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MDM SaaS APIs and Common Use-Cases with Case Study and Demo

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- 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
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- Please take time to complete the post-webinar survey and provide your feedback and suggestions for upcoming topics.

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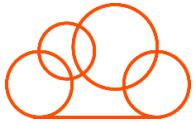

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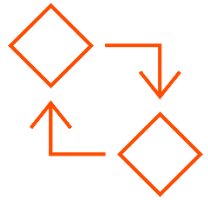

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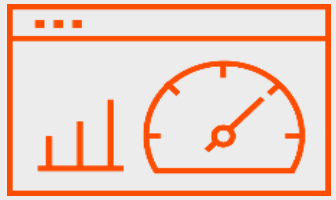

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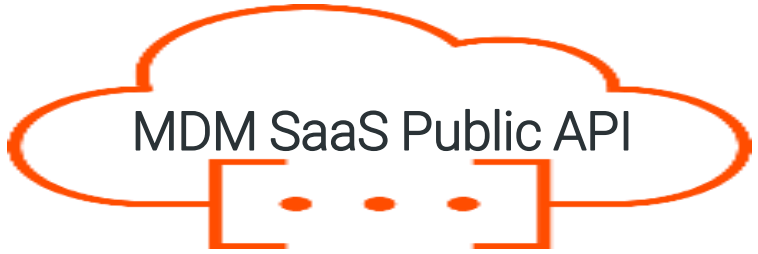
Agenda

1. Introduction to MDM SaaS Public API's
2. Brief discussion about Common Api Resources
3. Orchestration Use case using Search API
4. Demo
5. Q&A



An API is a toolset of software, definitions and protocols that help applications interact with other applications. It specifies what kind of requests can be made and how they can be fulfilled.

The following table describes the resources that you can use:

RESOURCE	SUPPORTED API	RESOURCE DESCRIPTION
search	• Search	Finds records that match your search criteria across all the business entities or within a specific business entity.
entity	• Create master record • Read Master Record by Business ID • Read Master Record by SourcePKey • Update Master Record (PUT) • Update Master Record (PATCH) • Read Source Records by Master Record	Creates, reads, or updates master records. Searches for source records that contribute to a master record.
entity-xref	• Read source record • Update Source Record (PUT) • Update Source Record (PATCH)	Reads and updates source records.
searchmatch	• Search Match API	Use the search match API to search for matching records based on the published match model configuration. The required input parameters for the REST API vary based on the business entity and selected match model.

Authentication Requests

- There are 2 Authentication request (Login and Logout).
- The REST APIs use the basic authentication method to authenticate users.
- If the ORG is using SAML setup and need to use the user as part of the SAML for API request, then users can obtain the JWT access token from the identity provider and include the token in a loginOAuth POST request to get the session ID. (Reference Doc HERE)
- The session ID expires after 30 minutes of inactivity. After the session ID expires, log in again to continue working with the REST API
- After successful authentication, you get the <baseApiUrl>, in this modify the POD details with the “-mdm” to use for MDM public APIs and remove the /saas at the end of the API from the Authentication output – This can be hardcoded/parameterized for any API calls as it will not change for a ORG.

