

Why is my history store flushing slowly and the current live values not being sent

When MQTT Engine is configured to process historical events by writing them to the Tag instead of directly to the Historian, MQTT Transmission must be configured to flush history in-order.

This is to ensure that when the Edge side client comes back online and flushes history, MQTT Engine will receive the oldest historical events first (in order) before any live tag changes events.

As such, whilst the history flush is in progress, all new change events are written to the history store until it has been completely flushed.

If the tag change rate at the Edge is faster than the Flush Period this can cause a build up of data in history store(s) and prevent the publishing of live data.

We can identify this problem through the Ignition Logs by navigating to Status > Diagnostics > Logs from the left hand menu bar.

If we see that history store is flushing a small amount of events (much less than the Flush Quantity which is the maximum number of tags to publish in a single message upon reestablishing communication), then the history is flushing too slowly to fully drain the History Store when new data is being inserted while in-order flushing is in progress.

Filter	type to filter	View	100	Min. Level	ALL	Live Values	on					
Logger	Time	Message										
I HistoryPublisher	15Mar2022 11:55:33	Publishing 2 historical metrics on topic spBv1.0/										
I HistoryPublisher	15Mar2022 11:55:32	Publishing 5 historical metrics on topic spBv1.0/										
I HistoryPublisher	15Mar2022 11:55:31	Publishing 4 historical metrics on topic spBv1.0/										
I HistoryPublisher	15Mar2022 11:55:30	Publishing 5 historical metrics on topic spBv1.0/										
I HistoryPublisher	15Mar2022 11:55:29	Publishing 2 historical metrics on topic spBv1.0/										
I HistoryPublisher	15Mar2022 11:55:28	Publishing 2 historical metrics on topic spBv1.0/										
I HistoryPublisher	15Mar2022 11:55:27	Publishing 3 historical metrics on topic spBv1.0/										
I HistoryPublisher	15Mar2022 11:55:26	Publishing 3 historical metrics on topic spBv1.0/										
I HistoryPublisher	15Mar2022 11:55:25	Publishing 6 historical metrics on topic spBv1.0/										
I HistoryPublisher	15Mar2022 11:55:24	Publishing 2 historical metrics on topic spBv1.0/										
I HistoryPublisher	15Mar2022 11:55:23	Publishing 11 historical metrics on topic spBv1.0/										
I HistoryPublisher	15Mar2022 11:55:22	Publishing 4 historical metrics on topic spBv1.0/										
I HistoryPublisher	15Mar2022 11:55:21	Publishing 2 historical metrics on topic spBv1.0/										
I HistoryPublisher	15Mar2022 11:55:20	Publishing 5 historical metrics on topic spBv1.0/										
I HistoryPublisher	15Mar2022 11:55:19	Publishing 2 historical metrics on topic spBv1.0/										
I HistoryPublisher	15Mar2022 11:55:18	Publishing 2 historical metrics on topic spBv1.0/										
I HistoryPublisher	15Mar2022 11:55:17	Publishing 2 historical metrics on topic spBv1.0/										
I HistoryPublisher	15Mar2022 11:55:16	Publishing 2 historical metrics on topic spBv1.0/										
I HistoryPublisher	15Mar2022 11:55:15	Publishing 5 historical metrics on topic spBv1.0/										
I HistoryPublisher	15Mar2022 11:55:14	Publishing 2 historical metrics on topic spBv1.0/										

To resolve this issue, decrease the Flush Period to allow MQTT Transmission to flush all historical data and get back to publishing live data.