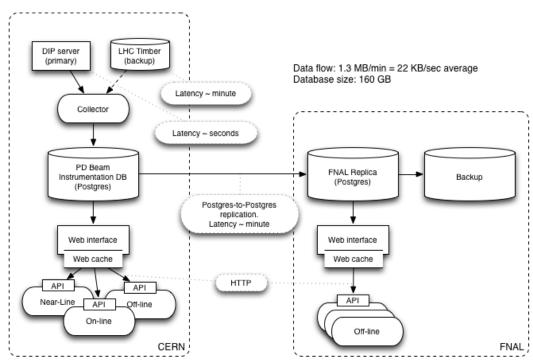
## Beam Instrumentation DB for ProtoDUNE

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## ProtoDUNE BI DB Architecture

ProtoDUNE Beam Instrumentation Database design



## Expected data latencies

- Most of data within seconds
- Occasionally, if we miss data from the DIP data feed within minutes
- In case of a DB failure hours
  - Data will be buffered by the collector and will be available from Timber

## ProtoDUNE BI DB User Interface

- HTTP/REST API
- Request: http://..../data?variable=<name>&t0=<time>&t1=<time>
- Output: CSV file with one timestamped measurement per row
- We have C library to request and parse such data
  - Retry on error functionality
- It has been used at FNAL for several years by all IF experiments