Sparkplug Compliance MQTT Engine 4.0.37

Eclipse™ Sparkplug™ TCK Results summary

Date: 05/10/2026 17:58:25

Warning: test Host SessionEstablishment logged more than once. Any previously failing assertion will not be overwritten by a later success.

Sparkplug Profile: Broker

Aware Group

Assertion count: 7 Number passed: 0 Number failed: 0 Percent passed: 0%

Assertion ID	Assertion Type	Test	Time	Result
tck-id-conformance-mqtt-aware-basic	MUST			
tck-id-conformance-mqtt-aware-dbirth-mqtt-retain	MUST			
tck-id-conformance-mqtt-aware-dbirth-mqtt-topic	MUST			
tck-id-conformance-mqtt-aware-nbirth-mqtt-retain	MUST			
tck-id-conformance-mqtt-aware-nbirth-mqtt-topic	MUST			
tck-id-conformance-mqtt-aware-ndeath-timestamp	MUST			
tck-id-conformance-mqtt-aware-store	MUST			

Main Group

Assertion count: 4 Number passed: 0 Number failed: 0 Percent passed: 0%

Optional assertion count: 0 Optional number passed: 0 Percent passed without optional: 0%

Assertion ID	Assertion Type	Test	Time	Result
tck-id-conformance-mqtt-qos0	MUST			
tck-id-conformance-mqtt-qos1	MUST			
tck-id-conformance-mqtt-retained	MUST			
tck-id-conformance-mqtt-will-messages	MUST			

Sparkplug Profile: Host

Message Reordering Group

Assertion count: 4 Number passed: 4 Number failed: 0 Percent passed: 100%

Assertion ID	Assertion Type	Test	Time	Result
tck-id-operational-behavior-host-reordering-param	SHOULD	MessageOrdering	2026-10-05 17:56:11.865	PASS
tck-id-operational-behavior-host-reordering-rebirth	MUST	MessageOrdering	2026-10-05 17:56:11.865	PASS
tck-id-operational-behavior-host-reordering-start	MUST	MessageOrdering	2026-10-05 17:56:11.865	PASS
tck-id-operational-behavior-host-reordering-success	MUST	MessageOrdering	2026-10-05 17:56:11.865	PASS

Main Group

Assertion count: 95 Number passed: 89 Number failed: 0 Percent passed: 93%

Optional assertion count: 5 Optional number passed: 5 Percent passed without optional: 93%

Assertion ID	Assertion Type	Test	Time	Result
tck-id-case-sensitivity-sparkplug-ids	SHOULD optional	MessageOrdering	2026-10-05 17:56:11.865	PASS
tck-id-components-ph-state	MUST	SessionEstablishment	2026-10-05 17:49:08.093	PASS
tck-id-conformance-primary-host	MUST	SessionEstablishment	2026-10-05 17:49:08.093	PASS
tck-id-host-topic-phid-birth-message	MUST	SessionEstablishment	2026-10-05 17:49:08.093	PASS
tck-id-host-topic-phid-birth-payload	MUST	MultipleBroker	2026-10-05 17:56:56.615	PASS
tck-id-host-topic-phid-birth-payload-timestamp	MUST	SessionEstablishment	2026-10-05 17:49:08.093	PASS

