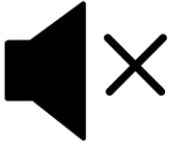


12 Sep, 2024

Journey of a Record in MDM SaaS

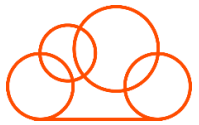
- Aditya Mandal, Principal Tech Support Engineer, GCS
- Pandiarajan B, Lead Tech Support Engineer, GCS

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.

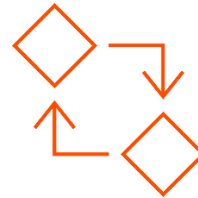
Feature Rich Success Portal



**Bootstrap trial and
POC Customers**



**Enriched Customer
Onboarding
experience**



**Product
Learning Paths
and Weekly
Expert Sessions**



**Informatica
Concierge**



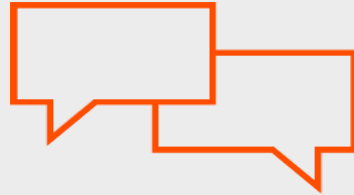
**Tailored training
and content
recommendations**

More Information



Success Portal

<https://success.informatica.com>



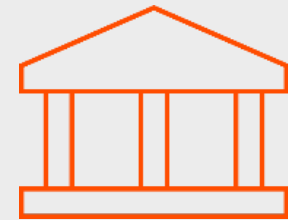
Communities & Support

<https://network.informatica.com>



Documentation

<https://docs.informatica.com>



University

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

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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.

Journey of a Record in MDM SaaS



Aditya Mandal

Principal Technical Support Engineer



Pandiarajan B

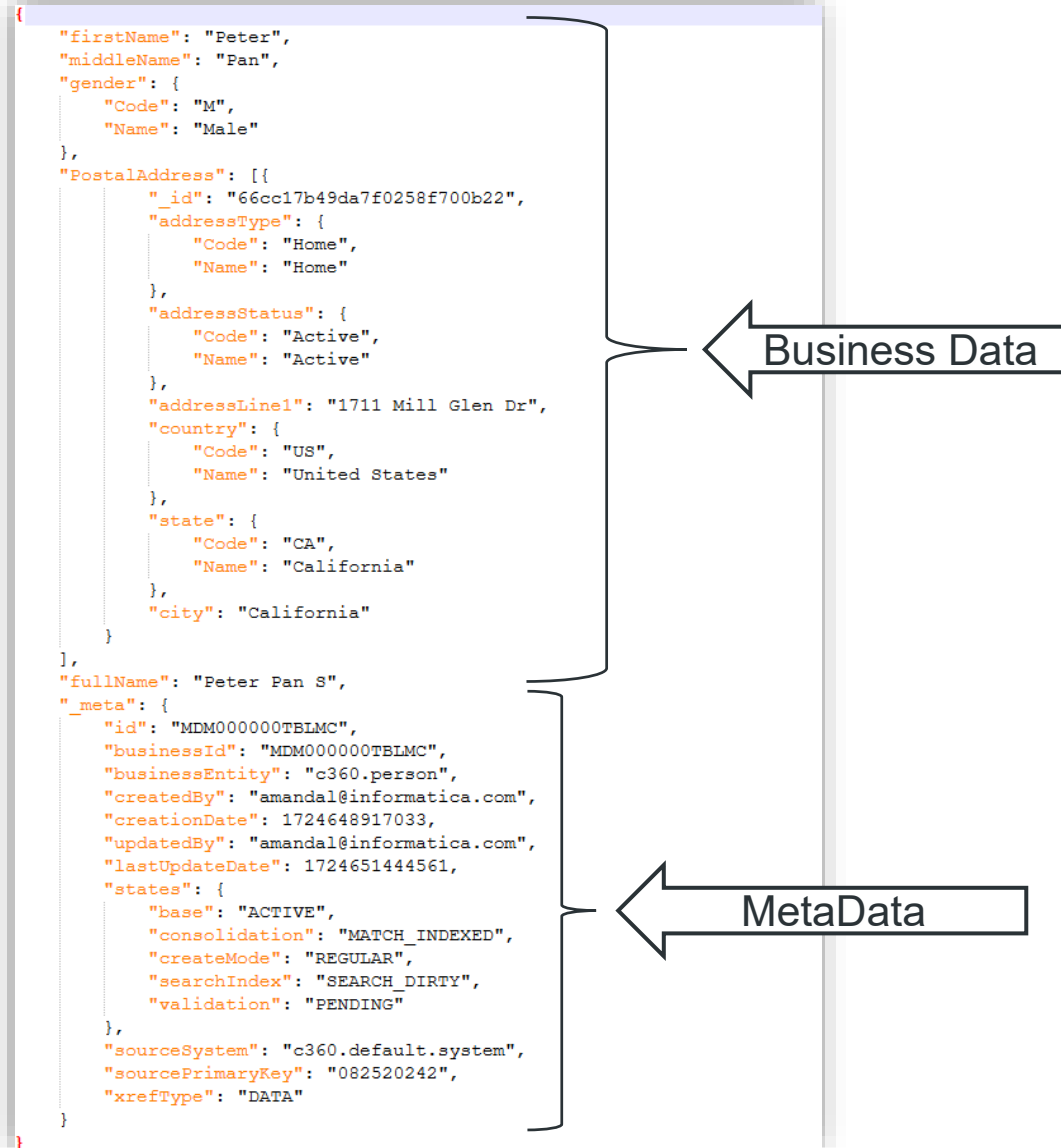
Lead Technical Support Engineer

Agenda

- 1 Record Structure
- 2 Record status information
- 3 Different Types of MDM operations
- 4 Journey of a Record in MDM SaaS
- 5 Additional Scenarios
- 6 Questions

Record Structure :

Sample Record



Record status information :

Master

```
"_meta" : {  
  "status" : "ACTIVE",  
  "businessId" : "MDM00000016V7K",  
  "type" : "c360.person",  
  "createdBy" : "amandal@informatica.com",  
  "creationDate" : NumberLong(1686926893506),  
  "updatedBy" : "amandal@informatica.com",  
  "lastUpdateDate" : NumberLong(1724906246511),  
  "modelVersion" : "34",  
  "states" : {  
    "base" : "ACTIVE",  
    "consolidation" : "MATCH_INDEXED",  
    "createMode" : "REGULAR",  
    "searchIndex" : "SEARCH_INDEXED",  
    "validation" : "PENDING"  
  },  
  "changeList" : null,  
  "jobId" : null  
}
```

XREF

```
"_meta" : {  
  "status" : "ACTIVE",  
  "businessId" : "MDM00000016V7K",  
  "type" : "c360.person",  
  "createdBy" : "amandal@informatica.com",  
  "creationDate" : NumberLong(1686926893506),  
  "updatedBy" : "amandal@informatica.com",  
  "lastUpdateDate" : NumberLong(1724906246511),  
  "modelVersion" : "34",  
  "states" : {  
    "base" : "ACTIVE",  
    "consolidation" : "MATCH_INDEXED",  
    "createMode" : "REGULAR",  
    "searchIndex" : "SEARCH_INDEXED",  
    "validation" : "PENDING"  
  },  
  "changeList" : null,  
  "jobId" : null  
}
```

Note : Not all flags are relevant to all the records.
Some states apply to XREF, while others are specific to the master.

