



NatWest  
Group

# **Customer Hierarchies Mastering External Data Sourcing**

Jan 2026

# **DNB Data Blocks and KDEs**

# Summary of data DNB Data Blocks and Data Elements



KDE	DNB Data Block	DNB Element	JSON Path & Definition
Registered Business Name	companyinfo_L2	<p>Registered Name</p> <p>The legally registered name of the organisation as recorded with an official registry.</p>	organization.registeredName
Registered Business Name	companyinfo_L2	<p>Multilingual Registered Names</p> <p>The legally registered name of the organisation represented in one or more languages or scripts</p>	organization.multilingualRegisteredNames[].name
Company House Registration Number	companyinfo_identifiers_v1 companyinfo_L2	<p>Registration Number</p> <p><b>1. Multiple Registration Authorities</b></p> <ul style="list-style-type: none"> <li>An organisation can have <b>multiple registration numbers</b></li> <li>Each number may come from a <b>different authority</b> <ul style="list-style-type: none"> <li>National Registry</li> <li>Tax Authority</li> <li>Regional Authority</li> </ul> </li> <li>Not Always "Companies House" <ul style="list-style-type: none"> <li>Outside the UK, there is <b>no single equivalent</b></li> <li>DNB standardises this via: <i>registrationAuthority.description</i> and <i>registrationAuthority.dnbCode</i></li> </ul> </li> </ul>	organization.registrationNumbers[].registrationNumber
Company House Registration Number	companyinfo_identifiers_v1 companyinfo_L2	<p>Registration Number Type</p> <p>Describes the <b>type or category</b> of registration number issued by the authority. Standardised using <i>registrationNumberType.dnbCode</i></p> <p><b>Examples:</b></p> <ul style="list-style-type: none"> <li><b>Company Registration Number</b></li> <li>Business Registration Number</li> <li>Tax Registration Number</li> <li>VAT Registration Number</li> </ul>	organization.registrationNumbers[].registrationNumberType.description
Company House Registration Number	companyinfo_identifiers_v1 companyinfo_L2	<p>Registration Authority</p> <p><b>Registration Authority</b> identifies the <b>official body, registry or government institution</b> that issued and maintains a given <b>registration or identification number</b> for an organisation.</p> <p><b>Examples:</b></p> <ul style="list-style-type: none"> <li>"Companies House"</li> <li>"Registrar of Companies"</li> <li>"Secretary of State"</li> <li>"Chamber of Commerce"</li> <li>"Commercial Register"</li> </ul>	organization.registrationNumbers[].registrationAuthority.description



# Summary of data DNB Data Blocks and Data Elements

KDE	DNB Data Block	DNB Element	JSON Path & Definition
Company House Registration Number	companyinfo_identifiers_v1 companyinfo_L2	<p>Registration Issuing Country</p> <p>Identifies the <b>country in which the registration number was issued</b>, independent of the organisation's operating or incorporation country.</p>	organization.registrationNumbers[].registrationAuthorityCountry.isoAlpha2Code
Company House Registration Number	companyinfo_identifiers_v1 companyinfo_L2	<p>Primary Registration Indicator (where present)</p> <p>Indicates whether this registration number is considered the <b>primary or most authoritative identifier</b> for the organisation.</p>	organization.registrationNumbers[].isPreferredRegistrationNumber
Company House Registration Number	companyinfo_identifiers_v1 companyinfo_L2	<p><b>What is Not Included (Important Clarification)</b></p> <ul style="list-style-type: none"> <li>x Registration issue date</li> <li>x Registration expiry date</li> <li>x Registration status (active/inactive)</li> <li>x Proof documents</li> </ul>	
Entity Type (Individual or Organisation) <i>DG: Not sure what you're after here – this relates to shareholders</i>	companyinfo_L1	<p>Subject Type</p> <p>Indicates whether the D&amp;B subject represents an <b>individual or an organisation</b></p>	organization.subjectType.description
Organisation Type	companyinfo_L2	<p>Legal Form</p> <p>The details of the structure of an organization, irrespective of the laws of the country or region in which it was formed. Commonly, this structure will be determined when registered with government authorities; however some entities are not required to register. This structure affects how much is paid in taxes, the ability to raise money, the requirements to register and the liability of proprietors. These structure types are universally standardized by Dun &amp; Bradstreet for client use based on Legal Form association with one and only one Global Legal Form. Examples include Joint Stock Company and Limited Liability Company.</p>	organization.legalForm.description
Organisation Type (Code)	companyinfo_L2	<p>Legal Form Code</p> <p>A unique code assigned by D&amp;B for the Global Legal Form. For example 31145 is the Code for Government Agency</p>	organization.legalForm.dnbCode <i>DG: Reference table 750 (Global Legal Form) supplied</i>



# Common Entity Types and DNB Codes

Entity Type	DNB Codes and DNB Description	Entity Type	DNB Codes and DNB Description
<b>Corporate / Incorporated</b> <ul style="list-style-type: none"> <li>Limited Company</li> <li>Private Limited Company (UK Ltd, GmbH, SARL, BV)</li> <li>Public Limited Company (PLC, AG, SA)</li> <li>Corporation</li> <li>Public Corporation</li> <li>Close Corporation</li> <li>Unlimited Company</li> <li>Company Limited by Guarantee</li> <li>Company Limited by Shares</li> </ul>	DG: Reference table 750 (Global Legal Form) supplied	<b>Non-Profit &amp; Membership Organisations</b> <ul style="list-style-type: none"> <li>Non-Profit Organisation</li> <li>Charity</li> <li>Association</li> <li>Society</li> <li>Cooperative</li> <li>Mutual Organisation</li> <li>Trade Association</li> <li>Professional Body</li> <li>Club</li> </ul>	
<b>Partnerships</b> <ul style="list-style-type: none"> <li>Partnership</li> <li>General Partnership</li> <li>Limited Partnership</li> <li>Limited Liability Partnership (LLP)</li> <li>Professional Partnership</li> <li>Joint Partnership</li> </ul>		<b>Sole Ownership</b> <ul style="list-style-type: none"> <li>Sole Proprietorship</li> <li>Sole Trader</li> <li>Individual Proprietor</li> </ul>	
<b>Public / Government Bodies</b> <ul style="list-style-type: none"> <li>Government Entity</li> <li>Public Authority</li> <li>Local Authority</li> <li>Municipal Body</li> <li>State-Owned Enterprise</li> <li>Government Agency</li> <li>Regulatory Authority</li> </ul>		<b>Other / Special Legal Forms Branch</b> <ul style="list-style-type: none"> <li>Representative Office</li> <li>Subsidiary</li> <li>Joint Venture</li> <li>Consortium</li> <li>Cooperative Society</li> <li>Economic Interest Group</li> <li>Industrial and Provident Society</li> <li>Friendly Society</li> <li>Religious Organisation</li> </ul>	
<b>Trusts &amp; Fiduciary Structures</b> <ul style="list-style-type: none"> <li>Trust</li> <li>Charitable Trust</li> <li>Family Trust</li> <li>Discretionary Trust</li> <li>Unit Trust</li> <li>Foundation</li> </ul>		<b>Financial &amp; Investment Structures</b> <ul style="list-style-type: none"> <li>Holding Company</li> <li>Investment Company</li> <li>Private Equity Fund</li> <li>Hedge Fund</li> <li>Mutual Fund</li> <li>Pension Fund</li> <li>Unit Trust</li> <li>Investment Trust</li> <li>Special Purpose Vehicle (SPV)</li> <li>Special Purpose Entity (SPE)</li> </ul>	

