs_hierarchy_hierarchy']/@relationshipSetMember.1"
26       },
27     ]
28   }
29 }
```

Relationship CRUD APIs

- **Create Relationship API Format:**

POST

```
<baseApiURL>/businessentity/public/api/v1/relationship/<relationship_Internal_ID>?sourceSystem=<sourceSystem>[&hierarchyType=<model name>][&hierarchyId=<ID of hierarchy>]
```

- **Read Relationship by Business ID:**

GET

```
<baseApiURL>/business-entity/public/api/v1/relationship/<relationship_Internal_ID>/<businessId>
```

- **Update Relationship Format:**

PUT

```
<baseApiURL>/businessentity/public/api/v1/relationship/<rel_name>/<businessId>?sourceSystem=<sourceSystem>[&hierarchyType=<model name>][&hierarchyId=<ID of hierarchy>]
```

- **Delete Relationship Format:**

DELETE

```
<baseApiURL>/business-entity/public/api/v1/relationship/<relationship_Internal_ID>/<businessId>?sourceSystem=<sourceSystem>[&hierarchyType=<model name>][&hierarchyId=<ID of hierarchy>]
```

Relationship filter API

Format :

POST<baseApiURL>/businessentity/public/api/v1/relationship/<relationship_Internal_ID>/filter

Request Body:

```
{
  "pageoffset": "0",
  "pageSize": "5",
  "filter": {
    "_from": {
      "businessEntity": "c360.person",
      "businessID": "MDM0000002L8HC"
    },
    "_to": { "businessEntity": "c360.organization",
             "businessID": "MDM00000000000"
    }
  }
}
```

Response

```
{
  "creationDate": 1736131476183,
  "updatedBy": "ahuligol_p01",
  "lastUpdateDate": 1736131479257
},
{
  "_from": {
    "businessEntity": "c360.person",
    "businessID": "MDM0000002L8HC"
  },
  "_to": {
    "businessEntity": "c360.organization",
    "businessID": "MDM0000001TL40"
  },
  "_meta": {
    "relationship": "c360_person_to_c360_organization_1736130855",
    "businessID": "MDM00000000FFL",
    "state": "ACTIVE",
    "createdBy": "ahuligol_p01",
    "creationDate": 1736131578236,
    "updatedBy": "ahuligol_p01",
    "lastUpdateDate": 1736131609434
  }
}
],
"numberOfElements": 5,
"totalNumberOfElements": 6,
"first": true,
"last": false,
"page": 0,
"size": 5,
"sort": []
}
```

Job based APIs in MDM SaaS

Create/Trigger Ingress or Egress Job APIs

Format : POST <baseApiURL>/job/public/api/v1/jobInstance/Ingress

Request Body:

```
{  
  "jobDefinitionId": "personingressjob"  
}
```



Response:

A screenshot of a REST client interface showing the response body. The response is a JSON object with an "id" field. The value of the "id" field is "1069444698499764224", which is highlighted in blue. The interface includes tabs for "Body", "Cookies", "Headers (22)", and "Test Results". Below the tabs, there are options for "JSON", "Preview", and "Visualize". The response body is displayed in a code editor with line numbers 1, 2, and 3.

```
1 {  
2   |   "id": "1069444698499764224"  
3 }
```

Trigger Match-Merge Job through API in MDM SaaS

Four parameter changes in input request

- Match Only
- Merge Only
- Match and Merge
- Reset Matched Records

Format : POST <baseApiURL>/job/public/api/v1/jobInstance/MatchMerge

Request Body:

```
{  
  "jobDefinitionId": "matchandmerge",  
  "matchModelId": "cfb05cae-3738-4f2e-91aa-71c8135b63f6",  
  "matchModelVersion": 2,  
  "parameters": [{"name": "processType",  
    "value": "Match and Merge"}]  
}
```



Body Cookies Headers (22) Test Results

{ } JSON Preview Visualize

```
1 {  
2 |   "id": "1069445318883463168"  
3 }
```



User validation in B360 UI Jobs

Search for Job Instances in MDM through API

Format : POST <baseApiURL>/job/public/api/v1/search

Request Body:

```
{
  "search": "*",
  "pageSize": 25,
  "pageOffset": 0,
  "filters": {
    "operator": "or",
    "filter": [
      {
        "fieldName": "jobType",
        "fieldValue": "c360.be.match.finishTraining"
      },
      {
        "fieldName": "jobType",
        "fieldValue": "c360.be.matchmerge"
      },
      {
        "fieldName": "jobType",
        "fieldValue": "c360.be.match.startTraining"
      }
    ]
  }
}
```