Search Request

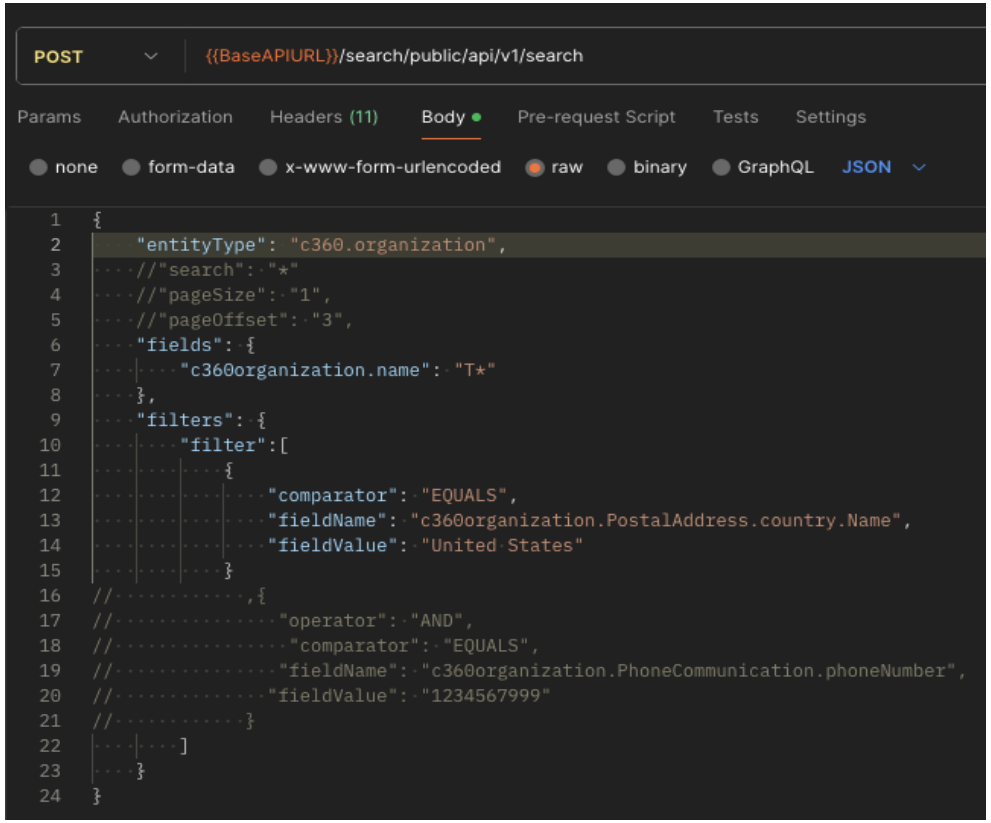
- Search returns the results in an Elastic Search mode.
  - For example, searching "blue sky" returns a fuzzy search with records “light blue sky”, “blue”, “sky”, “blue sky”, “blue skies” “blue moon”.
  - To search for exact string, use ”\”blue sky\”" and this will return record “blue sky”.
  - https://knowledge.informatica.com/s/article/SAAS-Search-Scenario-s?language=en_US&type=external – This KB has details on how the search works.
- In the Request body you can use either “*search*” or “fields” but not both.
- First case will be to use the default “*search*” parameter which will run the search against all the fields that are configured as searchable.
- The Search request can be enhanced by passing the field search by using the “*fields*” parameter.

```
{
    "entityType": "{{c360_perEntityType}}",
    "fields": {
        "c360person.firstName": "FN*",
        "c360person.lastName": "LN*"
    }
}
```

- If source knows the Filed values they want to search , then the Best practice is to use fields parameter with multiple fields value in the search
- To further enhance the search, filters (Facetable columns) can be used to further narrow down the results.
- The search results are based on the search layout config for the entity and the access permissions for the user.
- If additional columns/payload are needed in the search output, run the get API using the business ID and get the additional attributes.

