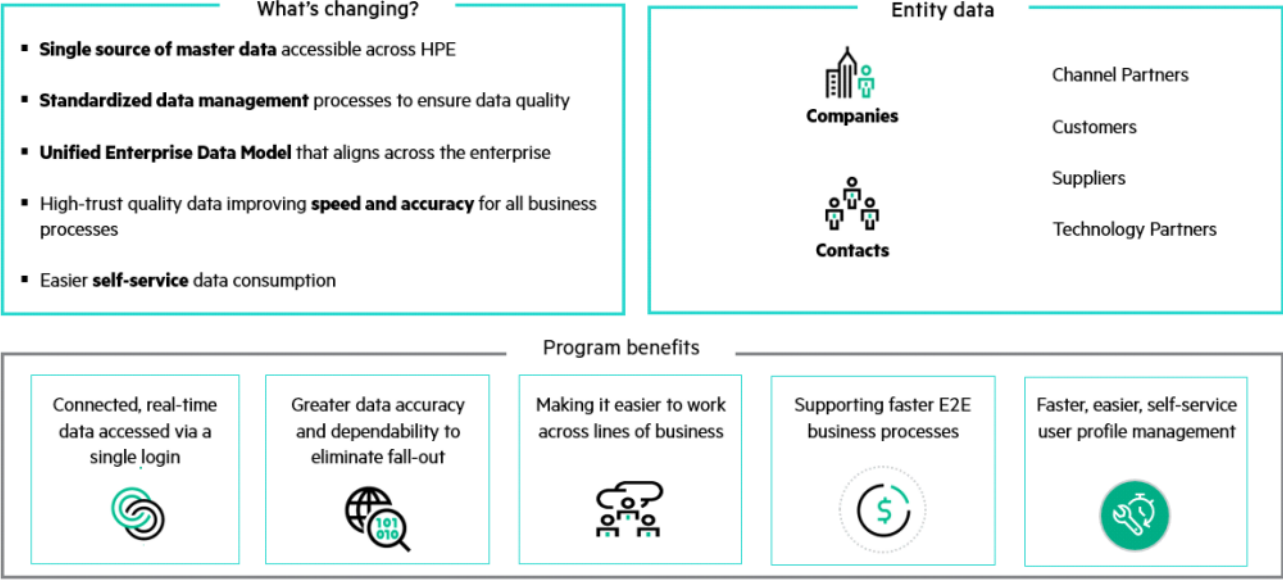# EMDM Architecture

Thursday, May 21, 2020   8:10 PM

- **Wendi Landa:** Senior Director, Entity Master Data Management
  - Entity Master Data will be the key to a connected partner experience by providing a single Partner / Customer identification across the value chain, enabling foundational data concepts such as a single login for all of your HPE Partner relationships

HPE Next: Entity Master Data Management (MDM) transformation

What's changing?

- **Single source of master data** accessible across HPE
- **Standardized data management** processes to ensure data quality
- **Unified Enterprise Data Model** that aligns across the enterprise
- High-trust quality data improving **speed and accuracy** for all business processes
- Easier **self-service** data consumption

Entity data

Companies

Contacts

Channel Partners

Customers

Suppliers

Technology Partners

Program benefits

Connected, real-time data accessed via a single login	Greater data accuracy and dependability to eliminate fall-out	Making it easier to work across lines of business	Supporting faster E2E business processes	Faster, easier, self-service user profile management

Party Data Model will replace multiple Customer IDs

Party definition

- A legal entity that HPE conducts business with; an organization or person and is associated to standardized addresses

- Parties identify HPE Partners, Vendors, Customers, Competitors

- Validation rules such as Address Standardization, D&B synchronization

Business Relationship definition

- **Business Relationship:** A Party's business affiliation to HPE (**Channel Partner, Customer, Vendor**)

What's changing?

- New standard Business ID (*Party ID*) will replace PRM & Location ID, CRS, CBN and CLE across HPE business transactions for Partner and Customer Roles

- Unique identifier will enable improved end-to-end quote-to-cash visibility and simplified data management for partners

Example

Company XYZ
120 Celebration Blvd.
Celebration, Florida, 34747-2341, US
Tax Id : 12-345678,
Site DUNS .., Domestic DUNS, ... Global DUNS ...