# Summary of data DNB Data Blocks and Data Elements



KDE	DNB Data Block	DNB Element	JSON Path & Definition
Legal Entity Identifier (LEI)	companyinfo_identifiers_v1	LEI	organization.legalEntityIdentifierDetails.entityID
LEI Legal Name	companyinfo_identifiers_v1	Legal Name	organization.legalEntityIdentifierDetails.legalName
LEI Registered Address	companyinfo_identifiers_v1	Legal Address	organization.legalEntityIdentifierDetails.legalAddress
<b>Registered Address (Legal Address) fields</b>			
Registered Address Country	companyinfo_L2	<p>Address Country The details of the geographical area of a Country or Region for this address of the organization. Countries divide their geography into smaller sub divisions. County is an example of a commonly used subdivision. Often found in UK.</p>	organization.primaryAddress.addressCountry.name organization.registeredAddress.addressCountry.name
Registered Address Region	companyinfo_L2	<p>Region The name of the geographical area for this address of the organization. For Example New Jersey.</p>	organization.registeredAddress.addressRegion.name
Registered Address City	companyinfo_L2	<p>Locality The details of the locality for this address of the organization. Locality defined as a district population cluster. City, town, township, village, borough etc.</p>	organization.registeredAddress.addressLocality.name
Registered Address Postal Code	companyinfo_L2	Postal Code	organization.registeredAddress.postalCode
Registered Address Street	companyinfo_L2	Street Address	organization.registeredAddress.streetAddress.line1/line2 Also refer to: organization.registeredAddress.streetAddress.streetName
Registered Address Flag	companyinfo_L2	<p>Is Registered Address Indicates if the address is the same as the organization's Registered Address if TRUE the primary/main address is the same as the organization's Registered Address. if FALSE The address is not the same as the organization's Registered Address.</p>	organization.primaryAddress.isRegisteredAddress DG: Used in the US where registered address isn't captured separately

# Summary of data DNB Data Blocks and Data Elements



## Trading Name and Trading Addresses

KDE

DNB Data Block

DNB Element

JSON Path & Definition

Trading Name DG: You likely want primaryName. tradeStyleNames are alternative trading names	companyinfo_L2	Trade Style Name	organization.tradeStyleNames[].name organization.primaryName
Multilingual Trading Name	companyinfo_L2	Multilingual Trade Style Name	organization.multilingualTradestyleNames[].name organization.multilingualPrimaryName.name
Trading Address	companyinfo_L2 / companyinfo_L3	<p>DNB does <b>not</b> explicitly label an address as '<b>Trading Address</b>'.</p> <p>Instead, <b>trading / operating address</b> is inferred from:</p> <ul style="list-style-type: none"> <li>primaryAddress DG: Use primaryAddress as trading premises</li> <li>otherAddresses[] (where available at higher levels)</li> </ul> <p>Trading Address is the address where the organisation operates or conducts business, not necessarily the registered or incorporation address.</p>	organization.primaryAddress fields which include: line1, line2, streetName, streetNumber, addressLocality.name, addressRegion.name, addressRegion.isoSubDivisionCode, addressCountry.name, addressCountry.isoAlpha2Code, postalCode.
Trading Address Ownership DG: This element is limited in population. Might be limited to US only TBC	companyinfo_L2 / companyinfo_L3	<p>Primary Address Location Ownership</p> <p>Description of the terms under which the entity occupies the premises (e.g., owned, rented, leased).</p>	organization.primaryAddress.locationOwnership.description

## Country Attributes (Incorporation, Residence, Operations)

Country of Incorporation	companyinfo_L2	Country ISO Code	organization.countryISOAlpha2Code (will be populated for both incorporated and unincorporated companies – not tied to registration status) organization.registeredAddress.addressCountry.isoAlpha2Code
Country of Legal Address	companyinfo_L2	Address Country ISO	organization.registeredAddress.addressCountry.isoAlpha2Code
Country of Operations	companyinfo_L3/1/2	<p>Operating Country</p> <p>DNB L3 data is enriched using local market sources and DNB treats L3 address as <b>operating / trading location</b>. Not necessarily the legal address. It reflects physical presence, trading activity, employees, revenue generation.</p>	organization.primaryAddress.addressCountry.isoAlpha2Code
Country of Control (Global Ultimate)	hierarchyconnections_L1	Global Ultimate Country	organization.corporateLinkage.globalUltimate.primaryAddress.addressCountry.isoAlpha2Code



# Summary of data DNB Data Blocks and Data Elements

## Operating Status & Lifecycle Fields

KDE	DNB Data Block	DNB Element	JSON Path & Definition
Operating Status	companyinfo_L2	Operating Status	organization.dunsControlStatus.operatingStatus.description
Operating Sub Status	companyinfo_L2	Operating Sub Status	organization.dunsControlStatus.operatingSubStatus.description
Detailed Operating Status	companyinfo_L2	Detailed Operating Status	organization.dunsControlStatus.detailedOperatingStatus.description
Out of Business Indicator	companyinfo_L2	Operating Status Code	organization.dunsControlStatus.operatingStatus.dnbCode
First Report Date DG: Of limited population	companyinfo_L2	First Report Date	organization.dunsControlStatus.firstReportDate

