

Open Data Contract Standard (ODCS)

YAML - interface contract: schema, semantics, quality & SLA

Sanitized work sample authored by Bernard Millet. All client-specific data, names and identifiers have been removed; it is representative of approach and craft, not a client deliverable.

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# -----
# Open Data Contract Standard (ODCS) - v3.0.0
# Bitol / Linux Foundation AI & Data
# -----
# Sanitized work sample. Illustrates how an interface between a data producer
# and its consumers is governed as an explicit, version-controlled contract:
# schema, semantics, data quality, SLAs and ownership in one place.
# -----

apiVersion: v3.0.0
kind: DataContract
id: customer-master-apac
status: active
name: Customer Master (APAC)
version: 1.2.0

# --- Description & semantics -----
description:
  purpose: >
    Single trusted view of the APAC Wealth Management client, consumed by
    client reporting, risk aggregation and regulatory submissions.
  usage: Master reference for any process that needs the agreed client record.
  limitations: Not for marketing use; contains Confidential data.

domain: customer
tenant: apac-wealth-management
dataProduct: customer-master

# --- Ownership -----
team:
  - role: owner
    description: Head of Client Data, APAC
  - role: steward
    description: Customer Data Steward
  - role: custodian
    description: Client Master Platform (IT)

# --- Physical binding -----
servers:
  - server: prod
    type: snowflake
    database: CLIENT_MASTER
    schema: CURATED
    dataset: DIM_CUSTOMER

# --- Schema -----
schema:
  - name: customer
    logicalType: object
    physicalName: DIM_CUSTOMER
    description: One row per mastered client (golden record).
    properties:
      - name: customer_id
        logicalType: string
        physicalType: VARCHAR(18)
        description: Surrogate golden-record key.
        required: true
        unique: true
        classification: Confidential
```

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- name: legal_name
  logicalType: string
  physicalType: VARCHAR(200)
  required: true
  classification: Confidential
- name: email
  logicalType: string
  physicalType: VARCHAR(254)
  description: Must match RFC 5322 format.
  required: false
- name: domicile_country
  logicalType: string
  physicalType: CHAR(2)
  description: ISO 3166-1 alpha-2 country code.
  required: true
- name: record_source
  logicalType: string
  description: Lineage - originating system of the surviving value.
  required: true
- name: load_ts
  logicalType: date
  description: UTC load timestamp.
  required: true

# --- Data quality (the rules, not the code) -----
quality:
- property: customer_id
  rule: completeness
  mustBe: 100
  unit: percent
  severity: critical
  dimension: completeness
- property: customer_id
  rule: uniqueness
  mustBe: 100
  unit: percent
  severity: critical
  dimension: uniqueness
- property: email
  rule: validFormat
  pattern: "^[^@\\s]+@[^@\\s]+\\.([^@\\s]+)$"
  mustBeGreaterThanOrEqualTo: 98
  unit: percent
  severity: high
  dimension: validity
- property: domicile_country
  rule: validValues
  reference: iso-3166-1-alpha-2
  severity: high
  dimension: validity

# --- Service levels -----
slaProperties:
- property: freshness
  value: 24
  unit: hours
  description: Maximum age of the data after the daily load.
- property: availability
  value: 99.5
  unit: percent
- property: retention
  value: 7
  unit: years

# --- Interoperability -----
support:
  standards:
    - ISO 3166-1 # country codes
    - RFC 5322 # email format
  exchangeFormats:

```

- FpML # product & counterparty interchange
catalog: OpenMetadata