Business Relationship : Customer

Standard Party ID
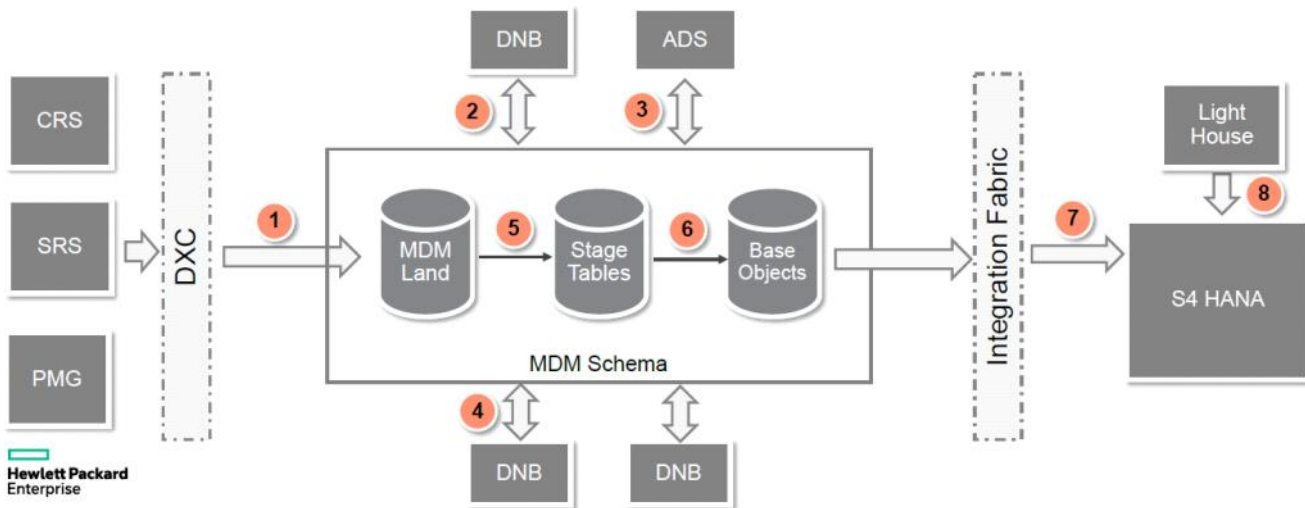
Master Data Maintenance Tasks: New Records

The EMDM system performs key master data maintenance tasks for the

(i) *New records* created within the EMDM system and

(ii) *Migrated records* from the legacy systems.

Data Maintenance Tasks for New Records	Data Maintenance Tasks for Migrated Records

For the new records, the EMDM system performs the following data maintenance tasks:

1. Enabling the data for self consumption
2. Searching the existing records and auto-subscribing records down to DNB
3. Ensuring the data quality for the new created records and ensuring that the records are compliant

Data Maintenance Tasks for New Records	Data Maintenance Tasks for Migrated Records

For the migrated records, the EMDM system performs the following data maintenance tasks:

1. **Source**: Sourcing the master data records from multiple source systems, such as CRS, PMG, and SRS systems.
2. **Cleanse**: Cleansing the sourced data by removing junk values and ensuring only high quality data is uploaded in the MDM system.
3. **Consolidate**: Consolidating the records by applying match rules to detect potential duplicate records. These records and merging them.
4. **Maintain**: Data Stewards will further enrich data using IDD.

Business Value of Geo Hierarchy

The Geo Hierarchy capability enables the user to establish conceptual parent-child relationships between various geographies. This includes countries and aggregates up to sub-regions and regions.

Following are some business values of Geo Hierarchy data:

The Geo Hierarchy data including the countries, regions, and sub-regions is maintained by the Master Data team.

Changes in the Geo Hierarchy data are applied once a year, after the financial year end, traditionally in the third week of November. By implementing the Geo Hierarchy solution, the business can perform the activities seamlessly in a more structured manner.

The Finance team drives the list of changes approved to be implemented. As MDM stores Geo Hierarchy data in a central repository it is convenient for managing and maintaining the Hierarchy.