## Sector & Sub-Sector (Industry Classification) Fields

Primary Sector (SIC)	companyinfo_L3	Primary SIC Code	organization.primaryIndustryCode.usSicV4
Sector Description	companyinfo_L3	SIC Description	organization.primaryIndustryCode.usSicV4Description
Sector Recently Changed Flag (eli specific) DG: Use monitoring service to provide ongoing latest updates	companyinfo_L3	SIC Change Indicator	organization.primaryIndustryCode.hasRecentlyChanged
Previous Sector (eli specific) DG: Use monitoring service to provide ongoing latest updates	companyinfo_L3	Previous SIC Code	organization.primaryIndustryCode.previousMonthData.usSicV4

# Summary of data DNB Data Blocks and Data Elements



DG: Note - you may be better off using the CMPCOL products which show direct, indirect and beneficial owners

Beneficial Ownership (Ownership Insight)			
KDE	DNB Data Block	DNB Element	JSON Path & Definition
Beneficial Owner	ownershipinsight_L1 DG: This data block contains only immediate shareholders	Share Ownership	organization.shareOwnership[]
Beneficial Owner Type	ownershipinsight_L1	Subject Type	organization.shareOwnership[].subjectType.description
Beneficial Owner Name DG: Yes for individuals, use the "duns" for corporate ownership	ownershipinsight_L1	Owner Name	organization.shareOwnership[].fullName
Direct Ownership Percentage	ownershipinsight_L1	Ownership Percentage	organization.shareOwnership[].ownershipPercentage
Indirect Ownership Percentage DG: Available in CMPBOL/CMPCOL	ownershipinsight_L1	Indirect Ownership Percentage	organization.shareOwnership[].indirectOwnershipPercentage
Voting Rights Percentage	ownershipinsight_L1	Voting Rights Percentage	organization.shareOwnership[].votingPercentageHigh
Ultimate Beneficial Owner Flag DG: CMPBOL/CMPCOL	ownershipinsight_L1	UBO Indicator	organization.shareOwnership[].isUltimateBeneficialOwner organization.beneficialOwnership.beneficialOwners[0].isBeneficiary

# Summary of data DNB Data Blocks and Data Elements



## Core Hierarchy Fields

### KDE

### DNB Data Block

### DNB Element

### JSON Path & Definition

Family Tree Role	hierarchyconnections_L1	Family Tree Role	organization.corporateLinkage.familytreeRolesPlayed[].description
Hierarchy Level	hierarchyconnections_L1	Hierarchy Level	organization.corporateLinkage.hierarchyLevel
Branch Count	hierarchyconnections_L1	Branches Count	organization.corporateLinkage.branchesCount
Group Size	hierarchyconnections_L1	Global Ultimate Family Tree Members Count	organization.corporateLinkage.globalUltimateFamilyTreeMembersCount

## Ultimate Ownership Fields

### Global Ultimate

### DNB Data Block

### DNB Element

### JSON Path & Definition

Global Ultimate DUNS	hierarchyconnections_L1	Global Ultimate DUNS	organization.corporateLinkage.globalUltimate.duns
Global Ultimate Name	hierarchyconnections_L1	Global Ultimate Primary Name	organization.corporateLinkage.globalUltimate.primaryName
Global Ultimate Country	hierarchyconnections_L1	Global Ultimate Country ISO	organization.corporateLinkage.globalUltimate.primaryAddress.addressCountry.isoAlpha2Code
Domestic Ultimate DUNS	hierarchyconnections_L1	Domestic Ultimate DUNS	organization.corporateLinkage.domesticUltimate.duns
Domestic Ultimate Name	hierarchyconnections_L1	Domestic Ultimate Primary Name	organization.corporateLinkage.domesticUltimate.primaryName
Domestic Ultimate Country	hierarchyconnections_L1	Domestic Ultimate Country ISO	organization.corporateLinkage.domesticUltimate.primaryAddress.addressCountry.isoAlpha2Code



# Summary of data DNB Data Blocks and Data Elements

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Core Individual Owner Identification			
KDE	DNB Data Block	DNB Element	JSON Path & Definition
Individual Owner	ownershipinsight_L1 CMPCOL	Share Ownership  The details of the recording of the individual, organization or entity that owns stock or common stock of the subject organization.	organization.shareOwnership[] CMPCOL: organization.beneficialOwnership.beneficialOwners
Owner Subject Type	ownershipinsight_L1 CMPCOL	Ownership Type (Individual or Organisation)  Identifies if the entity is an individual, a company, or that fact is unknown.	organization.shareOwnership.subjectType.description  dnbCode 11  CMPCOL: organization.beneficialOwnership.beneficialOwners.beneficiaryType.description
Shareholder/Owner Last Name	ownershipinsight_L1 CMPCOL	The surname of individual that that owns stock or common stock of the subject entity. In western cultures this is usually presented last.	organization.shareOwnership.familyName  CMPCOL: organization.beneficialOwnership.beneficialOwners.lastName
Individual Shareholder Name	ownershipinsight_L1 CMPCOL	The given and surname in addition to the middle name and name suffix listed. If the entity that owns stock or common stock is an organization, the name of the organization will be populated in the full name field.	organization.shareOwnership.fullName  CMPCOL: organization.beneficialOwnership.beneficialOwners.fullName
Shareholder/Owner First Name	ownershipinsight_L1 CMPCOL	The given name of the entity who owns stock and common stock if the entity is an individual. In western cultures this is usually presented first.	organization.shareOwnership.givenName  CMPCOL: organization.beneficialOwnership.beneficialOwners.firstName
Share Ownership Trustee Indicator	ownershipinsight_L1	Indicates whether the shareholder is a trustee or a nominee (i.e., the shareholder is acting on behalf of someone else to hold the shares.)  - If true, the shareholder is a trustee or a nominee - If false, the shareholder is acting in their own right and is not a trustee or nominee. This is the assumed condition; there is no requirement to create this tag to represent this fact.	organization.shareOwnership.isTrusteeNominee  CMPCOL: organization.beneficialOwnership.beneficialOwners.isTrusteeNominee
Share Ownership Last Update Date	ownershipinsight_L1	The date when the share ownership information was verified and updated.  Format: YYYY-MM-DD or YYYY-MM	organization.shareOwnership.lastUpdateDate