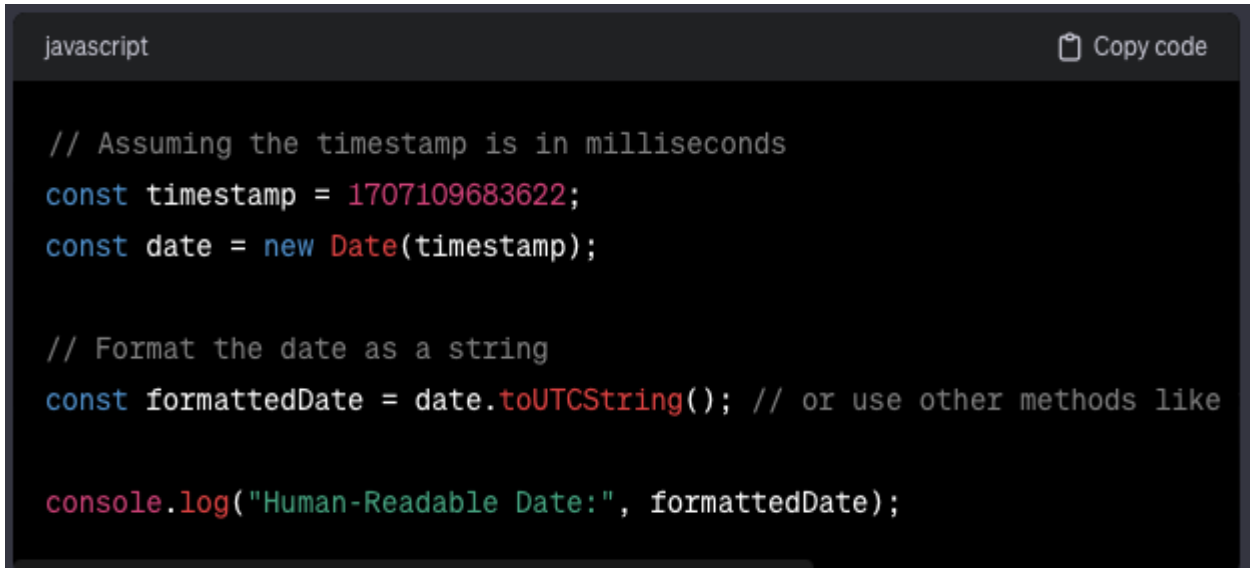
Search Request … conti

- If the search is too fuzzy and gets more results from MDM use the page size, page offset and sort fields to improve the API performance to get paged results instead of processing the complete results in one big payload.



Entity Requests

- When creating records try using PKEY as much as possible.
- Resolve crosswalk can be used for lookup values when the source values are passed and need to convert to enterprise lookup values based on any crosswalk created in R360.
- By default, if no values are passed even for Boolean field the values is set as undefined.
    - So, when a default value for Boolean fields needs to be set as true or false it needs to be passed in the input explicitly.
- All date are stored in the Unix timestamp and to convert to any readable format please use a formator to convert it.



Entity Request … conti

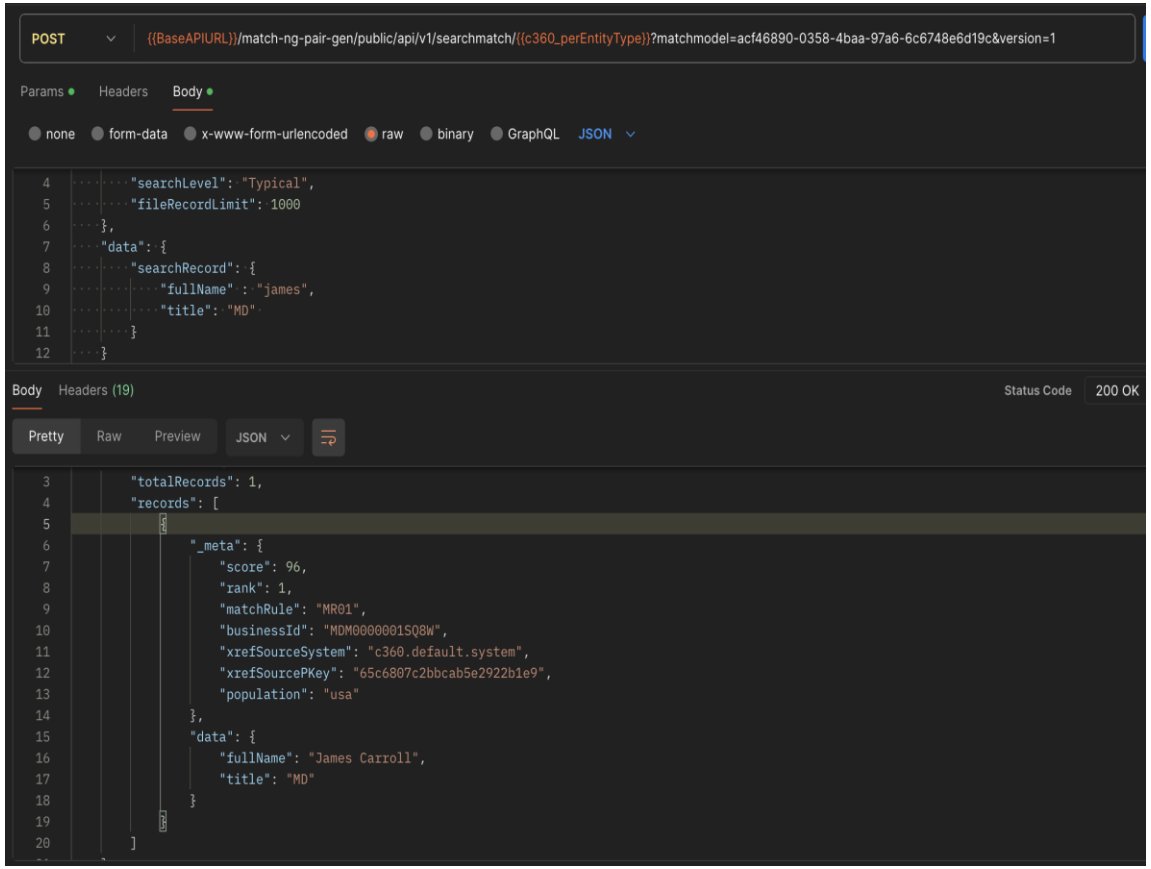
- There are 2 sets of metadata when running get request “_meta” that gives the basic information like created , updated date and the business id. Next, we can get the trust values in the “_contentMeta” tag.
- contentMeta is not typically needed for any specific business usecase in the APIs it is used locally for any validation of the request mostly. Also, this meta data is available only when using GET with business ID and not with source ID.
- In the API request if a system is passing the complete record attributes to be updated use the PUT request or if the changes are known with ‘replace’ or ‘add’ then only use PATCH API for updates.
- If a record is deleted in the UI (soft deleted) it is not searchable in the API using business ID or the source key values.