Record States :

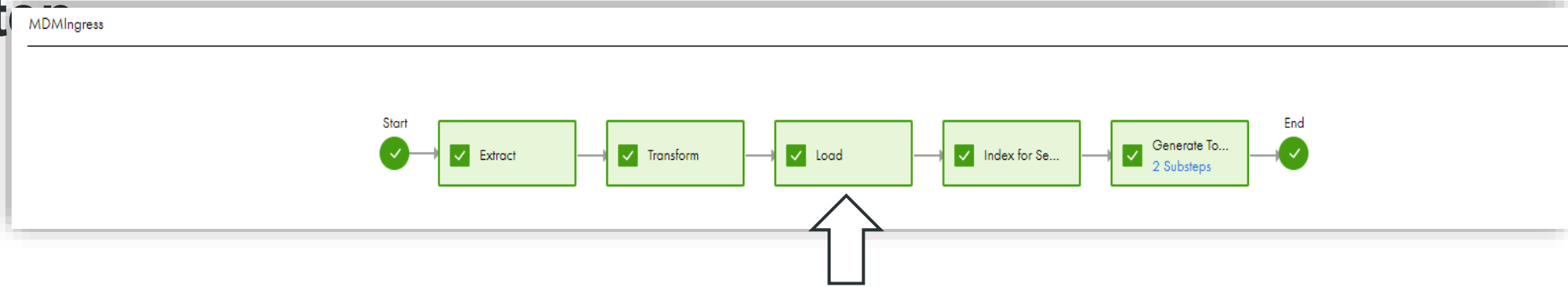
- Base (Active/Pending/Deleted)
- Consolidation States:
 - ✓ MATCH_DIRTY
 - ✓ MATCH_INDEXED
 - ✓ MATCHED
 - ✓ CONSOLIDATED
 - ✓ NOT_READY_FOR_MATCH
- SearchIndex (Search_dirty, Search_indexed)
- CreateMode
- Validation

```
"states" : {  
  "base" : "ACTIVE",  
  "consolidation" : "MATCH_INDEXED",  
  "createMode" : "REGULAR",  
  "searchIndex" : "SEARCH_INDEXED",  
  "validation" : "PENDING"  
},
```

Different Types of MDM operations :

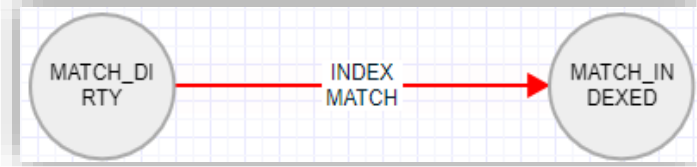
1. Ingress/File Import (IFI)
2. API Call
3. Match
4. Merge
5. Unmerge
6. Delete
7. Task Driven
8. Job Driven

Ingress & File Import (IFI) : Load Step



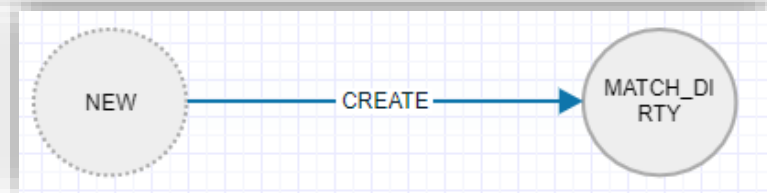
Master

```
"states": {  
  "base": "ACTIVE",  
  "consolidation": "MATCH_INDEXED",  
  "createMode": "REGULAR",  
  "searchIndex": "SEARCH_DIRTY",  
  "validation": "PENDING"  
},
```

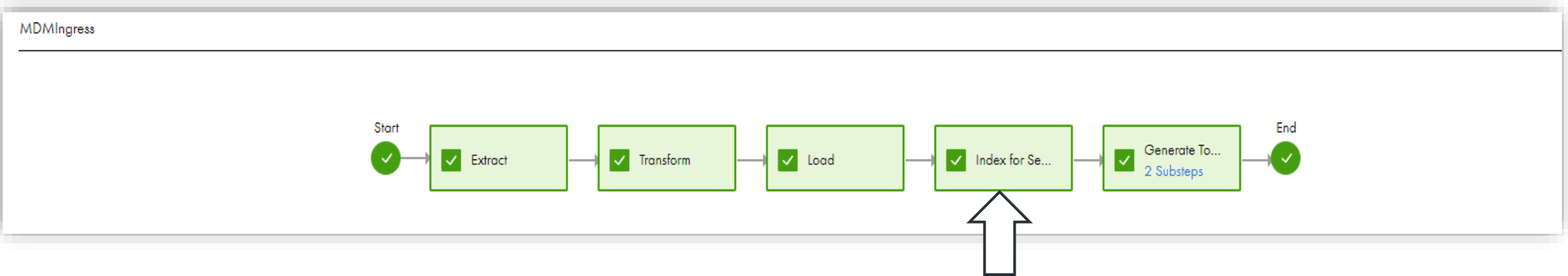


XREF

```
"states": {  
  "base": "ACTIVE",  
  "consolidation": "MATCH_DIRTY",  
  "createMode": "REGULAR",  
  "searchIndex": "SEARCH_DIRTY",  
  "validation": "PENDING"  
},
```