# Summary of data DNB Data Blocks and Data Elements

DG: Note - you may be better off using the CMPCOL products which show direct, indirect and beneficial ownership

Ownership & Control (Individual)			
KDE	DNB Data Block	DNB Element	JSON Path & Definition
Shareowner High Percentage	ownershipinsight_L1 CMPCOL	Records the high end of the range of the percentage of voting rights in the subject directly held/owned.	organization.shareOwnership.votingPercentageHigh
Shareholder/Owner Ownership Percentage	ownershipinsight_L1 CMPCOL	The total percent of the subject organization's stock or common stock owned by either an individual, organization with DUNS or direct entity shareholder.	organization.shareOwnership.ownershipPercentage DG: CMPCOL organization.beneficialOwnership.beneficialOwners.directOwnershipPercentage
Share Ownership Indirect Percentage	ownershipinsight_L1 CMPCOL	The total percentage of the shares (or other instrument of ownership) of the entity directly held/owned by all the entities in which this entity holds shares.	organization.shareOwnership.indirectOwnershipPercentage DG: CMPCOL organization.beneficialOwnership.beneficialOwners/indirectOwnershipPercentage
Share Ownership Principal Indicator	ownershipinsight_L1 CMPCOL	<b>DO NOT USE. NO LONGER PROVIDED.</b> Indicates whether this shareholder is a person or entity that currently has a relationship with the entity where the relationship is a management relationship, employee relationship, or service provider relationship.  - If true, such a relationship exists. - If false, such a relationship does not exist.	organization.shareOwnership.isPrincipal CMPCOL: organization.resolvedEntities.entities.isPrincipal
Share Ownership Trustee Indicator	ownershipinsight_L1 CMPCOL	Indicates whether the shareholder is a trustee or a nominee (i.e., the shareholder is acting on behalf of someone else to hold the shares.)  - If true, the shareholder is a trustee or a nominee - If false, the shareholder is acting in their own right and is not a trustee or nominee. This is the assumed condition; there is no requirement to create this tag to represent this fact.	organization.shareOwnership.isTrusteeNominee CMPCOL: organization.beneficialOwnership.beneficialOwners.isTrusteeNominee
Shareowner Registration Numbers	ownershipinsight_L1	Records the details of the numbers assigned by an external body or by D&B which either uniquely identifies or helps to identify the shareholder organization.	organization.shareOwnership.registrationNumbers
Shareowner Registration Number	ownershipinsight_L1	A number assigned by an external body or by D&B which either uniquely identifies or helps to identify the shareholder organization.	organization.shareOwnership.registrationNumbers.registrationNumber
Shareowner Registration Number Type Description	ownershipinsight_L1	Text identifying the type of Registration Number, e.g., Chamber of Commerce Number, Value Added Tax Number, Federal Taxpayer Identification Number, Companies Registry Office Number.	organization.shareOwnership.registrationNumbers.typeDescription dnbCode 7



# Summary of data DNB Data Blocks and Data Elements

DG: Note - you may be better off using the CMPCOL products which show direct, indirect and beneficial ownership

Stock Ownership (Individuals)			
KDE	DNB Data Block	DNB Element	JSON Path & Definition
Share Ownership Stock Details	CMPCOL	The type of stock the shareholder owns in the entity and the various parameters that define the control the shareholder may exercise over the entity.	organization.shareOwnership.stockDetails  CMPCOL: organization.beneficialOwnership.beneficialOwners.capitalDetails.capitalStocks
Share Ownership Stock Voting Rights Indicator	CMPCOL	Indicates whether the shares of the type specified in Share Ownership Stock Type carry voting rights.  - If true, stock type carries voting rights. - If false, stock type does not carry voting rights.	organization.shareOwnership.stockDetails.hasVotingRights  CMPCOL: organization.beneficialOwnership.beneficialOwners.capitalDetails.capitalStocks.hasVotingRights
Share Ownership Stock Ownership %	CMPCOL	The total percentage of the specified share type owned directly by the shareholder.	organization.shareOwnership.stockDetails.ownershipPercentage  CMPCOL: organization.beneficialOwnership.beneficialOwners[0].equityDirectPercentage
Share Ownership Stock Amount		The details on the value of the total shares of this type possessed by the shareholder.	organization.shareOwnership.stockDetails.shareAmount
Share Ownership Stock Currency	CMPCOL	The three-letter currency code, defined in the ISO 4217 scheme published by the International Organization for Standardization (ISO) identifying the type of money in which this amount is expressed (e.g., USD, CAD, GBP, EUR).	organization.shareOwnership.stockDetails.shareAmount.currency  CMPCOL: organization.beneficialOwnership.beneficialOwners.capitalDetails.capitalAmount.currency
Share Ownership Stock Value	CMPCOL	The total par value of shares of this type held by a shareholder in the entity. Par value is the face value of the shares and not the current stock exchange price (e.g., if there are 100 ordinary shares with a par value of 5 euros per share the recorded amount is 500).	organization.shareOwnership.stockDetails.shareAmount.value  CMPCOL: organization.beneficialOwnership.beneficialOwners.capitalDetails.capitalStocks.stockAmount.value
Share Ownership Stock Quantity	CMPCOL	The total number of shares within each Capital Stock Type regardless of value. For example, if there are 100 Preference shares with a par value of 5 Euros per share the recorded amount is 100.	organization.shareOwnership.stockDetails.shareQuantity  CMPCOL: organization.beneficialOwnership.beneficialOwners.capitalDetails.capitalStocks.quantity
Share Ownership Stock Subtype		The sub-category of share classification that has been specifically defined by the entity.  For example, the ordinary shares of an entity may be broken down into Ordinary A, Ordinary B, etc., where the A and B categories have different rights or characteristics. In this example, two Share Ownership Stock Detail aggregates will be created.	organization.shareOwnership.stockDetails.stockSubType  CMPCOL:



# Summary of data DNB Data Blocks and Data Elements

## Parent and Subsidiary Control Fields

KDE

### DNB Data Block

### DNB Element

### JSON Path & Definition

Immediate Parent DUNS	hierarchyconnections_L1	Parent DUNS	organization.corporateLinkage.parent.duns
Immediate Parent Name	hierarchyconnections_L1	Parent Primary Name	organization.corporateLinkage.parent.primaryName
Immediate Parent Country	hierarchyconnections_L1	Parent Country ISO	organization.corporateLinkage.parent.primaryAddress.addressCountry.isoAlpha2Code
Control Basis	hierarchyconnections_L1	Ownership > 50%	organization.corporateLinkage.parent
Ownership Control Type Text	Present in which data block?	<p>The name for the type of controlling ownership (e.g., publicly owned, privately owned, state owned).</p> <p>Note: For some countries, controlling ownership can be derived from the legal form.</p> <p>Need to discuss ask. Look at: CMPCOL:  <code>organization.beneficialOwnership.beneficialOwners.natureOfControl</code>  And / or gather the <code>organization.legalForm.description</code> from the duns of the shareholder</p>	organization.controlOwnershipType.description
Ownership Control Type Code	Present in which data block?	<p>A unique code assigned by Dun &amp; Bradstreet to identify the type of controlling ownership.</p> <p>Need to discuss ask. Look at: CMPCOL:  <code>organization.beneficialOwnership.beneficialOwners.natureOfControl</code>  And / or gather the <code>organization.legalForm.description</code> from the duns of the shareholder</p>	organization.controlOwnershipType.dnbCode

## TO DO:

1. Individual Owners
2. Ownership less than 50%
3. Enumeration of dnbCodes

# **Entity Resolution Party**



# Entity Resolution

Registry & Legal Identifiers					
KDE Category	KDE Name	Description	Tier	Match Notes	
Registry ID	Company Registration Number (CRN)	UK Companies House (CH) identifier	Tier 1	Primary UK anchor	
Registry ID	Charity Registration Number	Charity regulator ID	Tier 1	Use only for charities – CRN alternative	
Global ID	Legal Entity Identifier (LEI)	ISO 17442 identifier	Tier 1	Strong for regulated entities	
Commercial ID	D-U-N-S Number / Code	D&B unique identifier	Tier 1	Not always populated – typically considered secondary to CRN in UK	
Commercial ID	Immediate Parent D-U-N-S	Direct parent entity	Tier 1	Hierarchy only – to be explored	
Commercial ID	Global Ultimate D-U-N-S	Ultimate parent entity	Tier 1	Roll-up reporting – to be explored	
Business ID	Business Identifier Code (BIC)	Used to identify banks and financial institutions globally for international payments, anti-money-laundering checks etc.	Tier 1	Also known as SWIFT Code	
Tax ID	Tax ID	Government-issued identifier for a business for tax purposes.	Tier 1	For UK - UTR (Unique Taxpayer Reference), VAT Number	
Name-Based KDEs					
Legal Name	Registered Legal Name	Name as per registry	Tier 2	Tokenised + suffix-aware	
Legal Name	Previous Legal Names	Historic names	Tier 2	Prevents false negatives	
Trading Name	Trading Name	Operating name	Tier 3	Never alone	
Alias	Short / Known As Name	Internal alias	Tier 3	Internal resolution only	
Name Tech	Normalised Name Key	Punctuation-free, suffix-stripped	Tier 2	Matching engine input – derived	

## KDE Classification Legend

Tier	Type
Tier 1 (Deterministic)	Strong unique identifiers
Tier 2 (Probabilistic – High)	Strong disambiguators
Tier 3 (Probabilistic – Supporting)	Contextual enhancers

# Entity Resolution



## Jurisdiction & Legal Status KDEs

KDE Category	KDE Name	Description	Tier	Match Notes
Jurisdiction	Country of Incorporation	Where legally formed	Tier 2	Strong disambiguator
Jurisdiction	Country of Registration	Filing jurisdiction	Tier 2	Often same as incorporation
Legal Structure/Form	Legal Entity Type	Ltd, PLC, LLP, Charity etc	Tier 2	Prevents cross-type mismatch
Status	Company Status	Active, Dormant, Dissolved	Tier 2	Must be ACTIVE – Currently we do not have this in Party MDM
Dates	Incorporation Date	Date of formation	Tier 2	High confidence signal
Dates	Dissolution Date	Closure date	Tier 2	Exclusion logic

## Address KDEs (Normalised)

Address	Registered Address	Legal registered address	Tier 2	Use latest only
Address	Postcode (UK)	Postal code	Tier 2	Very high signal
Address	Address Components	Street, town, building	Tier 3	Tokenised
Geo ID	UPRN	Unique Property Ref Number	Tier 1	Gold standard UK
Geo ID	UDPRN	Delivery Point Ref	Tier 1	Alternative to UPRN
Tech	ISO Address Format	Structured ISO address	Tier 2	Improves automation

## Industry & Classification KDEs

Industry	SIC 2007 (Primary)	UK industry code	Tier 3	Supporting only
Industry	SIC (6-digit)	Detailed SIC	Tier 3	Supporting only

# DNB Entity Resolution

## Identity Resolution Guide

D&B Direct+ Identity Resolution (IDR) uses input criteria to find the best candidates in its extensive database of entities. It uses proprietary algorithms to identify the best matches and returns those matches with detailed information about what criteria was used to find the match.

### Identity Resolution Steps

1. Cleanse, Parse, and Standardize
2. Retrieve candidates
3. Evaluate and decide

Identity Resolution API, Batch Match, and High-Volume Match perform all 3 of these steps.

#### Cleansing, Parsing, and Standardization

Cleansing, Parsing and Standardization maximizes the impact of the inquiry in identifying candidates.

##### Cleanse

- Remove extraneous characters.
- Convert to standard abbreviations (e.g., N = North).
- Replace vanity with standard city names (e.g., Westwood to Los Angeles).
- Convert text versions of numbers to numeric equivalent.
- Remove noise and low-value words (e.g., INC, CO).

##### Parse

- Segregate address components.
- Correct street and city names.
- Parse freeform text into logical subcomponents.
- Generate latitude and longitude.

