From: Stella Yu [mailto:stella.yu@hitachivantara.com]

**Sent:** Monday, June 25, 2018 6:50 PM **To:** White2, James; Conn, Trevor **Subject:** Re: EdgeX Logging

Hi Jim & Trevor,

Thank you for the clarifications and being patient with our requests. Here is some of the requirement we received. The first one is for smart cities we did in the past. The 2<sup>nd</sup> one came in recently for a near real-time system. Both needs to run on gateway devices similar to Dell Edge Gateway 5000.

## Binary data requirement:

- Image data size: 3.5MB every 5 minutes
- Video clips: 135MB once a week
- Collected data is sent to remote cloud through cellular networks

## High throughput data requirement:

- 3.6 million messages / hour / sensor X 1000 sensors
- Average 150 bytes / message
- Messages encoded in Hex sent real time without delay (ie. No batching)
- Messages propagate from PLC → timeseries database → display (like Grafana) over ethernet with latency of < 1 second</li>

Regarding testing binary data we discussed on the phone last week, besides testing with Protobuf structures, another suggestion is to test with zip files and assert we can traverse the uncompressed folder structure and read files in the receiving end.

HTH, Stella