```
161     type: "String"
162   },
163   {
164     "name": "MATCH_TOKENIZE_LOAD_TYPE",
165     "value": "ALL",
166     "type": "String"
167   },
168   {
169     "name": "JOB_FLOW_NAME",
170     "value": "MATCH_TRAINING",
171     "type": "String"
172   }
173 ],
174 "jobLevelMetrics": null,
175 "_meta": {
176   "completedAt": 1715790077144,
177   "state": "SUCCESS",
178   "createdAt": 1715789728589,
179   "createdBy": "rahul_priv_01",
180   "updatedAt": 1715790077144,
181   "updatedBy": "rahul_priv_01",
182   "startedAt": 1715789728589,
183   "startedBy": "rahul_priv_01",
184   "isCompleted": true
185 }
186 }
187 ]
188 }
```

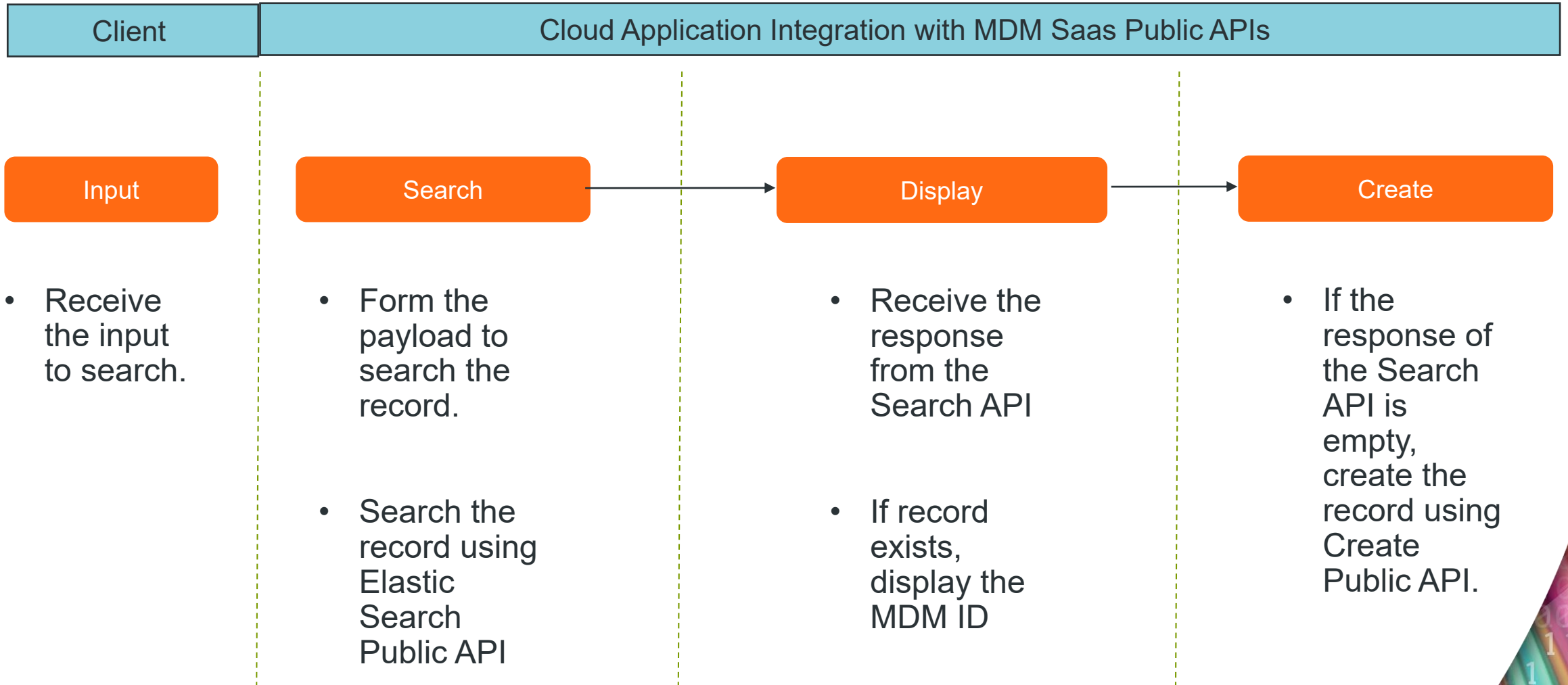
Read Job Instances in MDM through API

Format : GET <baseApiURL>/job/public/api/v1/jobInstance/<jobInstanceid>

Response:

