**How to get Data from multiple indexes by single query**

So here we are using the technique called enriching data by creating an enrich ingest processor.

We have to add data from your existing indices to incoming documents during the ingest

.while reading data of incoming doc ,it also fetch older existing document based on the match field (acts like a primary key field) .

We can enrich one or more source indices

We have to create a policy of enrich data which define how processor matches the enrich data to incoming data

I have created an index Employee

PUT /employee/\_doc

{

"email": "abc@phasezero.ai",

"name": "sandeep",

"city": "bangalore",

"county": "India",

"state": "United State",

"zip": "560047"

**Now create Enrich policy of above index**

PUT /\_enrich/policy/employee-policy

{

"match": {

"indices": "employee",

"match\_field": "email",

"enrich\_fields": ["name", "county", "city", "zip", "state"]

}}

While creating enrich policy you specify as many as field you want to . only these field can be added to the future incoming document

Add we have specified match\_field as email is a common field for another indices

Which act as a primary key

# after designing the policy you can run it via the execute it

POST /\_enrich/policy/employee-policy/\_execute

**Now we have to create the ingest pipleLine**

PUT /\_ingest/pipeline/employee\_lookup

{

"processors" : [

{

"enrich" : {

"description": "Add 'employee' data based on 'email'",

"policy\_name": "employee-policy",

"field" : "email",

"target\_field": "employee",

"max\_matches": "1"

}}]}

Above ingest pipeline creation will create a ingest pipeline with the name of

Employee\_lookup

Policy-name should be enrich policy that we created above , field is match field that is common across the indices , target field is the appended object to the incoming document in my case I am getting the employee object so I name it as employee field.

Ingest processor doesn’t create an another index but when ever new ingest of data happens it looks for the the process and get based on the match field it retrieve another index data .

So lets create an new Index with has match field email in it

PUT /testenrich/\_doc?pipeline=employee\_lookup

{

"email": "abc@phasezero.ai",

}

Above index as only email data

While ingestion of data itself I am looking for the ingest pipeline lookup

GET /testenrich/\_search

{“query”:{ “match”:{ "email": "abc@phasezero.ai",}}}

Response :

{

"\_index": "testenrich",

"\_id": "ecXo1I0BqfsUQ-jXn-X-",

"\_score": 2.6855774,

"\_source": {

"employee": {

"zip": "560047",

"city": "bangalore",

"name": "vijay",

"county": "India",

"state": "United State",

"email": "abc@phasezero.ai"

},

"email": "abc@phasezero.ai"

}

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Description automatically generated



Our query

A screenshot of a computer code

Description automatically generated

In above query we query against testenrich index which as only email data but we are able to fetch another index data additionally.

Note : Mapping of testenrich data has both parent and child combine but data will not be copied just it maintain mapping

But data of schema would be same what we created . once it enriched it will have copy of it

If not enriched it remains same same how we inserted in child

example : below doc\_id 2 is enriched , doc\_id:4 is not enriched , it does remain individually like SQL

A screenshot of a computer code

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I have build 2 indeces in our new VM and pipeline GET /\_ingest/pipeline/employee\_lookup

https://172.37.2.121:9200/employee

<https://172.37.2.121:9200/testenrich>

Reference :

<https://www.elastic.co/guide/en/elasticsearch/reference/current/ingest-enriching-data.html>

<https://opster.com/guides/elasticsearch/search-apis/elasticsearch-join-two-indexes/>

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