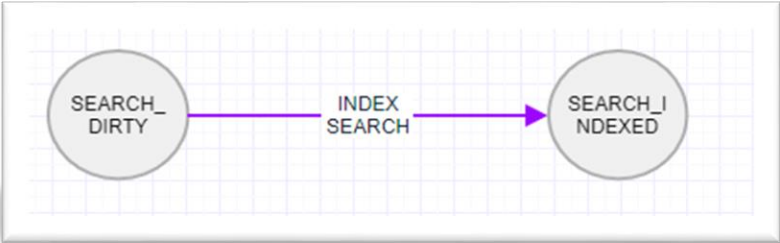


Ingress & File Import (IFI) : Index for Search step



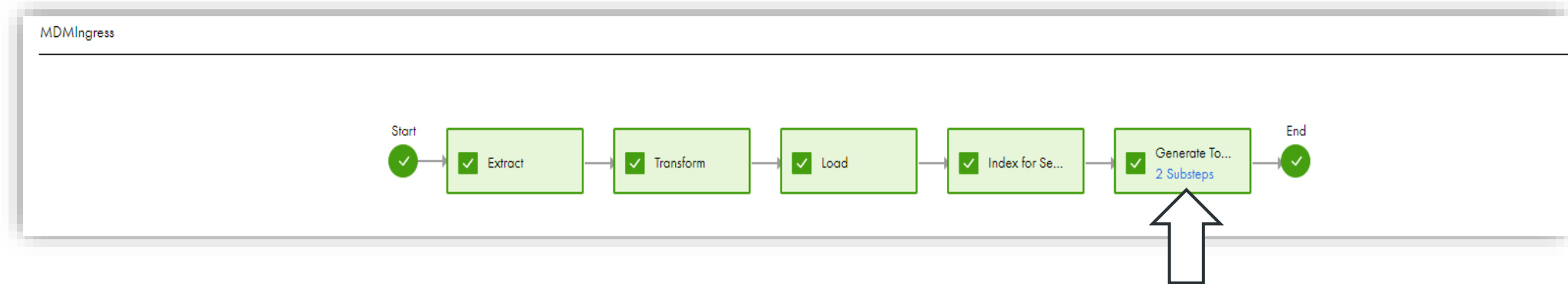
Master Record is indexed. Record is searchable. Search index is not applicable for XREF

Master



```
1 | "states": {  
  |   "base": "ACTIVE",  
  |   "consolidation": "MATCH_INDEXED",  
  |   "createMode": "REGULAR",  
  |   "searchIndex": "SEARCH_INDEXED",  
  |   "validation": "PASSED",  
  |   "xref_consolidation": "MATCH_DIRTY"  
  | }  
2 |
```

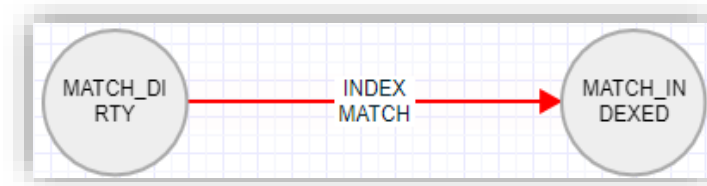
Ingress & File Import (IFI) : Generate Tokens



Once Generate Match Tokens step completes, CONSOLIDATION State transitions to **MATCH_INDEXED (XREF)**

XREF

```
"states": {  
  "base": "ACTIVE",  
  "consolidation": "MATCH_INDEXED",  
  "createMode": "REGULAR",  
  "searchIndex": "SEARCH_DIRTY",  
  "validation": "PENDING"  
},
```



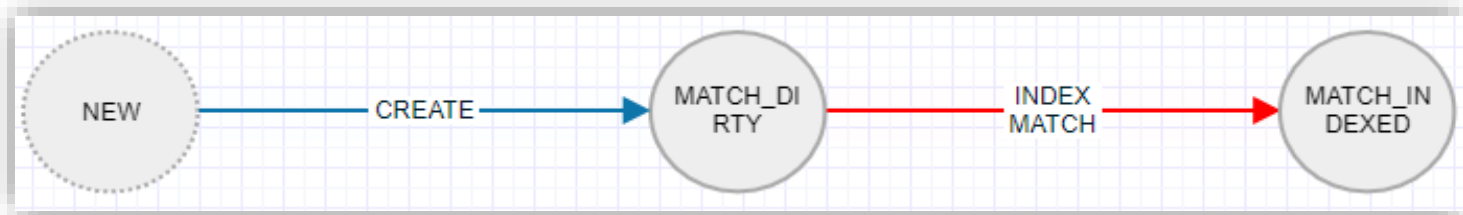
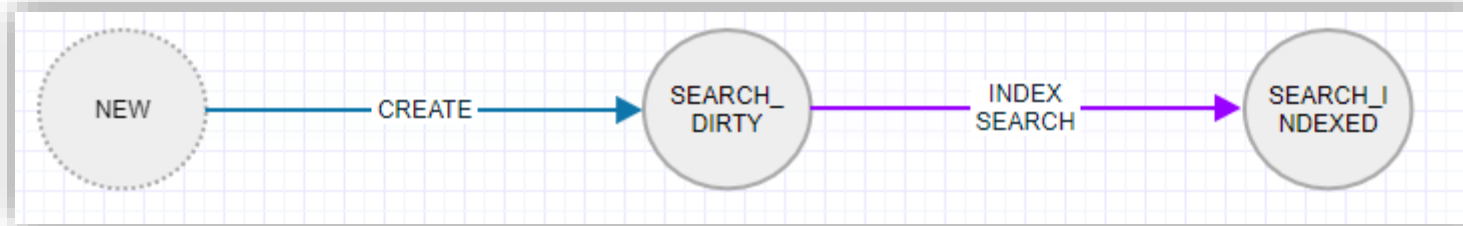
API call :

- Record is created using POST API Call, consolidation state directly changed to MATCH_INDEXED

GET : {{publicURL}}/business-entity/public/api/v1/entity/c360.person/MDM000000ZZNIX?_showContentMeta=true



Master

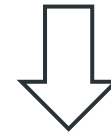


```
"states": {  
  "base": "ACTIVE",  
  "consolidation": "MATCH_INDEXED",  
  "createMode": "REGULAR",  
  "searchIndex": "SEARCH_INDEXED",  
  "validation": "PASSED",  
  "xref_consolidation": "MATCH_DIRTY"  
},
```

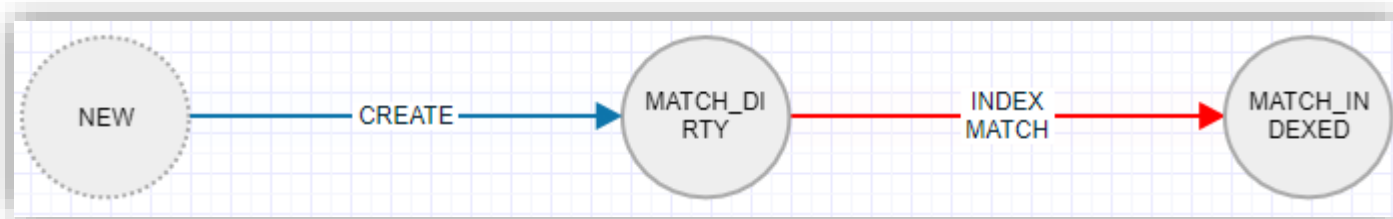

API call :

- Record is created using POST API Call, consolidation state directly changed to **MATCH_INDEXED**

GET : {{publicURL}}/business-entity/public/api/v1/entity-xref/<BE>/<sourcesystem>/<pkey>?_showContentMeta=true