Business users can extract the data based on the business requirements from MDM to ensure a synchronized cross system implementation.

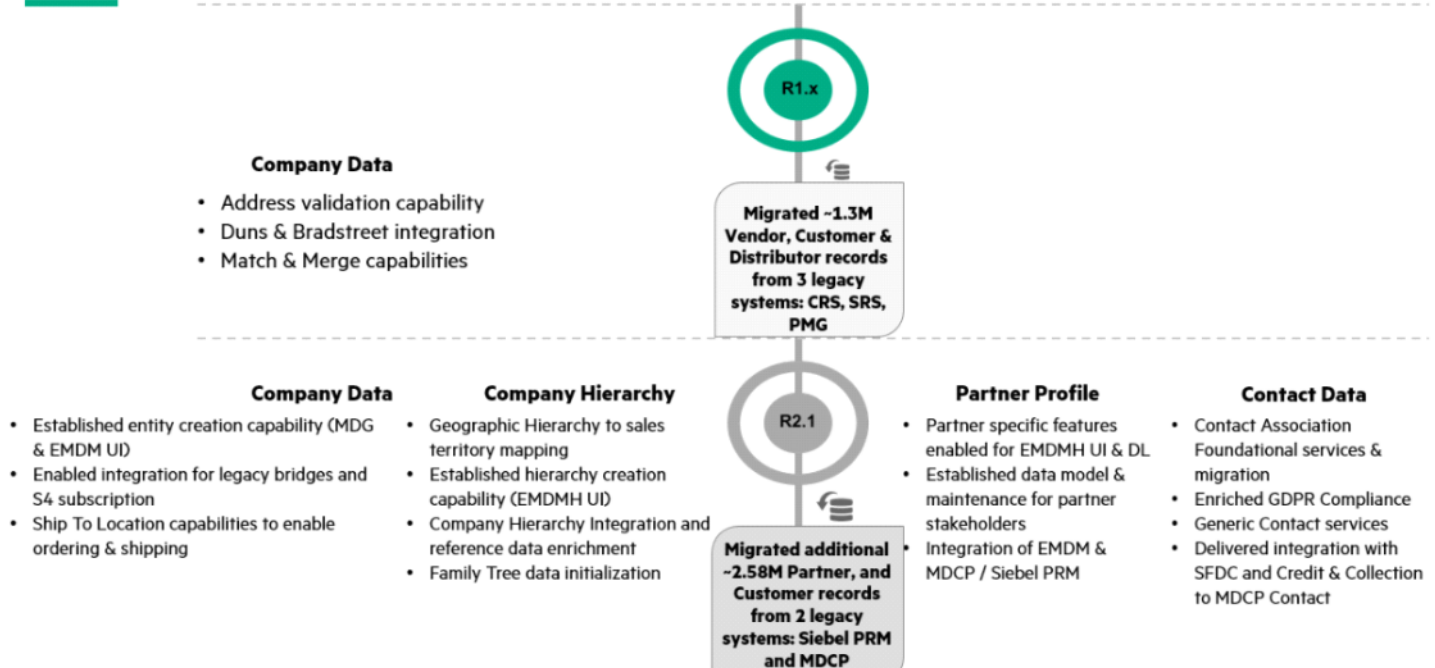# Reference Data Management: An Overview

Reference Data

Reference Data are the data objects relevant to various operations, consisting of sets of values, statuses, or classification. Reference Data is generally uniform, company-wide, and can be either created within a country or by external standardized bodies.

