#### **Itcs-Data**

Itcs-Data is a common understanding in public transport for data showing where a transport is located. In this project data from a simulation is used to simulate realtime data. The data is sent via UDP and received with apache nifi.

In nifi there is a script running to filter out data which has no gps data. This faulty data is sent to a different rest api where it is counted and visualised in the summary.

The data with gps is forwarded to another rest api where the dataflow is counted and the busses which are activ.

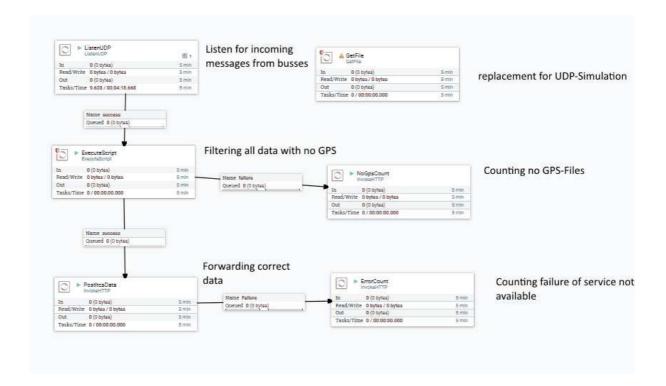
If the confiurable maximum amount of busses exceeded a mail, which is configured in the properties file, is sent to the person responsible to confirm more busses shall be sent.

## Hadoop

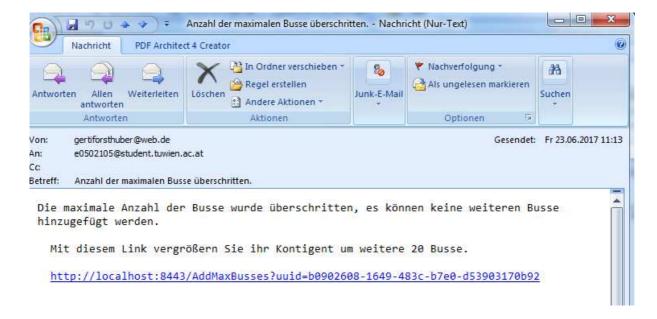
Hadoop was used in the cloude, as I run out of the free trial I decided to scip the saving of not used data and reconsider the design to just keep the data needed.

### **Apache NIFI**

There are 2 templates, for trying the application you have to use the template with GetFile and configure the Path, as well as the path of the script for filtering the data with 0 gps.



## If maximum Number of Busses received - Mail has to confirmed



# **ItcsDataFlow**



Datenverlauf: Busse, NoGPS, Error