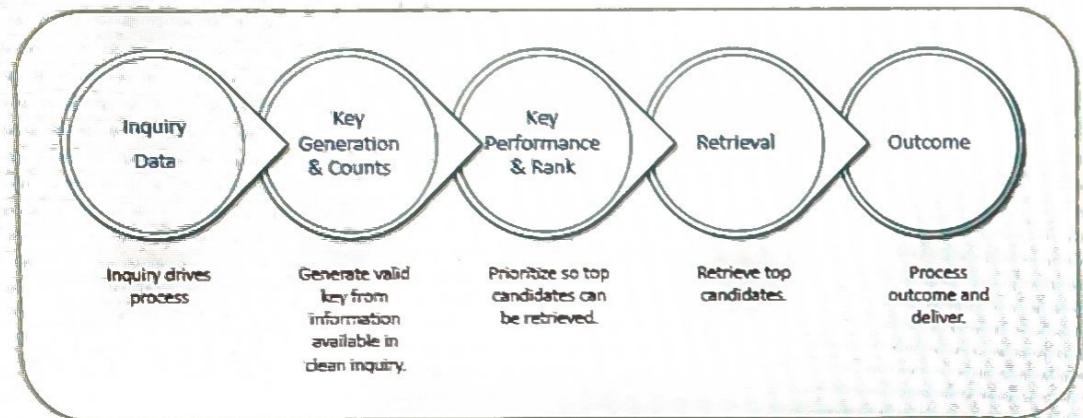
##### Standardize

- Remove plurals.
- Standardize words and phrases.
- Remove punctuation.
- Correct spelling.
- Format to postal standards.

Request	Cleanse	Parse	Standardize
Name    Alpha Plastics of L.V.	Alpha Plastics LV		ALPHA PLASTIC LV
Address    123 N ELM STR, BETHLHM PA 18025		Street number: 123 Street name: Elm St. City: Bethlehem State: PA Zip: 18025 Zip Ext: 1234 Latitude: 40.837470 Longitude: -73.910533 Geocode: 000	

## Retrieve Candidates

3



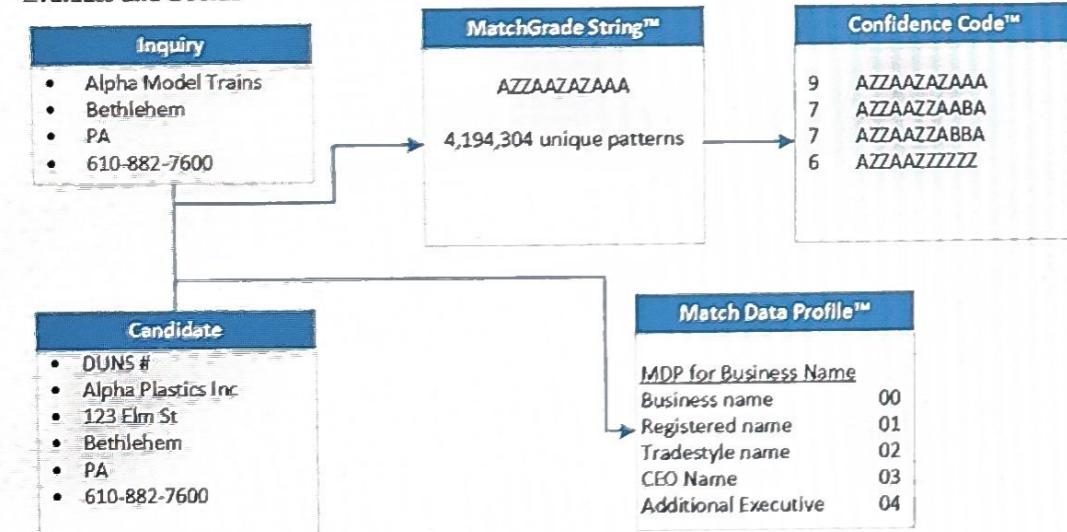
D&B Direct+ stores reference files containing multiple indicia such as name, address, telephone and others allowing multiple match points for the same entity.

- Name types, which may include trade names, executive names, and other.
- Address types, which may include physical, mailing, and former.
- Phone, which may include current and former.

For example:

Inquiry	D&B Reference File
Joe's Pizza 7 Carmine St Manhattan, NY 10014	- Joe's Pizza = Trade style for Golden Pizza Inc - Vanity City name replaced by primary city (New York) Golden Pizza Inc 7 Carmine St New York, NY 10014-4441

Evaluate and Decide



- MatchGrade String (MGS)  
Evaluation of each inquiry data element based on similarity between the cleansed inquiry data and Reference File candidate.
- Confidence Code (CC)  
Qualitative evaluation indicating the overall match quality for each inquiry.
- Match Data Profile (MDP)  
Information on the type of data used to make the match.

#### MatchGrade Strings

4

MatchGrade Strings provide qualitative assessments between inquiry and reference components. These strings provide insights on quality and rationale for use case specific acceptance criteria. Each evaluated component receives one of the following grades:

Grade	Definition	Example
A	Considered the same	Alpha Plastics vs. Alpha Plastics Co.
B	Some similarity	Alpha Plastics vs. Alpha Plastics & Metal
F	Considered different	Alpha Plastics vs. Alpha Plumbing
Z	Missing information; cannot make conclusion	Inquiry and/or reference data are blank

The components are:

- Business name
- Street Number
- Street Name
- City
- State
- PO Box
- Phone
- Postal Code
- Density (the number of businesses within the same Postal Code)
- Uniqueness (the number of unique inquiry business names within a given region, country, or relevant jurisdiction)
- Sic

#### Confidence Code

Confidence codes are based on the detailed MatchGrade Strings™; over 4 million string combinations are mapped to 10 Confidence Codes, allowing for broad categorization of matched records. The higher the number, the higher the confidence that it is an accurate match.

The algorithms that are used to by Identity Resolution assign a value between 1 and 10 representing the degree of certainty that a candidate is a suitable match based on the criteria provided. Each Identity Resolution request returns entities whose Confidence Code value (when rounded to the nearest whole number) is equal to or exceeds the threshold value.

#### Match Data Profile

Match Data Profile (MDP) codes detail the type of information contained in the reference record. Match Data Profile (MDP) Codes indicate if and how each component type was matched in the returned candidate.