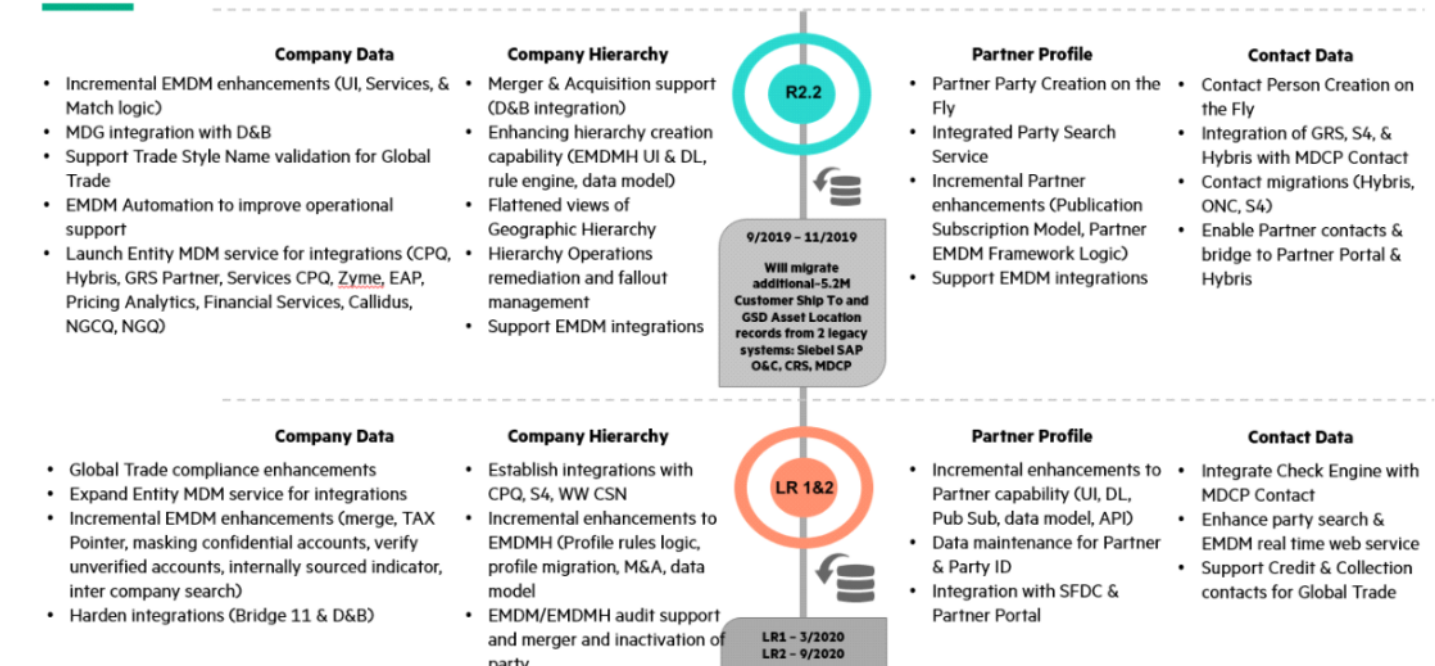### Benefits of Entity MDM Reference Data Management

- It provides a centralized repository of Reference Data
- It provides a generic service offering synchronized data across various systems, such as SFDC and MDCP Contacts
- It ensures an ease of onboarding future systems looking to consume these Reference Data
- It eliminates manual effort to update data in different systems and hence preventing data discrepancy

LEGACY DATA CONSOLIDATION STRATEGY

Source	Source ID	Party ID	Organization Name	_	_
CRS	0500023285	1000807443	Ingram Micro Inc		
CRS	0600348923	1001071113	Ingram Micro		
SRS	0010233842	1000006410	Ingram Micro Inc		
MDCP	62395348	1000912877	Ingram Micro Inc		
MDCP	47439802	1008473345	Ingram Micro		
MDCP	784053539	1000050920	Ingram Micro		
SPRM	1-AY2KDZ	1000828275	Ingram Micro		

Source	Source ID	Old Party ID	New Party ID
CRS	0500023285	1000807443	1000006410
CRS	0600348923	1001071113	1000006410
SRS	0010233842	1000006410	1000006410
MDCP	62395348	1000912877	1000006410
MDCP	47439802	1008473345	1000006410
MDCP	784053539	1000050920	1000006410
SPRM	1-AY2KDZ	1000828275	1000006410

Downstream Apps

1 Records from Source Systems are brought into EMDM

2 Matching, merging, and survivorship rules are applied and Golden record identified.

3 Cross-reference between all the source records and Golden record are created

4 Golden record consumed by Downstream systems

11

ENTITY MDM ROADMAP – R1.X AND R2.1

R1.x

Company Data
- Address validation capability
- Duns & Bradstreet integration
- Match & Merge capabilities