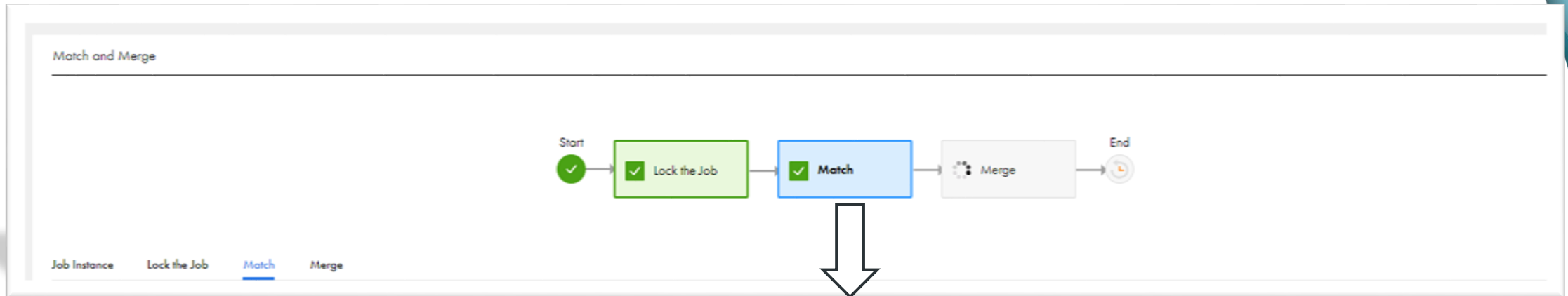


XREF

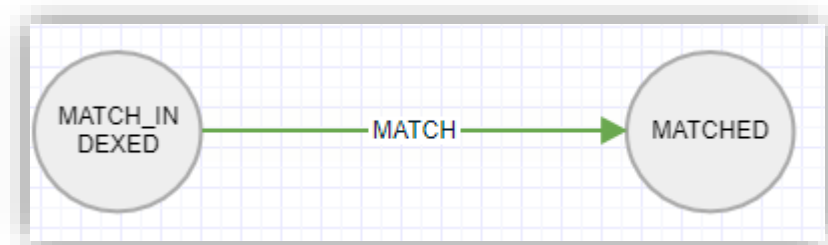


```
{  
  "states": {  
    "base": "ACTIVE",  
    "consolidation": "MATCH_INDEXED",  
    "searchIndex": "SEARCH_DIRTY",  
    "validation": "PENDING",  
    "xref_consolidation": "MATCH_DIRTY"  
  },  
  "sourceSystem": "c360.default.system",  
  "sourcePrimaryKey": "PkeyAPICALL1234",  
  "xrefType": "DATA"  
},
```

Match job :



XREF

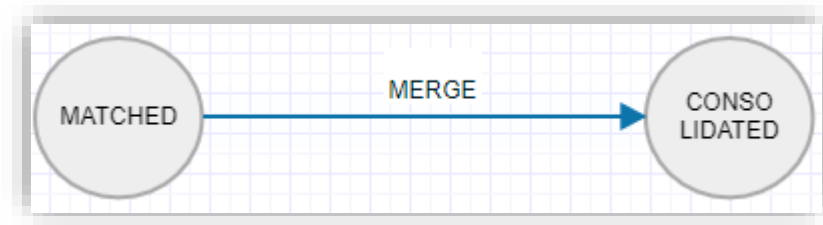
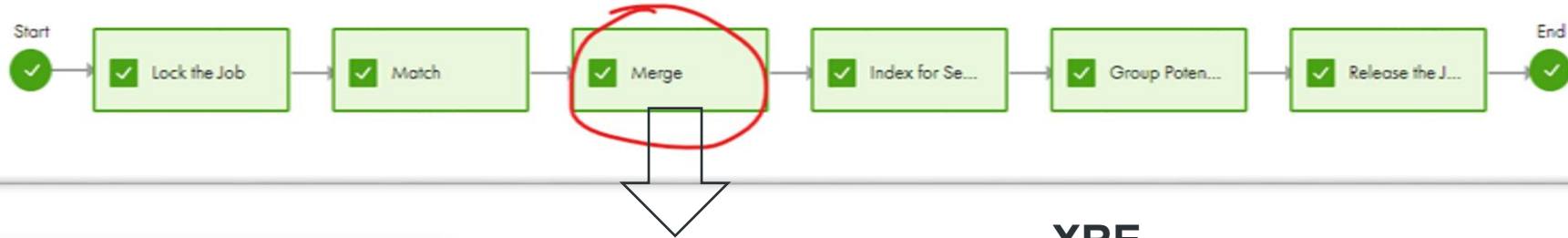


```
"states": {  
  "base": "ACTIVE",  
  "consolidation": "MATCHED",  
  "searchIndex": "SEARCH_DIRTY",  
  "validation": "PENDING"  
},  
"sourceSystem": "c360.default.system",  
"sourcePrimaryKey": "082520243",  
"xrefType": "DATA"  
},
```

- Only the 'MATCH_INDEXED' records will transition to MATCHED.

Merge job :

Match and Merge



XRE

```
lastUpdatedDate F 1/24/2009 10:01,  
"states": {  
  "base": "ACTIVE",  
  "consolidation": "CONSOLIDATED",  
  "searchIndex": "SEARCH_DIRTY",  
  "validation": "PENDING"  
},  
"sourceSystem": "c360.default.system",  
"sourcePrimaryKey": "082520241",  
"xrefType": "DATA"  
},
```

1. M&M Job : Merges record from the same specific match job
2. Merge only job : Merges records from all match jobs executed to date.

Unmerge :

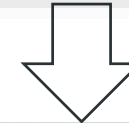
- Public API

POST | `{{publicURL}}/business-entity/public/api/v1/entity-group/c360.person/MDM000004ND28Y`

Params | Authorization | Headers (12) | **Body** | Scripts | Settings

☐ none ☐ form-data ☐ x-www-form-urlencoded ☒ raw ☐ binary ☐ GraphQL **JSON** ▾

```
1  [
2    {
3      "sourcePKey": "2296507531_cb313b4c-0e58-409f-9bee-a4a494c20fca",
4      "sourceSystem": "crm"
5    }
6  ]
```



**XRE
F**

- CONSOLIDATION State remains unchanged**

```
    "lastUpdateDate": 1724648571601,
    "states": {
      "base": "ACTIVE",
      "consolidation": "CONSOLIDATED",
      "searchIndex": "SEARCH_DIRTY",
      "validation": "PENDING"
    },
    "sourceSystem": "c360.default.system",
    "sourcePrimaryKey": "082520241",
    "xrefType": "DATA"
```

Unmerge :

