
Message Tracing by Metric Log

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Current Status:

- done() emits a metric log (PR #2685, merged) **1**
- Once Messaging API support PRs are reviewed and merged (PR #2733, #2734, #2738, #2744, #2750, #2751), all core nodes emit metric log when message processing is completed.

```
14:21:51 - [metric] {"level":99,"nodeid":"D","event":"node.join.receive","msgid":"Y","timestamp":1579670511863}
14:21:53 - [metric] {"level":99,"nodeid":"D","event":"node.join.receive","msgid":"Z","timestamp":1579670513508}
14:21:56 - [metric] {"level":99,"nodeid":"D","event":"node.join.receive","msgid":"X","timestamp":1579670516424}
14:21:56 - [metric] {"level":99,"nodeid":"D","event":"node.join.correlate","msgid":"X","value":{"join":["Y","Z"]},"timestamp":1579670516425} 2
14:21:56 - [metric] {"level":99,"nodeid":"D","event":"node.join.send","msgid":"X","timestamp":1579670516425}
14:21:56 - [metric] {"level":99,"nodeid":"D","event":"node.join.done","msgid":"X","timestamp":1579670516425} 1
14:21:56 - [metric] {"level":99,"nodeid":"D","event":"node.join.done","msgid":"Y","timestamp":1579670516425}
14:21:56 - [metric] {"level":99,"nodeid":"D","event":"node.join.done","msgid":"Z","timestamp":1579670516425}
```

Next Steps:

- Metric log for more precise tracing:
 - for the node which split a message or consolidate multiple messages (e.g. split/join, batch) **2**
- Graceful shutdown (as an experimental function):
 - waiting for process all messages in runtime.
 - PR already exists (#2296), but need to add test cases.