Entity Xref Requests

- The Read source record API are typically used for any manual validation to verify the information from the source system.
  - It holds the states of the record like ACTIVE, PENDING etc. and the MATCH status that give info about consolidation process.
  - It can also provide information on the type of XREF, weather it's a PATCH record or DATA record.
- Typically, any update from the source system use the entity-xref updates calls and not the business entity golden record update.

Search Match API call

- Another type of matching that using the Informatica Match model for finding duplicates.
- It uses a predefined match model and the rules that are configured.
- This method needs to have all the columns that are defined as match columns and needs to be passed as input to the request.
- There is a match score that is passed which can be used for any business logic for picking the records.



DEMO

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References and useful documentation links :

- HOW TO: Several ways to get Session ID to start REST API session by Login API V3 in MDM SaaS

  https://knowledge.informatica.com/s/article/000212150?language=en_US&type=external

- REST API guidelines

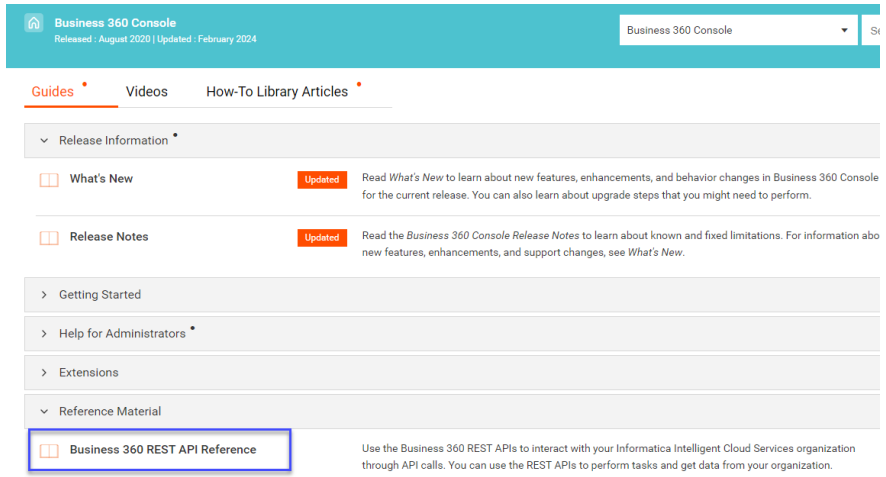
  https://docs.informatica.com/master-data-management-cloud/business-360-console/current-version/business-360-rest-api-reference/business-360-rest-api/rest-api-guidelines.html

- REST API collection

  https://docs.informatica.com/master-data-management-cloud/business-360-console/current-version/business-360-rest-api-reference/business-360-rest-api/rest-api-collection.html

- Business 360 REST API Reference

  https://docs.informatica.com/master-data-management-cloud/business-360-console/current-version/business-360-rest-api-reference/business-360-rest-api.html