UI

John Smith M

1711 Mill Glen Dr, California, California, United States

Record Details

Source Records

Hierarchy

History

Relationship Graph

Source Records

2 of 2 source records

John Smith M	John Smith M	John Smith M
	Source System: Informatica Customer 360	Source System: Informatica Customer 360
<div>System Fields</div> <div>Business ID : MDM000000TB...</div> <div>ID : 66cc13073f113...</div> <div>Updated On : 08/26/2024</div> <div>Updated By : amandal@infor...</div> <div>Record State Indl... : ACTIVE</div> <div>Population :</div> <div>Not Ready For M... :</div>	<div>MDM000000TBDWK</div> <div>082520241</div> <div>08/26/2024</div> <div>amandal@informatica.com</div> <div>ACTIVE</div> <div></div> <div>False</div>	<div>MDM000000TBLMC</div> <div>082520242</div> <div>08/26/2024</div> <div>amandal@informatica.com</div> <div>ACTIVE</div> <div></div> <div>False</div>

Match Pair Details

General Information

 | |

Actions

Override Surviving Values

Unmerge Records

Delete

Restore



XREF

CONSOLIDATION State remains unchanged

```
...
"lastUpdateDate": 1724648571601,
"states": {
  "base": "ACTIVE",
  "consolidation": "CONSOLIDATED",
  "searchIndex": "SEARCH_DIRTY",
  "validation": "PENDING"
},
"sourceSystem": "c360.default.system",
"sourcePrimaryKey": "082520241",
"xrefType": "DATA"
}
```

DELETE (Soft-Delete) :

- Record can be deleted using following methods
 - ✓ Ingress
 - ✓ API
 - ✓ UI
- Master Delete** – Only master record gets deleted. Xref record remains active.

Peter Pan S
Deleted
S, Peter, 09/05/2024 06:57:55 PM

Page Tab 1 | Source | History

Source Records | 2 of 2 source records

Peter Pan S		Peter Pan S	Person - ex66da4584e7276a286...
		Source System: Informatica Customer 360	Source System: Informatica Customer 360
System Fields			
Business ID	: MDM000000ZZ...	MDM000000ZZFSY	MDM000000ZZFSZ
ID	: 66da4584e7276...	PkeyAPICALL1234	ex66da4584e7276a286b5f2615
Updated On	: 09/05/2024	09/05/2024	09/05/2024
Updated By	: amanda_l_p01	amanda_l_p01	amanda_l_p01
Record State Indi...	: DELETED	ACTIVE	ACTIVE
Population	:		
Not Ready For M...	:	False	False

Master

```
"states" : {  
  "base" : "DELETED",  
  "consolidation" : "MATCH_DIRTY",  
  "createMode" : "REGULAR",  
  "searchIndex" : "SEARCH_INDEXED",  
  "validation" : "SKIPPED"  
},
```

Base
Layer
(master)

ACTIVE

DELETE

DELETED

DELETE (Soft-Delete) :

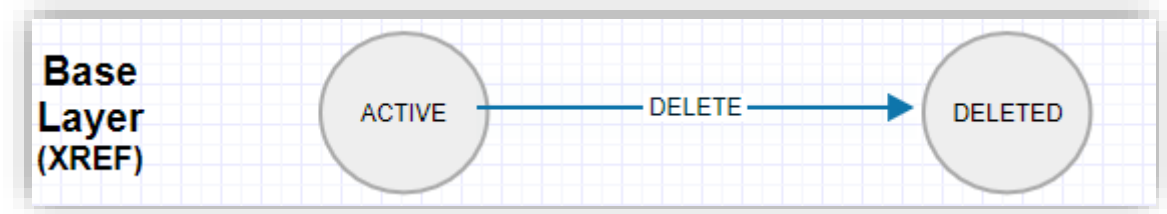
- Xref Delete : Xref record gets deleted.
- When all xrefs are soft deleted, master is automatically soft deleted i.e. master state base goes into DELETED

Peter P Pan
Pan, Peter, 09/06/2024 04:18:15 PM

Page Tab 1 Source History

Source Records | 3 of 3 source records

Peter P Pan	Peter P Pan	Person - ex66db71984f2ca34b5d...	Peter Pan S
	Source System: Informatica Customer 360	Source System: Informatica Customer 360	Source System: Informatica Customer 360
System Fields			
Business ID : MDM000000ZZ...	MDM000000ZZFT1	MDM000000ZZV8H	MDM000000ZZV8G
ID : 66db71984f2ca...	BID1234	ex66db71984f2ca34b5d6a95b0	PkeyAPICALL1235
Updated On : 09/06/2024	09/06/2024	09/06/2024	09/06/2024
Updated By : amandal_p01	amandal_p01	amandal_p01	amandal_p01
Record State Ind... : ACTIVE	ACTIVE	ACTIVE	DELETED
Population :			
Not Ready For M... :	False	False	False



XRE

```
"states" : {  
  "base" : "DELETED",  
  "consolidation" : "MATCH_DIRTY",  
  "createMode" : "REGULAR",  
  "searchIndex" : "SEARCH_DIRTY",  
  "validation" : "PENDING"  
},
```


Not Ready For Match

- Field value to enable or disable the participation of source records in the match process.
- When set to False, the data is ready for matching.
- When set to True, the record will be excluded from the match process.
- When the user updates the xref with notReadyForMatch field as false or does not send any data for notReadyForMatch field, then value is reset to MATCH_INDEXED

Master

```
"state": "ACTIVE",  
"validation": "PASSED",  
"consolidation": "MATCH_INDEXED",
```

XREF

```
"states": {  
  "base": "ACTIVE",  
  "consolidation": "NOT_READY_FOR_MATCH",  
  "searchIndex": "SEARCH_DIRTY",  
  "validation": "PENDING",  
  "xref_consolidation": "MATCH_DIRTY"  
},
```

HCO Source Records Split View Hierarchy		
Source Records 1 of 1 source records		
Rajan Sb		Rajan Sb Source System: Informatica Custoi
Updated On	: 10/15/2023	10/15/2023
Updated By	: rajan_p01	rajan_p01
Record State Indicator	: ACTIVE	ACTIVE
Population	:	
Not Ready For Match	:	False
General Information		
Full Name	: Rajan Sb	Rajan Sb
Number of Employees	:	
Company Type	:	

- Ingress Process :

Target Fields: (4 of 271 mapped)

Element Name
▼ ✓ root*
▼ Person
✓ sourcePKey*
businessId
sourceSystem*
creationDate
lastUpdateDate
state
createdBy
updatedBy
originalBusinessId
mergedBusinessId
populationName
notReadyForMatch
▶ xrefLinksArray
▶ Person

- File Import Process :

