



DVAUT

Data Validation Audit and Upload Tool

DVAUT (Data Validation Audit and Upload Tool)

The basic aim of DVAUT is to clean and match field audit data to Eskom's customer data, providing mechanisms to manage contractors and to enforce data quality standards. Audits can be done on Township, EBC, Transformer and LV Pole levels.

A template can be created for any field audit given the fields gathered correspond to DVAUT's supported fields.

Business benefit

- Turnaround time of cleansing of Field Data improved;
- Less manual intervention for matching;
- Validations and cleansing deployed in the tool - CC&B to do's decreased;
- Smaller subsets of data downloaded from CC&B - this mitigates the timeout errors and ensures speedy downloads & uploads;
- Bulk fixes of data as opposed to fixing data record by record basis;
- Reporting – Exceptions, Contractor payment reports, etc;
- Archiving of data, tracking of changes, managerial signoff (i.e. tariffs);
- Version Control – locking of data sets to prevent concurrent updates;

Functional Areas

DVAUT supported fields and data cleansing options

- Required field / missing data validation
 - Duplicates on meter numbers and a mechanism to handle the duplicates
 - Township code and description, SGC, EBC validation and data cleansing (Bulk)
 - GPS format conversion to CC&B standards (Bulk)
 - Check meter for valid STS(LUHN) and proprietary on existing and change outs (Bulk)
 - Token technology and algorithm technology validation and data cleansing (Bulk)
 - Meter manufacturer validation and data cleansing (Automatic / Bulk)
 - Transformer validation and data cleansing (Bulk)
 - LV Pole validation and data cleansing (Bulk)
 - Tariff, AMP and instance validation and data cleansing (Bulk)
 - National ID validation (Bulk)
- *Data validation is done using CC&B catalogs and formula

DVAUT data cleansing reporting

- Required field / missing data
- Contractor payment / non-payment report
- Contractor data quality

- Summary reports

The number of records that forms part of this audit
The number of records that failed on required fields / Missing data
The number of records that passed on required fields
The number of records without duplication
The number of rejected duplicate records
The number of valid STS Meters
The number of invalid STS Meters
The number of valid Proprietary Meters
The number of invalid Proprietary Meters
The number of records with valid Township code & SGC
The number of records with invalid Township code & SGC
The number of records with deemed not part of audit
The number of records with valid Token & Algorithm Technology
The number of records with invalid Token & Algorithm Technology
The number of records with valid Transformer information
The number of records with invalid Transformer information
The number of records with valid Pole information
The number of records with invalid Pole information
The number of records with valid National ID
The number of records with invalid National ID
The number of records with valid Tariff / AMP combination
The number of records with invalid Tariff / AMP combination
The number of records with updated Tariff / AMP

DVAUT data matching

- Preliminary matching is based address and meters
- Custom matching can be done with automated query builder on
 - ADDRESS1
 - ADDRESS2
 - ADDRESS3
 - PHONE
 - CM_PHONE2
 - NATIONAL_ID
 - FIRST_NAME
 - SURNAME
 - FAC_LVL_2_CD
 - LATITUDE
 - LONGITUDE
 - CM_POLE_NBR
 - CM_SUPPLY_GRP_CD
 - CM_TOWNSHIP_CD
 - CM_TRANSF_NAME

DVAUT data matching reporting

The number of records that forms part of this audit
The number of records that passed Data Cleansing

The number of records that failed Data Cleansing
The number of records used from CC&B
The number of records used for linking
The number of records linked with meters and addresses
The number of records linked with addresses
The number of records not linked with meters / addresses. Possible new customers
The number of audited / mapped field records
The number of non-audited / un-mapped field records
The number of records for CC&B updates
The number of Move In\Out records
The number of not considered Move In\Out records
The number of Field level Meter Change \ Outs
The number of CC&B level Meter Change \ Outs
The number of Field and CC&B level Meter Change \ Outs
The number of possible New Connections
The number of possible CIS Moves