Migrated ~1.3M Vendor, Customer & Distributor records from 3 legacy systems: CRS, SRS, PMG

R2.1

Company Data
- Established entity creation capability (MDG & EMDM UI)
- Enabled integration for legacy bridges and S4 subscription
- Ship To Location capabilities to enable ordering & shipping

Company Hierarchy
- Geographic Hierarchy to sales territory mapping
- Established hierarchy creation capability (EMDMH UI)
- Company Hierarchy Integration and reference data enrichment
- Family Tree data initialization

Partner Profile
- Partner specific features enabled for EMDMH UI & DL
- Established data model & maintenance for partner stakeholders
- Integration of EMDM & MDCP / Siebel PRM

Contact Data
- Contact Association Foundational services & migration
- Enriched GDPR Compliance
- Generic Contact services
- Delivered integration with SFDC and Credit & Collection to MDCP Contact

Migrated additional ~2.58M Partner, and Customer records from 2 legacy systems: Siebel PRM and MDCP

ENTITY MDM ROADMAP - R2.2 AND LR1 & LR2

R2.2

Company Data
- Incremental EMDM enhancements (UI, Services, & Match logic)
- MDG integration with D&B
- Support Trade Style Name validation for Global Trade
- EMDM Automation to improve operational support
- Launch Entity MDM service for integrations (CPQ, Hybris, GRS Partner, Services CPQ, Zyme, EAP, Pricing Analytics, Financial Services, Callidus, NGCQ, NGQ)

Company Hierarchy
- Merger & Acquisition support (D&B integration)
- Enhancing hierarchy creation capability (EMDMH UI & DL, rule engine, data model)
- Flattened views of Geographic Hierarchy
- Hierarchy Operations remediation and fallout management
- Support EMDM integrations

Partner Profile
- Partner Party Creation on the Fly
- Integrated Party Search Service
- Incremental Partner enhancements (Publication Subscription Model, Partner EMDM Framework Logic)
- Support EMDM integrations

Contact Data
- Contact Person Creation on the Fly
- Integration of GRS, S4, & Hybris with MDCP Contact
- Contact migrations (Hybris, ONC, S4)
- Enable Partner contacts & bridge to Partner Portal & Hybris

9/2019 – 11/2019
Will migrate additional ~5.2M Customer Ship To and GSD Asset Location records from 2 legacy systems: Siebel SAP O&C, CRS, MDCP

LR 1&2

Company Data
- Global Trade compliance enhancements
- Expand Entity MDM service for integrations
- Incremental EMDM enhancements (merge, TAX Pointer, masking confidential accounts, verify unverified accounts, internally sourced indicator, inter company search)
- Harden integrations (Bridge 11 & D&B)

Company Hierarchy
- Establish integrations with CPQ, S4, WW CSN
- Incremental enhancements to EMDMH (Profile rules logic, profile migration, M&A, data model)
- EMDM/EMDMH audit support and merger and inactivation of party

Partner Profile
- Incremental enhancements to Partner capability (UI, DL, Pub Sub, data model, API)
- Data maintenance for Partner & Party ID
- Integration with SFDC & Partner Portal

Contact Data
- Integrate Check Engine with MDCP Contact
- Enhance party search & EMDM real time web service
- Support Credit & Collection contacts for Global Trade

LR1 – 3/2020
LR2 – 9/2020

Overview of Party Hierarchy

Party ID Hierarchy is a new tab added for a party record within the EMDM system. This tab lists the hierarchy of a record based on the DNB hierarchy. EMDM system allows user to maintain and update the party hierarchy as per the requirement. Party Hierarchy is managed and updated using the Data Loader functionality.

Key Features

EMDM system allows users to:

1. View the DNB and Party Hierarchy on the same screen.
2. Create/update Party Hierarchy using the search functionality.
3. Search or filter hierarchy using effective date, country, and OOB flag.
4. Make mass update to hierarchy using data loader functionality.

The **Party Hierarchy** section displays the hierarchy information as maintained in the MDM database. User is able to make updates to the MDM hierarchy information.

