Extract-Transform-Load (ETL) Process Design for the ACME-Flying Use Case

- The maintenance period for the calculation of `ADOS` was extracted from `AMOS`.
- The rows with a negative value of `duration` were removed from `Maintenanceevents` as those were considered incorrect values.
- `scheduleddeparture` and `starttime` are used as `dateID` from `Flights` and `Maintenanceevents` tables respectively.
- Future additions or updates of the *Bussines Rules (BR)* were not taken into account and some BR[1] were not considered given that the affected tables were not used.
- BR-18 was simultaneously checked with BR-14, but the "diverted" condition has been overlooked.
- The `FlightNumber` in the BR-14 was only checked with respect to the length of the substring in between positions 15 and 19 from `FlightID`, due to a missing reference.
- For BR-12, the length differentiation of duration for `AircraftOnground` and `Maintenance` lies on $. < 24$ or $. \leq 24$ respectively.
- The days of delay for the BR-8 was computed with respect to the time difference of `executiondate` and `due` from `Technicallogbookorders`.
- For BR-6, only a verification of serial number was done, since unique values were checked in the BR-2 and BR-3.
- In `Flights`, we assume that `actualarrival` is computed for the same time zone as `actualdeparture`.
- `ADIS` is the time difference between `scheduleddeparture` and `actualarrival` since we assume that the interval contains both *in-flight* and *ready-for-flight*.
- `scheduleddeparture` and `actualdeparture` were used to compute the duration of the delay, if any.
- `reporteurID` from `Technicallogbookorders` without an assigned `airport` in the .csv lookup file were not removed but given a *"NaN"* string value.
- The affected records removed (in BR-2, BR-6, BR-7, BR-8) from the `AirportDimension` flow were not stored since those are the same affected rows as in `LogBookMetrics`.

[1] BR-1, BR-5, BR-10, BR-11.