Design

Boundary and Error Conditions:

- If Prometheus scrape happens within 1 sec of the clock interval boundary when CIM may not have completed the clock aligned scrape, that interval/bucket data would be exported to Prometheus during next scrape.
- If Prometheus does not scrape the data from CIM for any reason, CIM shall retain data for 'n' intervals. 'n' is configurable. For CIM footprint and performance considerations,
    - 'n' to be calculated based on number of counters and memory needed to hold previous interval data.
    - CIM memory usage for metrics retention shall not exceed 5MB.