Healthcare Operational Use case with MDM SaaS

Mr. Bruce

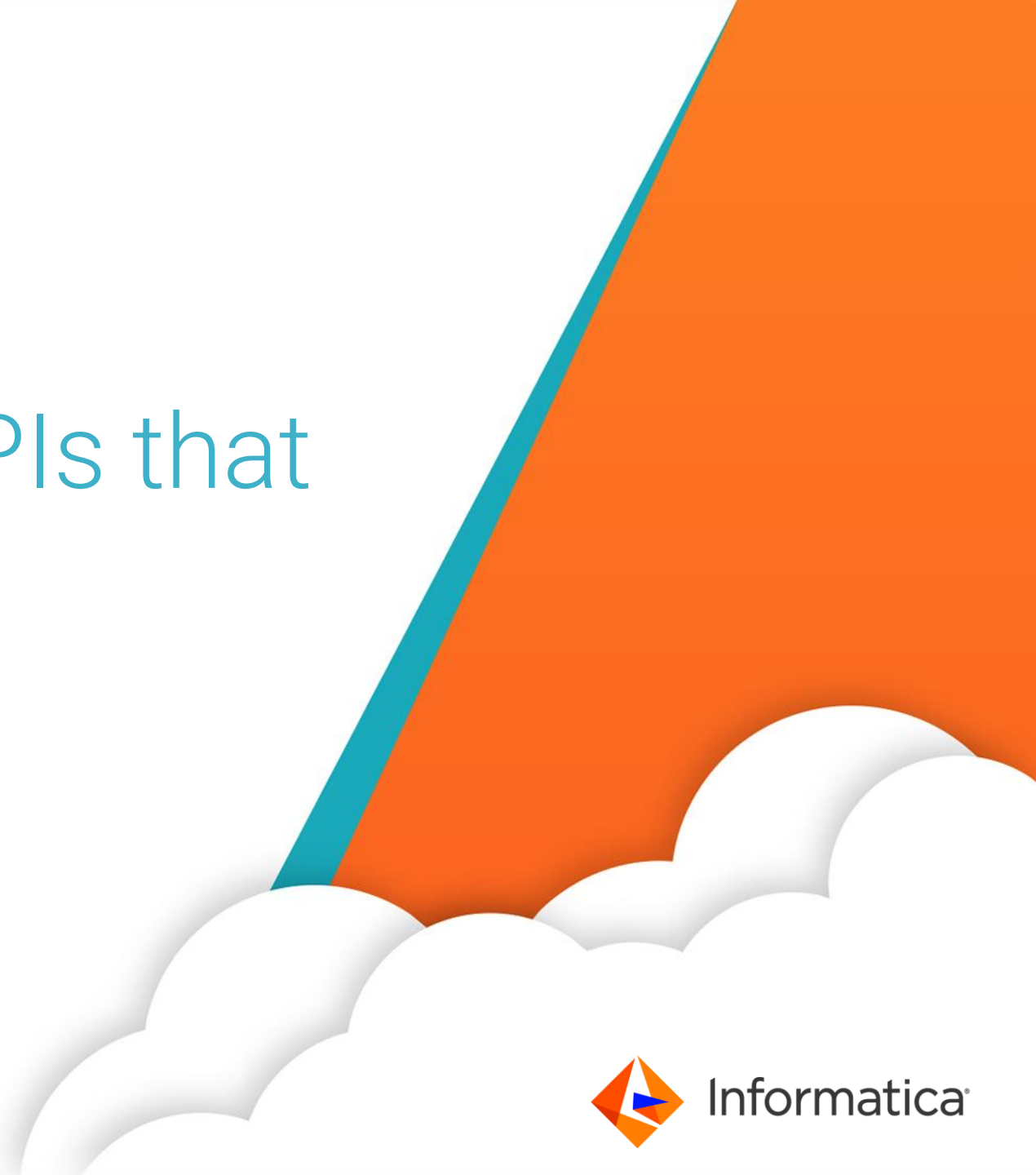
Ms. Maria

Mr. Bruce is a patient who is trying to find the Doctor using an online portal and then call the Clinic's front desk person Ms. Maria to book an appointment for his treatment.

Mr. Bruce goes to the online portal where he provides the basic search information details but need to get many other details of the Doctor like specialization and certifications before he can book an appointment.

Once the details are available, he is going to call the Clinic and provide the details to Ms. Maria who will look into the patient system to find patient account for Mr. Bruce and then use that account number to book an appointment in their scheduling system with the Doctor whom Mr. Bruce wanted to see.

Quick Overview on APIs that are available.



Below is the Orchestration flow for the use case

Scenario 1:

- Search Doctor info using elastic search API and get attributes that are not marked as searchable.
    - Search API / Search Match API
    - Get Master API.

Scenario 2:

- Search for the Patient record and if not available create as new patient and get the account number to book the appointments
    - Make a search call with additional filters to narrow down the results.
    - If single record or a confident record is identified.
    - Run CREATE API using the business ID and new source key if not available else use the existing patient record to book the appointment.

Note: These APIs can be built using CAI and exposed as single wrapper service to any downstream or source systems.

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Thank You

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