

IFD: Customer Loyalty Tier Mapping

SchemaFlow cookbook sample document

Purpose

This publishable sample specification supports a database change request to add a customer loyalty tier attribute to the operational customer profile table.

Change request covered by this document

- Add LOYALTY_TIER VARCHAR(20) to ODS.ODS_CUSTOMER_PROFILE as a nullable column.
- Backfill ODS.ODS_CUSTOMER_PROFILE.LOYALTY_TIER from CORE.DIM_CUSTOMER.LOYALTY_TIER.
- Join target and source rows on CUSTOMER_ID.
- Use only CORE.DIM_CUSTOMER records where IS_CURRENT = true.
- Add a non-unique index on ODS.ODS_CUSTOMER_PROFILE(CUSTOMER_ID, LOYALTY_TIER).

Data flow

CORE.DIM_CUSTOMER -> ODS.ODS_CUSTOMER_PROFILE -> CORE.VW_CUSTOMER_PROFILE -> MARTS.CUSTOMER_LOYALTY_SUMMARY

Target object

Schema: ODS

Table: ODS_CUSTOMER_PROFILE

Column to add: LOYALTY_TIER

Data type: VARCHAR(20)

Nullability: nullable

Business key: CUSTOMER_ID

Source object

Schema: CORE

Table: DIM_CUSTOMER

Source column: LOYALTY_TIER

Join column: CUSTOMER_ID

Current row filter: IS_CURRENT = true

Relevant column mapping

CORE.DIM_CUSTOMER.CUSTOMER_ID -> ODS.ODS_CUSTOMER_PROFILE.CUSTOMER_ID

CORE.DIM_CUSTOMER.LOYALTY_TIER -> ODS.ODS_CUSTOMER_PROFILE.LOYALTY_TIER

CORE.DIM_CUSTOMER.IS_CURRENT -> source filter for current customer dimension rows

Implementation notes

- The new target column remains nullable so unmatched customers can remain NULL.
- The backfill should not insert or delete customer profile rows.
- If multiple source rows are marked current for the same CUSTOMER_ID, stop and remediate before backfill.
- Validate that LOYALTY_TIER values do not exceed 20 characters before deployment.
- Existing downstream consumers should be checked for SELECT * or fixed column ordering assumptions.

Index requirement

Create a non-unique index to support lookups and filters using CUSTOMER_ID and LOYALTY_TIER.
Recommended index columns: CUSTOMER_ID, LOYALTY_TIER.

Prechecks

- Confirm ODS.ODS_CUSTOMER_PROFILE exists and does not already contain LOYALTY_TIER.
- Confirm CORE.DIM_CUSTOMER exists and contains CUSTOMER_ID, LOYALTY_TIER, and IS_CURRENT.
- Count duplicate current source rows by CUSTOMER_ID where IS_CURRENT = true.
- Check maximum length of CORE.DIM_CUSTOMER.LOYALTY_TIER.
- Record target row count before the backfill.

Postchecks

- Confirm ODS.ODS_CUSTOMER_PROFILE.LOYALTY_TIER exists as nullable VARCHAR(20).
- Confirm target row count is unchanged after the backfill.
- Compare a sample of CUSTOMER_ID records between ODS and CORE.
- Report the count of NULL LOYALTY_TIER values after the backfill.
- Confirm the non-unique index exists on CUSTOMER_ID and LOYALTY_TIER.

Rollback

- Drop the new non-unique index if created.
- Set ODS.ODS_CUSTOMER_PROFILE.LOYALTY_TIER back to NULL if only the backfill needs rollback.
- Drop ODS.ODS_CUSTOMER_PROFILE.LOYALTY_TIER if a full schema rollback is required.

This sample contains no client names, employee names, internal URLs, credentials, or production values.