Target
Map Selected
Target Field
▶ Area Served
▶ Account
▶ Compliance
▶ DEA
▶ Sampleability
▶ Certification
▶ Holding Tax FG
▶ Party Source System
▶ Address Custom
Population Name
NotReadyForMatch
▼ _cm
Source Last Updated Date

- API Update Process :

PATCH - https://usw1-mdm.dmp-us.informaticacloud.com/business-entity/public/api/v1/entity-xref/c360.person/b360.default.system/pkey809?_forceUpdate=true¬ReadyForMatch=true

BODY:

```
[
  {
    "op": "setSourceLastUpdateDate",
    "path": "/",
    "value": "1690566309481"
  }
]
```

Note : SourceLastUpdateDate Value would be **epoch timestamp**

UI Disabling:

Source Records

Source Records | 1 of 1 source records

Rj Org

Source System: Informatica Customer 360

06/27/2023

rajan_p01

ACTIVE

False

Actions

Override Surviving Values

Unmerge Records

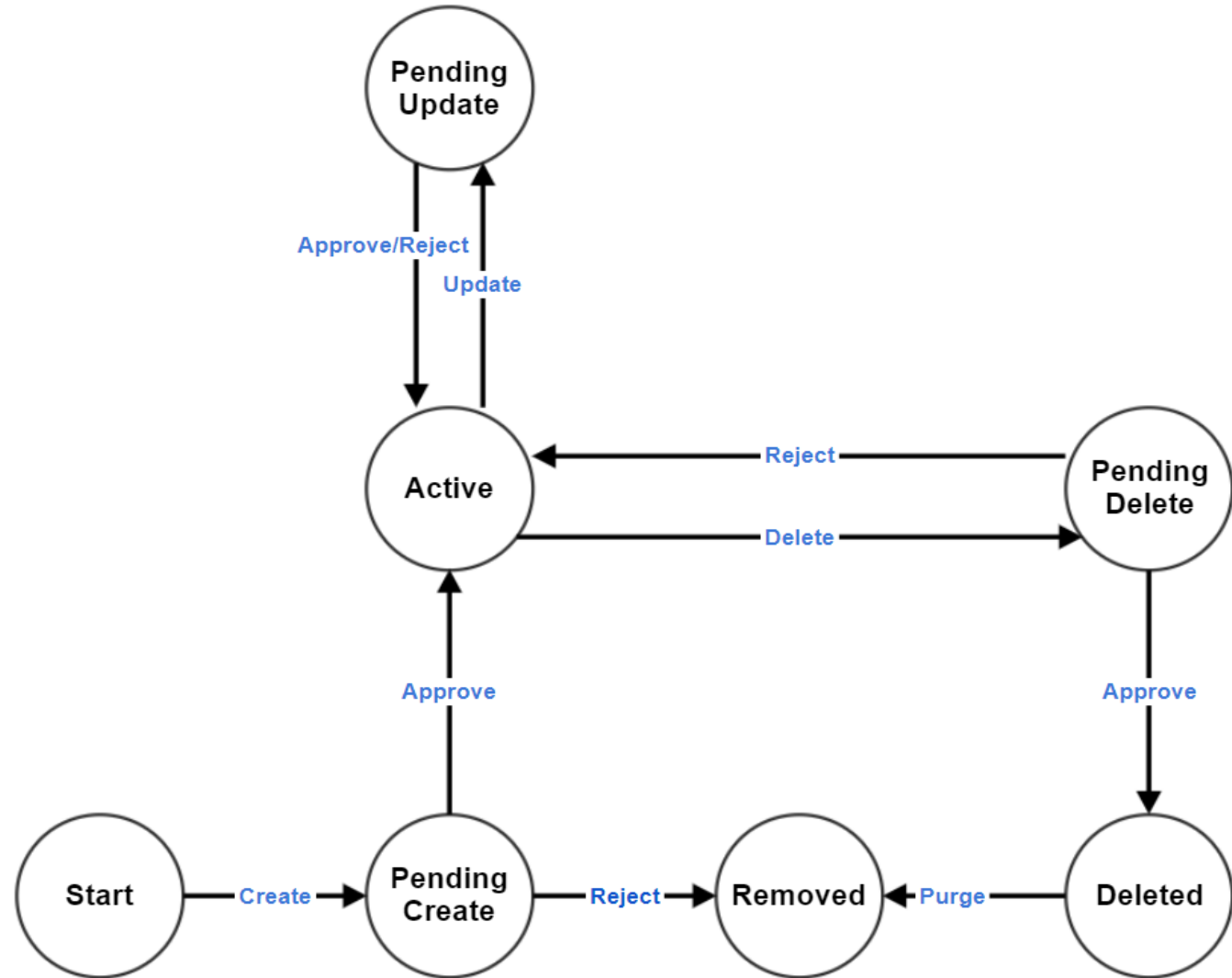
Disable Matching

Delete

Restore

Task driven Data States

- User Triggered Task events -
 - Create/Update Task.
 - Delete Task.
 - Unmerge/Manual Merge Task.
- System Triggered Task Events -
 - Resolve Potential Match Task
- Internal Task States
 - Active
 - Pending Create
 - Pending Update
 - Pending Delete
 - Deleted