The Match Data Profile appears in the API response as follows:

```

'matchDataProfile': '0100000098989800000098009898',
'matchDataProfileComponentsCount': 14,
'matchDataProfileComponents': [
  {
    'componentType': 'Name',
    'componentValue': '01'
  }
]
  
```

With an entry for each Component Type. Below is an example for Business Name. A reference for all codes can be found under [Appendix: Match Data Profile \(MDP\) Codes Reference](#)

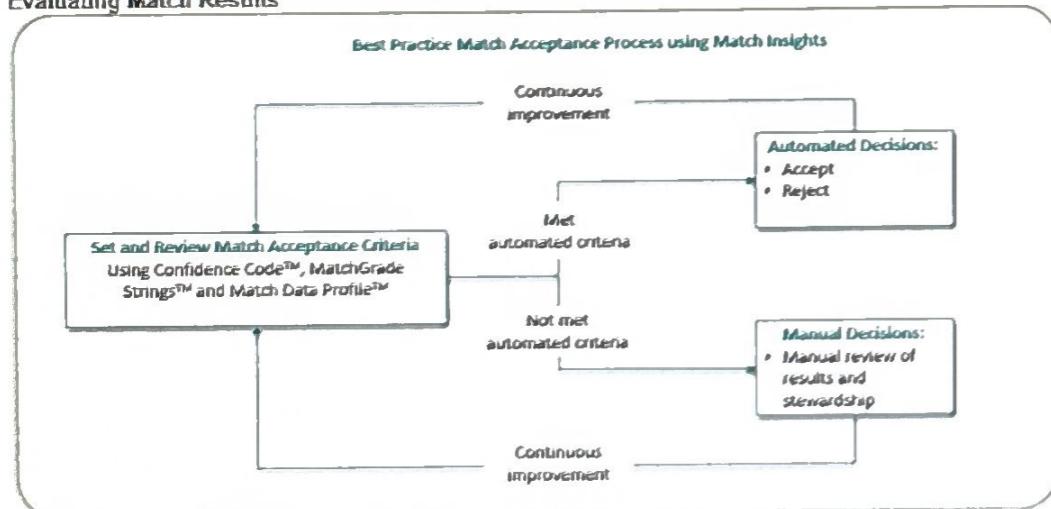
Customer Input Name	D&B Name Returned	MDP Code for Business Name	Matched To
Smith Bros Clothiers	<u>Smiths</u> Bros Clothiers, Inc	00	Business Name
Smith Bros Cloth Inc	<u>Smiths</u> Bros Clothiers, Inc	01	Registered Name
Smiths' Clothes	<u>Smiths</u> Bros Clothiers, Inc	02	Tradestyle
Edward Smith	<u>Smiths</u> Bros Clothiers, Inc	03	CEO Name
John Smith	<u>Smiths</u> Bros Clothiers, Inc	04	Additional Executive
SBC LLC	<u>Smiths</u> Bros Clothiers, Inc	10	Registered Acronym
Gorman & Sons	Gorman Brothers Acquisition	05	Former Business Name
Thomas Johnson	Gorman Brothers Acquisition	07	Former CEO Name

#### nameMatchScore

The nameMatchScore allows you to further segment quality when a Business Name is matched, so, for example, if have lots of Bs for Name, you can see which are better than others using the nameMatchScore.

nameMatchScore returns a number from 0 to 100; the higher the number, the better the match.

#### Evaluating Match Results



#### Match Types

Depending on the criteria provided, the system performs a specific match type.

This is identified in the response, for example:

"matchDataCriteria": "Name and Address Lookup",

The D&B Identity Resolution engine inspects the Request Parameters provided and determines how to yield the best results. The following list explains the order in which the parameters will be evaluated.

#### Precedence for Transactional and Batches

Precedence	Lookup Type	Notes
1	D-U-N-S	D-U-N-S Number®
2	Registration	A Registration lookup is triggered first when the request includes the following, If resulted candidates have low confidence code then match will be performed based on name or address provided and does not meet any of the above rules: - Registration Number - Registration Number Type - Name - Street - Locality - Region - Country
3	Name & Address	Name & Address Lookup is triggered when the request includes the following and does not meet any of the above rules: - Name - Street - Locality - Region - Country
4	Telephone Number	A Telephone Number lookup is triggered when the request includes the following and does not meet any of the above rules: - Telephone Number - Country
5	Domain/Email	A Domain lookup is triggered when the request includes the following and does not meet any of the above rules: - URL (or) Email  Note: <ul style="list-style-type: none"><li>• If both URL and Email are provided, the domain from the URL takes priority.</li><li>• If no country code is provided, the Global Ultimate is returned.</li><li>• If a country code is provided and multiple D-U-N-S Numbers within the country have the specified domain, the Domestic Ultimate is returned.</li><li>• If a Region is provided and multiple D-U-N-S Numbers within the Region have the specified domain, the headquarters is returned.</li></ul>

#### Asian Language Matching

D&B Direct+ Identity Resolution provides a single API to request matches in all supported languages.

Asian language is only supported for Name and Address lookup.

The system determines the language to use as follows:

1. If inLanguage parameter is NOT provided, then the system sets inLanguage to "en-US".
2. If inLanguage parameter specifies any of the supported languages (below), that language is used.
3. If inLanguage is set to "auto":
  - a. When name or name and address lookup is used, the system attempts to auto-detect the language using name and addressLine1 parameters:
    - If no character of above languages is detected in name or streetAddressLine1 query parameters, then inLanguage parameter is set to en-US.
    - If any character of above languages is detected in name or streetAddressLine1 query parameters, then
      - for China, Japan, Taiwan, South Korea and Hong Kong countries/markets, inLanguage parameter is set to zh-hans-CN.
      - for other countries/markets, error is returned.
  - b. When any lookup type is not "name and address", inLanguage is set to "en-US".

**Appendix: Match Data Profile (MDP) Codes Reference**
**Business Name Profile Code**

This code indicates where the name request value was found.