```
"runtimeParameters": [
  {
    "name": "isTerminationAllowed",
    "value": true,
    "type": "Boolean"
  },
  {
    "name": "MODEL_VERSION",
    "value": "1738204285051",
    "type": "String"
  }
],
"jobLevelMetrics": null,
"_meta": {
  "state": "RUNNING",
  "createdAt": 1738204286072,
  "createdBy": "ahuligol_p01",
  "updatedAt": 1738204290180,
  "updatedBy": "ahuligol_p01",
  "startedAt": 1738204286072,
  "startedBy": "ahuligol_p01",
  "isCompleted": false
}
```

Search Before Create



Search Before Create Custom CAI Process

Application Integration ▾

Org - CAI/MDM Webinar Demo ▾

SearchbeforeCreateProcess | Valid

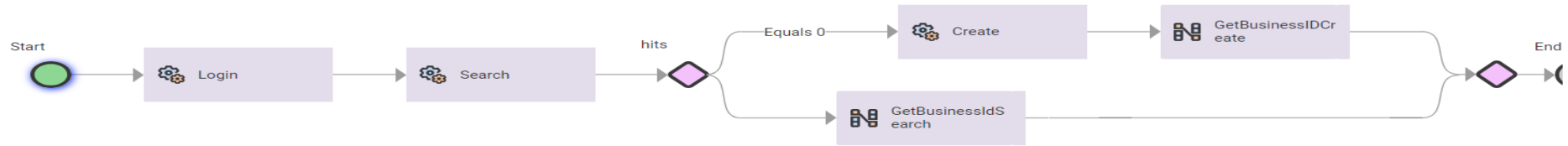
Save

Publish

Design

Find

- Assignment
- Service
- Subprocess
- Human Task
- Create



Start Properties

General

Step type: Start

Name: * ?

SearchbeforeCreateProcess

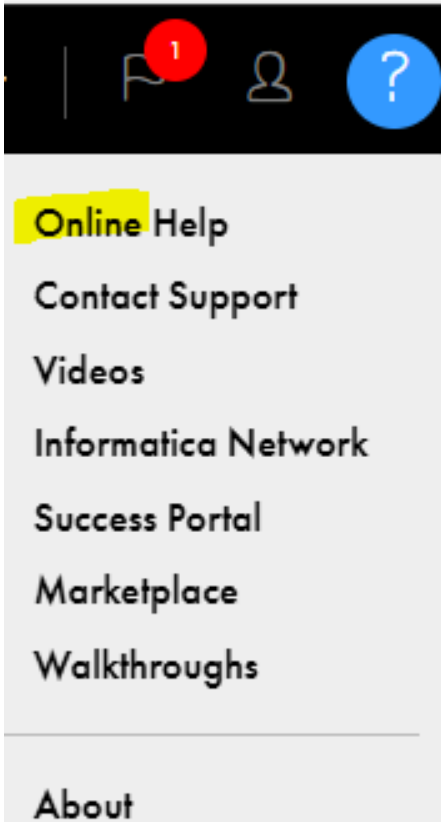
API Name: ?

SearchbeforeCreateProcess

Override API Name

API Best Practices:

URL: https://onlinehelp.informatica.com/IICS/prod/b360/en/index.htm#page/wz-b360-rest-api/REST_API_guidelines.html



REST API guidelines

Consider the following guidelines when working with the Business 360 REST APIs:

- All resources and attributes are case sensitive.
- Use the login resource to start a REST API session. The session expires after 30 minutes of inactivity.
- Use the logout resource to log out of the Business 360 session included in the request header.
- Specify the format of the request and response in the header. Use the Content-Type attribute to specify the request format and the Accept attribute to specify the response format.
- If a request or response type is not configured, Business 360 uses JSON by default.
- For requests in XML, use an enclosing tag to define an object.
- XML responses that include a list of objects return the objects enclosed in the tag.
- For all resources except login, use a placeholder for the session ID in request headers. Replace the placeholder with the session ID data returned when you log in to a session.
- For all resources except login, use a placeholder for the base URL. For version 2 resources, replace the placeholder with the URL returned in the serverUrl. For version 3 resources, replace the placeholder with the URL returned in the baseApiUrl.
- For POST requests, you must include all fields in the request object unless you submit the request in the JSON format using partial mode. Partial mode is not applicable to most resources. By default, the REST API uses full mode.
- Where indicated, enclose POST request attributes in the specified object. When no object is specified, include attributes in the request body.
- After you add or update records, the records take about a second to become searchable through the Search API.
- Specify the MODEL_VERSION header to avoid request failures due to version differences. To enhance performance and avoid failures, use the same model version parameter in successive request headers. For more information about the MODEL_VERSION header, see [Request header](#).

Questions?



Thank You

Where data & AI come to **LIFE**