The **DNB Hierarchy** section contains the hierarchy information as maintained in the DNB database. The DNB hierarchy is available as a read-only information.

Key Updates

User can update the party hierarchy information through the following key actions:

- Create Relationship
- Edit Relationship
- Delete Relationship
- Reset
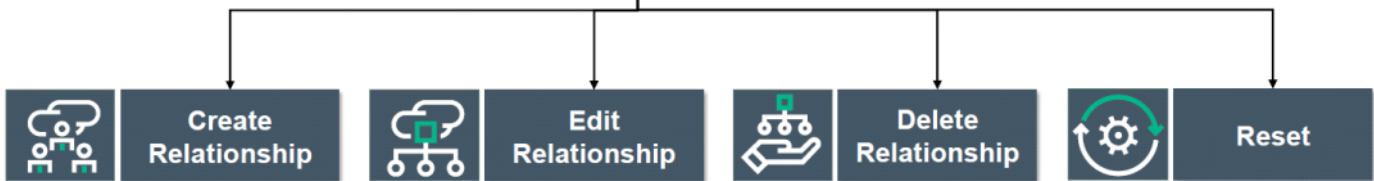
# Steps to Make Bulk Updates to Party Hierarchy

EMDM system allows user to make party hierarchy updates to bulk records at one go using the Data Loader functionality. Data loader dashboard offers the possibility to download a desired template, upload a DL file, trace the upload progress, and view success/error details.

Execute the following steps to update the party hierarchy information for bulk records:

1. Click the **Data Loader** option on the EMDM homepage. This will open the *Data Loader Upload form* screen.
2. Click the **Download Templates** button and download the required template. For example, download the Manage Party Hierarchy template.
3. There are various templates available, select **Manage_Party_Hierarchy.xlsm** option. This template allows user to upload updates to be made for hierarchy data for bulk party records.
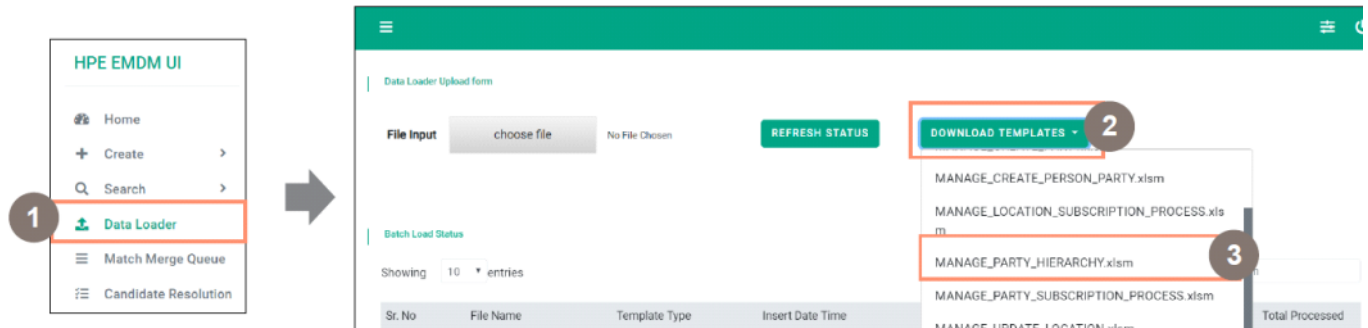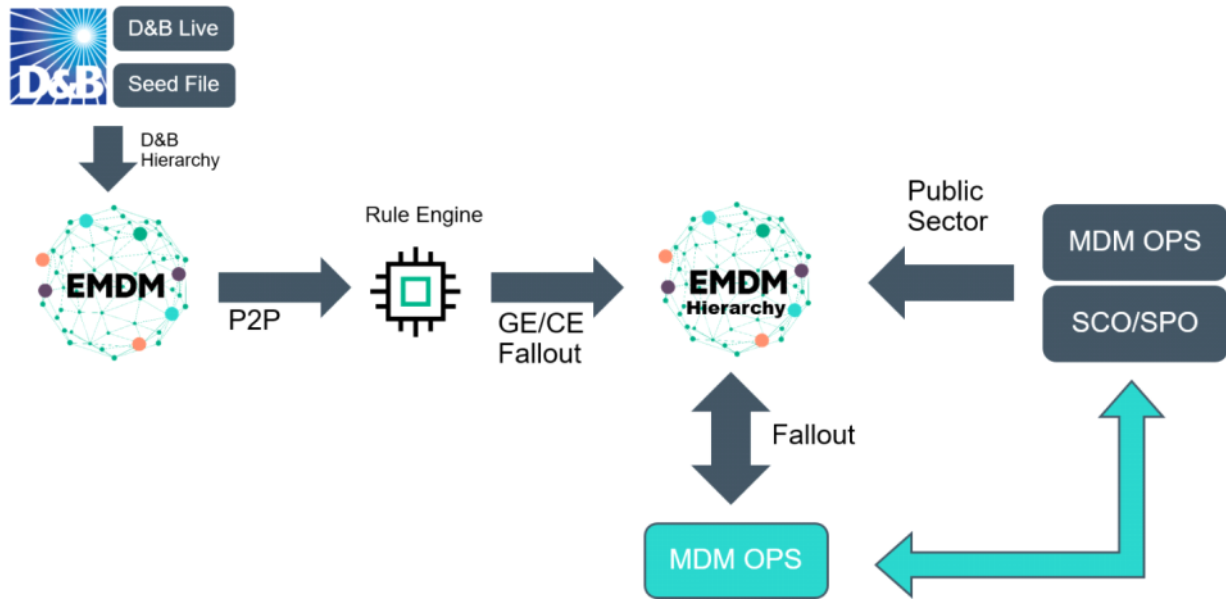