<b>Code</b>	<b>Match To</b>	<b>Notes</b>
00	Primary Name.	
01	Registered Name.	Not applicable for US and Canada
02	Trade Style Name.	
03	Name of CEO or other primary contact.	
04	Additional Executive Name.	
05	Former name.	
06	Reserved for future use.	
07	Name of former CEO or other primary contact.	
08	Reserved for future use.	
09	Short Abbreviated Name.	Available for limited markets, where applicable.
10	Registered Acronym.	Available for limited markets, where applicable.
11	Brand name for a brand or product is owned by the subject.	Available for limited markets, where applicable.
12	Search Name.	Available for limited markets, where applicable.
13	Trademark Name.	Not applicable for United States and Canada.
14	Marketing Name. This name is assigned to the business for marketing purposes. Usually this will be a name created by D&B and not one which is officially used by the business.	Not applicable for United States and Canada.
15	Known by Name.  This is any other name by which the entity is known.	Not applicable for United States and Canada.
16	Reserved for future use.	
17	Headquarter Business Name.	Not applicable for United States and Canada.
18	Registered Tradestyle Name	Not applicable for United States and Canada.

<b>Code</b>	<b>Match To</b>	<b>Notes</b>
19	Alternative Language Name	Not applicable for United States and Canada.
20	Organization Identification Number; full match. The Organization Identification Number is a business identification number used in some countries for business registration and tax collection. Examples include CRO numbers in the U.K. and the French Siren numbers.	
21	Reserved for future use.	
30	Primary Name, but the legal designator (business type) of the candidate does not match the inquiry business type.	
31	Registered Name, but the legal designator (business type) of the candidate does not match the Inquiry business type.	Not applicable for United States and Canada.
32	Trade Style Name, secondary or additional name used by the business, but the legal designator (business type) of the candidate does not match the inquiry business type.	
33	Former Business Name, but the legal designator (business type) of the candidate does not match the inquiry business type.	
34	Former Tradestyle Name, but the legal designator (business type) of the candidate does not match the inquiry business type.	Reserved for future use.
35	Short or abbreviated name for the business, but the legal designator (business type) of the candidate does not match the inquiry business type.	Available for limited markets, where applicable.
36	Registered Acronym, but the legal designator (business type) of the candidate does not match the Inquiry business type.	Available for limited markets, where applicable.
37	Brand Name, but the legal designator (business type) of the candidate does not match the Inquiry business type.	Available for limited markets, where applicable.
38	Search Name, but the legal designator (business type) of the candidate does not match the Inquiry business type.	Available for limited markets, where applicable.
39	Trademark Name, but the legal designator (business type) of the candidate does not match the Inquiry business type.	Not applicable for United States and Canada.
40	Marketing Name, but the legal designator (business type) of the candidate does not match the Inquiry business type.	Not applicable for United States and Canada.
41	Known by name, but the legal designator (business type) of the candidate does not match the Inquiry business type.	Not applicable for United States and Canada.
42	Headquarter Business Name, but the legal designator (business type) of the candidate does not match the Inquiry business type.	Not applicable for United States and Canada.

Code	Match To	Notes
43	Registered Tradestyle Name, but the legal designator (business type) of the candidate does not match the inquiry business type.	Not applicable for United States and Canada.
44	Alternative Language Name, but the legal designator (business type) of the candidate does not match the inquiry business type.	Not applicable for United States and Canada.
50	Domain, the domain resolved from Input URL field.	
60	Domain, the domain resolved from Input Email field.	
98	No D&B Data exists for this field.	
99	No Data in inquiry for this field.	
97	Unknown Name Type.	

#### Street Number Profile Code

This code indicates where the number portion of the streetAddressLine1 request value was found. The system does not look for the number in a different address type than Street Name; if found the code will be the same as Street Name Profile Code.

Code	Matched To
00	Primary Address
01	Registered Address
02	Former Address
03	Additional Address (Executive)
98	No D&B Data exists for this field
99	No Data in inquiry for this field
97	Unknown Address Type
96	Unresolved

#### Street Name Profile Code

This code indicates where the street portion of the streetAddressLine1 request value was found.

Code	Matched To
00	Primary Address
01	Registered Address
02	Former Address
03	Additional Address (Executive)
98	No D&B Data exists for this field
99	No Data in inquiry for this field

Code	Matched To
97	Unknown Address Type
96	Unresolved

#### City Profile Code

This code indicates where the locality request value was found.

Code	Matched to
00	Primary Address
01	Registered Address
02	Former Address
03	Additional Address (Executive)
04	Mailing Address
98	No D&B Data exists for this field
99	No Data in inquiry for this field
97	Unknown Address Type
96	Unresolved

#### State Profile Code

This code indicates where the region request value was found.

Code	Matched to
00	Primary Address
01	Registered Address
02	Former Address
03	Additional Address (Executive)
98	No D&B Data exists for this field
99	No Data in inquiry for this field
97	Unknown Address Type
96	Unresolved

#### PO Box/Mailing Profile Code

This code indicates where the PO Box value was found.

Code	Matched to
00	Primary Address
02	Former Address

**Code Matched to**

03	Additional Address (Executive)
98	No D&B Data exists for this field
99	No Data in inquiry for this field
97	Unknown Address Type
96	Unresolved

**Phone Profile Code**

This code indicates where the telephoneNumber request value was found.

**Code Matched to**

00	Current Phone
02	Former Phone
98	No D&B Data exists for this field
99	No Data in inquiry for this field

**Postal Code Profile Code**

This code indicates where the postalCode request value was found.

**Code Matched to**

00	Data Present
98	No D&B Data exists for this field
99	No Data in inquiry for this field
96	Unresolved

**DUNS Profile Code**

This code indicates where the D-U-N-S Number was found.

**Code Matched to**

00	Data Present
98	No D&B Data exists for this field
99	No Data in inquiry for this field

**SIC Profile Code****Code Matched to**

00	Data Present
98	No D&B Data exists for this field
99	No Data in inquiry for this field

**Density Profile Code**

This code indicates the availability of data for [this criteria](#).

**Code Matched to**

00	Data Present
98	No D&B Data exists for this field
99	No Data in inquiry for this field

**Uniqueness Profile Code**

This code indicates the availability of data for [this criteria](#).

**Code Matched to**

00	Data Present
98	No D&B Data exists for this field
99	No Data in inquiry for this field

**Registration Number (National ID) Profile Code**

This code indicates the availability of data for [this criteria](#).

**Code Matched to**

00	Data Present
98	No D&B Data exists for this field
99	No Data in inquiry for this field

**URL Profile Code**

This code indicates where the url or email request value was found.

**Code Matched to**

00	Data Present
50	Domain, the domain resolved from Input URL field.
60	Domain, the domain resolved from Input Email field.
98	No D&B Data exists for this field
99	No Data in inquiry for this field