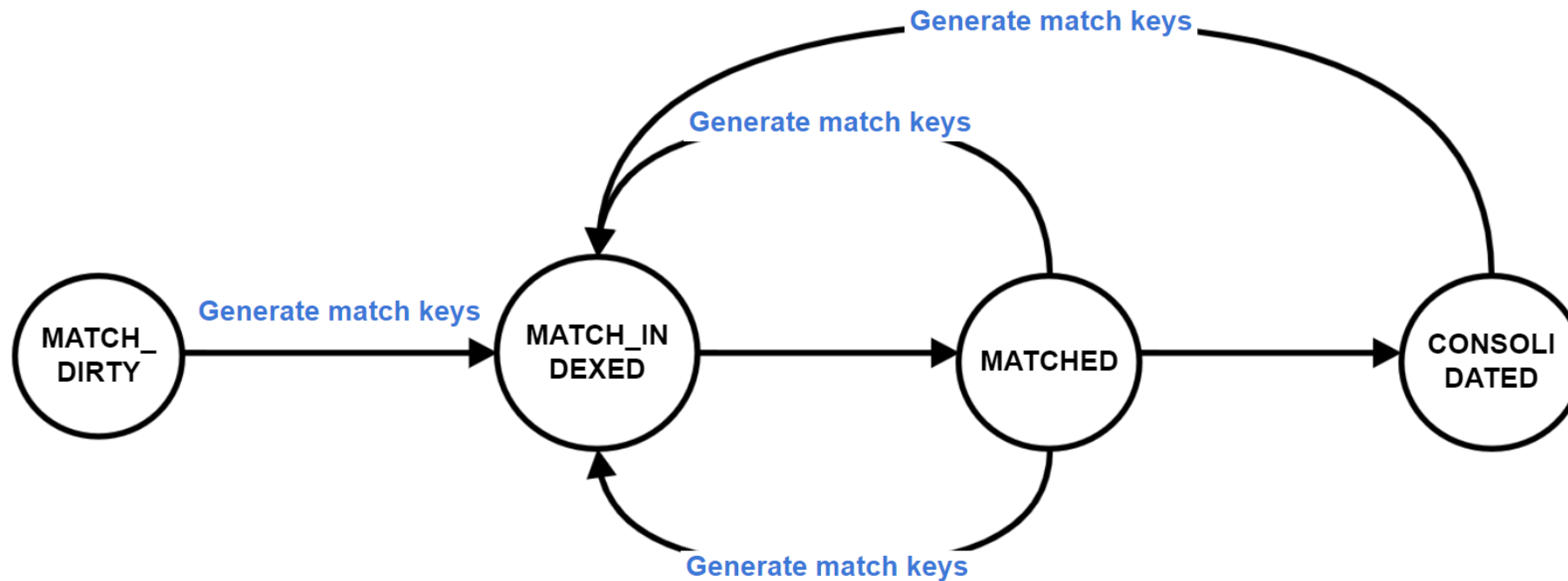
```
"states": {  
  "base": "ACTIVE",  
  "consolidation": "NOT_READY_FOR_MATCH",  
  "searchIndex": "SEARCH_DIRTY",  
  "validation": "PENDING",  
  "xref_consolidation": "MATCH_DIRTY"  
},
```

```
"states": {
  "base": "DELETED",
  "consolidation": "MATCH_DIRTY",
  "createMode": "REGULAR",
  "searchIndex": "SEARCH_DIRTY",
  "validation": "PENDING"
},
```

Task:	First Review	Assigned To:	Due By:	10/11/2023
Status:	Unassigned	Created By: refds	Created On:	10/04/2023
Priority:	↑ Medium	Modified By:	Modified On:	10/04/2023

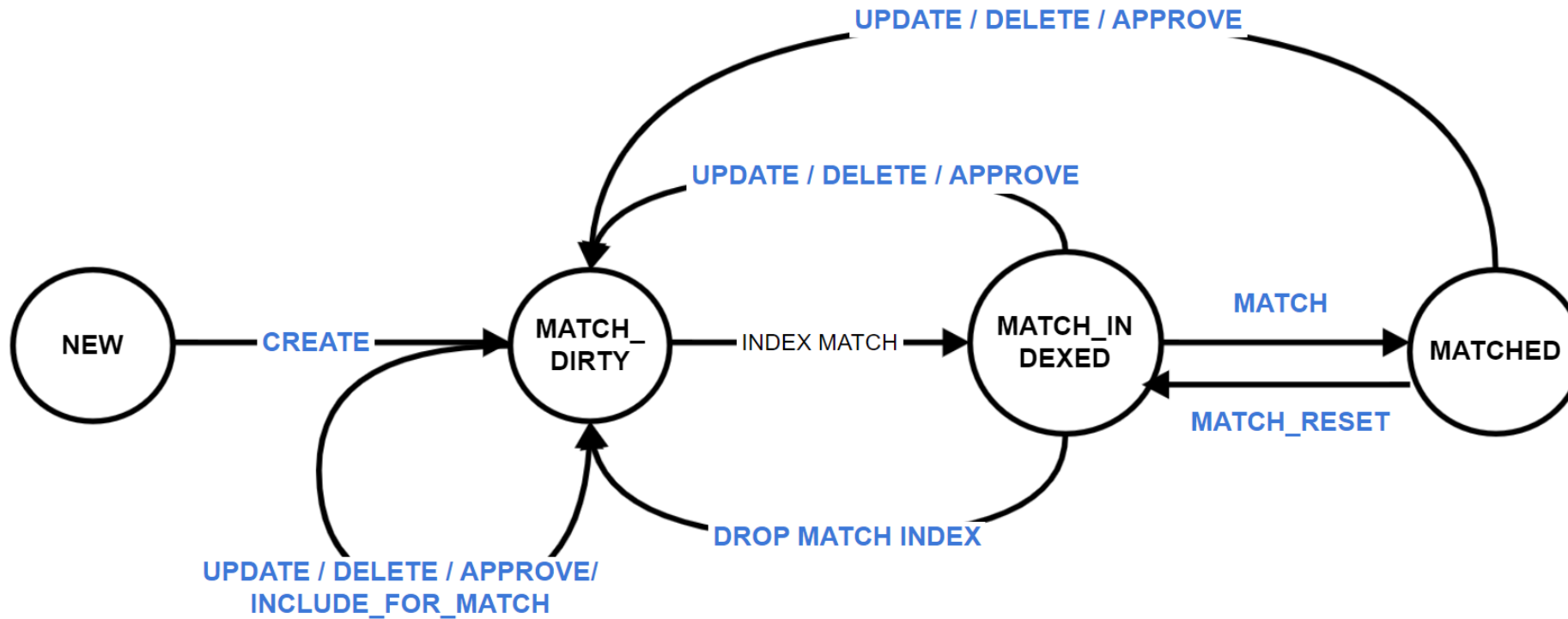
Job Driven Data States

- **Generate Match Keys Job - MDMMatchReIndex**
 - ❑ Generates match keys to identify matching candidates



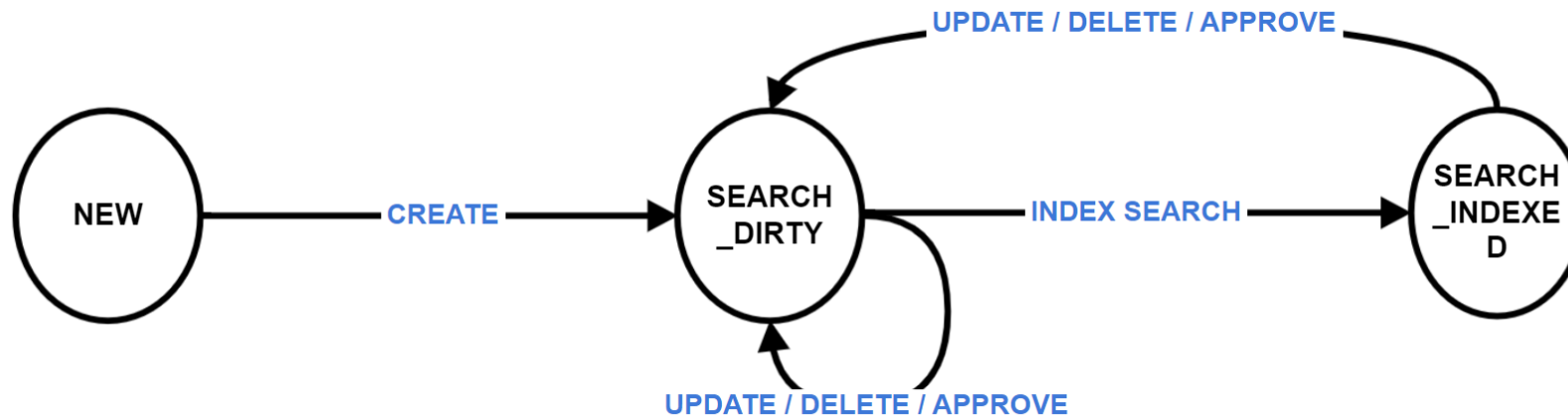
- **Match Reset Job - Reset Matched Records**

- ☐ Resets matched records that have not been merged.
- ☐ Makes these records available for matching again.