EMDM fallout Management
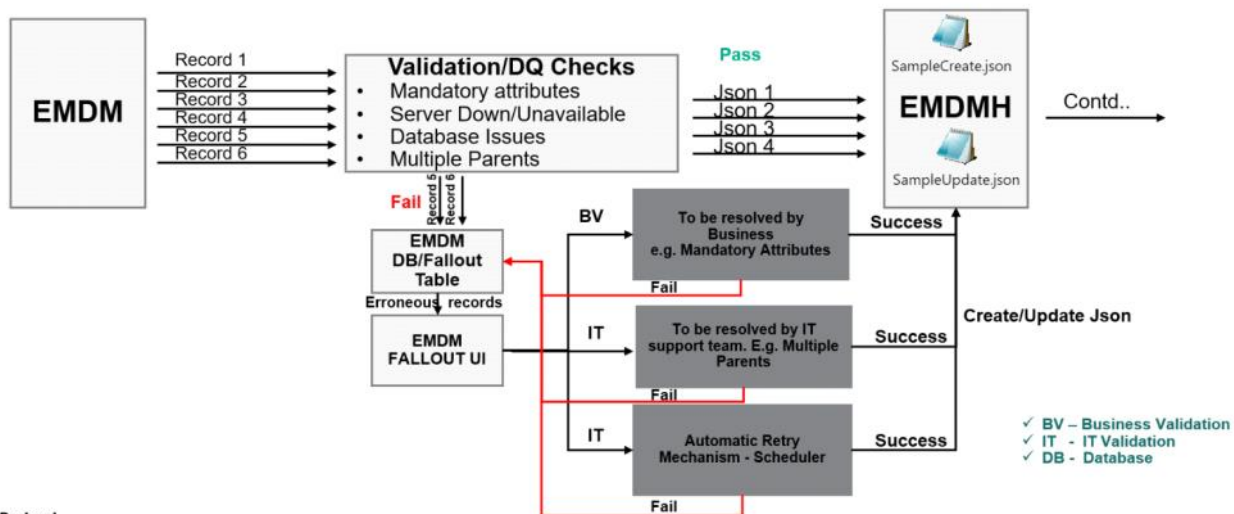
- select * from **[MDM_PUBLISH].[dbo].[JMS_MESSAGE];**

- select * from **[MDM_PUBLISH].[dbo].[CMPNY_HRCHY_LOG];**

- select *from [MDM_PUBLISH].[dbo].[CMPNY_HRCHY_ERROR];

Company Hierarchy Initialization Logic.

EMDM - EMDMH - CPP Flow