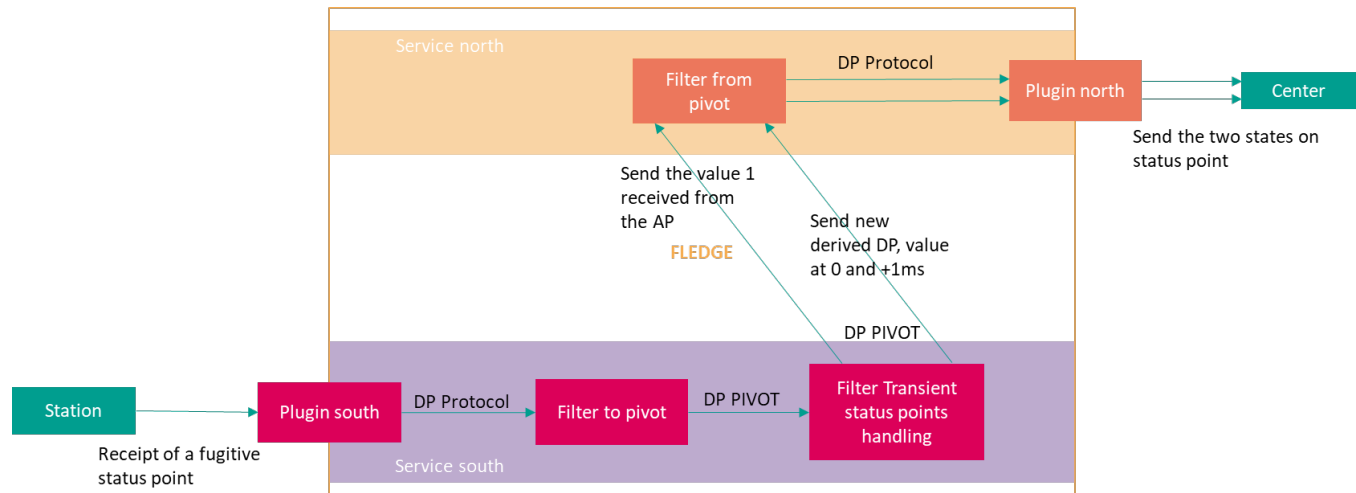# Transient status points handling

Module description

The transient status points that are transmitted by the station only with value = 1.

The transient status points are acquired from the station like any normal status point. When a transient status point is received (value 1), it is normally forwarded to the north service.

A new datapoint is then generated by the module with a value of 0 and is forwarded to the north service with a modified timestamp (+1ms).

However, on GI response they must always be sent to 0.

Configuration

The following attributes are read from the Exchanged data configuration:

- pivot_subtypes has "transient" in the list.

Filtering rules

R1 : Only status points configured as transient in subtypes are processed by the plugin, ie pivot_subtypes has "transient" in the list.

R2 : When creating a new datapoint, add 1 ms to the timestamp of the received transient status point.

Data processing

Input

This filter plugin expects readings to be a pivot model status point datapoints.

The module uses the identification (Attribute "*PIVOT.GTIS.Identifier*") of the data to identify the transient status point to process.

Output

If the value "1" is received from the station, the module transmits the value to the center. If the status point is transient, a new datapoint is created with :

- its value to 0
- Timestamp incremented by 1ms.

The generated new data are:

- For a simple point data type :
    - *PIVOT.GTIS.SpsTyp.stVal* = False
    - *PIVOT.GTIS.SpsTyp.t.SecondSinceEpoch* (incremented timestamp)

- *PIVOT.GTIS.SpsTyp.t.FractionOfSecond* (incremented timestamp)
- *PIVOT.GTIS.SpsTyp.q.Source* = "substituted"
- *PIVOT.GTIS.TmOrg.stVal* = "substituted"
- For a double point data type :
  - *PIVOT.GTIS.DpsTyp.stVal* = "off"
  - *PIVOT.GTIS.DpsTyp.t.SecondSinceEpoch* (incremented timestamp)
  - *PIVOT.GTIS.DpsTyp.t.FractionOfSecond* (incremented timestamp)
  - *PIVOT.GTIS.DpsTyp.q.Source* = "substituted"
  - *PIVOT.GTIS.TmOrg.stVal* = "substituted"