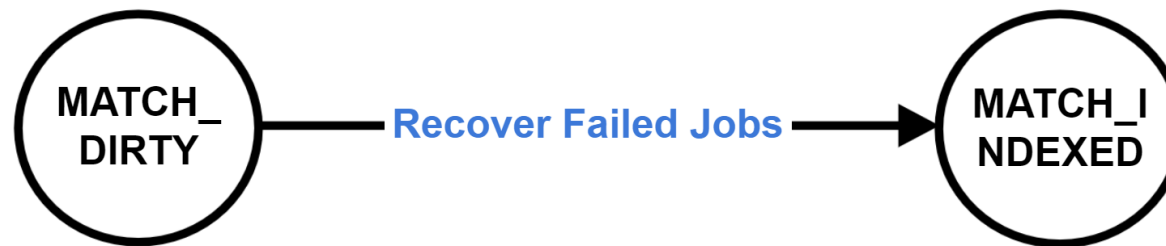
- **Generate Search Indexes - MDMSearchIndex**

- ☐ Indexes records for search requests.
- ☐ Search index is applicable only for Master



- **Recovering a Failed Job**

- ☐ When running a job, like a match and merge job, some records may not be processed.
- ☐ You can run the *Recover Failed Job* option to identify and process any unprocessed records.

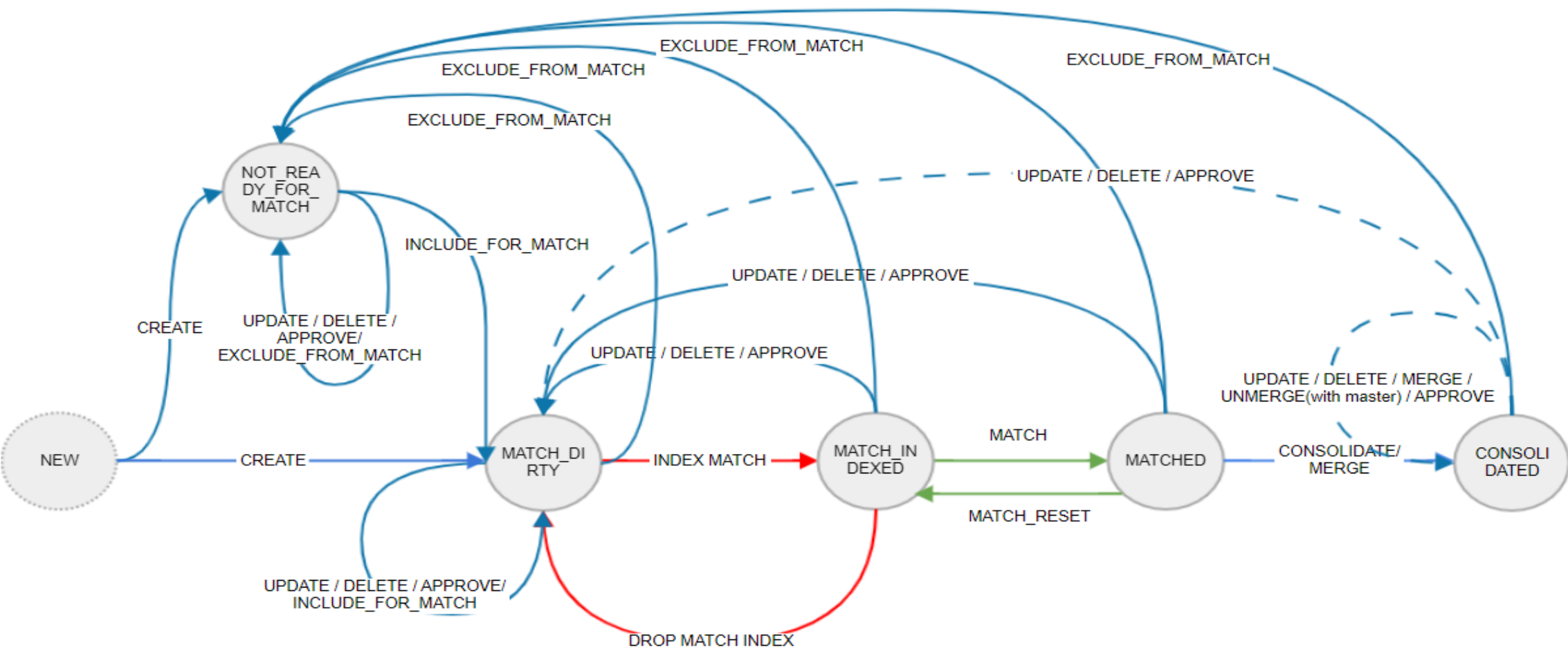


Please note that not all flags are applicable to every record. For example, some states apply specifically to XREF records, while others apply to the master record.

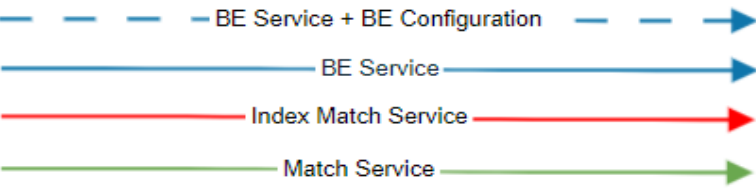
Additional Scenarios

- When an unmerge occurs on a specific record pair, those unmerged source record pairs are excluded from matching with each other.
- However, unmerged source records can re-enter the matching process through transitive matching if a new record with similar potential matching values is introduced.
- Alternatively, data stewards can manually merge these unmerged source records if necessary.
- If there's missing data for a blocking rule or a data issue, the consolidation state of the source records will remain in MTCH_DRTY.

Please note that the processes we've discussed represent the 'happy path'—the ideal scenarios. There may be situations where errors or issues prevent the proper transition of records, requiring further analysis and action to resolve.



Consolidation layer for XREF records.
To be used for XREF records matching



Thank You