tck-id-host-topic-phid-birth-qos	MUST	SessionEstablishment	2026-10-05 17:49:08.093	PASS
tck-id-host-topic-phid-birth-required	MUST	SessionEstablishment	2026-10-05 17:49:08.093	PASS
tck-id-host-topic-phid-birth-retain	MUST	SessionEstablishment	2026-10-05 17:49:08.093	PASS
tck-id-host-topic-phid-birth-sub-required	MUST	SessionEstablishment	2026-10-05 17:49:08.093	PASS
tck-id-host-topic-phid-birth-topic	MUST	SessionEstablishment	2026-10-05 17:49:08.093	PASS
tck-id-host-topic-phid-death-payload	MUST	SessionEstablishment	2026-10-05 17:49:08.093	PASS
tck-id-host-topic-phid-death-payload-timestamp-connect	MUST	MultipleBroker	2026-10-05 17:56:56.615	PASS
tck-id-host-topic-phid-death-payload-timestamp-disconnect-clean	MUST	SessionTermination	2026-10-05 17:49:54.609	PASS
tck-id-host-topic-phid-death-payload-timestamp-disconnect-with-no-disconnect-packet	MUST	SessionTermination	2026-10-05 17:49:54.609	NOT EXECUTED
tck-id-host-topic-phid-death-qos	MUST	SessionEstablishment	2026-10-05 17:49:08.093	PASS
tck-id-host-topic-phid-death-required	MUST	SessionEstablishment	2026-10-05 17:49:08.093	PASS
tck-id-host-topic-phid-death-retain	MUST	SessionEstablishment	2026-10-05 17:49:08.093	PASS
tck-id-host-topic-phid-death-topic	MUST	SessionEstablishment	2026-10-05 17:49:08.093	PASS
tck-id-intro-group-id-chars	MUST			
tck-id-intro-group-id-string	MUST			
tck-id-intro-sparkplug-host-state	MUST	SessionEstablishment	2026-10-05 17:49:08.093	PASS
tck-id-message-flow-edge-node-birth-publish-will-message-topic	MUST	SendCommand	2026-10-05 17:53:53.449	PASS
tck-id-message-flow-hid-sparkplug-state-message-delivered	MUST	SessionEstablishment	2026-10-05 17:49:08.093	PASS
tck-id-message-flow-phid-sparkplug-clean-session-311	MUST	SessionEstablishment	2026-10-05 17:49:08.093	PASS
tck-id-message-flow-phid-sparkplug-clean-session-50	MUST	SessionEstablishment	2026-10-05 17:49:08.093	NOT EXECUTED
tck-id-message-flow-phid-sparkplug-state-publish	MUST	SessionEstablishment	2026-10-05 17:49:08.093	PASS
tck-id-message-flow-phid-sparkplug-state-publish-payload	MUST	SessionEstablishment	2026-10-05 17:49:08.093	PASS
tck-id-message-flow-phid-sparkplug-state-publish-payload-timestamp	MUST	SessionEstablishment	2026-10-05 17:49:08.093	PASS
tck-id-message-flow-phid-sparkplug-subscription	MUST	SessionEstablishment	2026-10-05 17:49:08.093	PASS
tck-id-operational-behavior-data-commands-dcmd-metric-name	SHOULD optional	SendCommand	2026-10-05 17:53:53.449	PASS
tck-id-operational-behavior-data-commands-dcmd-metric-value	MUST	SendCommand	2026-10-05 17:53:53.449	PASS
tck-id-operational-behavior-data-commands-dcmd-verb	MUST	SendCommand	2026-10-05 17:53:53.449	PASS
tck-id-operational-behavior-data-commands-ncmd-metric-name	SHOULD optional	SendCommand	2026-10-05 17:53:53.449	PASS
tck-id-operational-behavior-data-commands-ncmd-metric-value	MUST	SendCommand	2026-10-05 17:53:53.449	PASS
tck-id-operational-behavior-data-commands-ncmd-rebirth-name	MUST	SendCommand	2026-10-05 17:53:53.449	PASS
tck-id-operational-behavior-data-commands-ncmd-rebirth-value	MUST	SendCommand	2026-10-05 17:53:53.449	PASS
tck-id-operational-behavior-data-commands-ncmd-rebirth-verb	MUST	SendCommand	2026-10-05 17:53:53.449	PASS
tck-id-operational-behavior-data-commands-ncmd-verb	MUST	SendCommand	2026-10-05 17:53:53.449	PASS
tck-id-operational-behavior-edge-node-termination-host-action-ddeath-devices-offline	MUST	EdgeSessionTermination	2026-10-05 17:55:22.934	PASS
tck-id-operational-behavior-edge-node-termination-host-action-ddeath-devices-tags-stale	MUST	EdgeSessionTermination	2026-10-05 17:55:22.934	PASS
tck-id-operational-behavior-edge-node-termination-host-action-ndeath-devices-offline	MUST	EdgeSessionTermination	2026-10-05 17:55:22.934	PASS

tck-id-operational-behavior-edge-node-termination-host-action-ndeath-devices-tags-stale	MUST	EdgeSessionTermination	2026-10-05 17:55:22.934	PASS
tck-id-operational-behavior-edge-node-termination-host-action-ndeath-node-offline	MUST	EdgeSessionTermination	2026-10-05 17:55:22.934	PASS
tck-id-operational-behavior-edge-node-termination-host-action-ndeath-node-tags-stale	MUST	EdgeSessionTermination	2026-10-05 17:55:22.934	PASS
tck-id-operational-behavior-host-application-connect-birth	MUST	SessionEstablishment	2026-10-05 17:49:08.093	PASS
tck-id-operational-behavior-host-application-connect-birth-payload	MUST	SessionEstablishment	2026-10-05 17:49:08.093	PASS
tck-id-operational-behavior-host-application-connect-birth-qos	MUST	SessionEstablishment	2026-10-05 17:49:08.093	PASS
tck-id-operational-behavior-host-application-connect-birth-retained	MUST	SessionEstablishment	2026-10-05 17:49:08.093	PASS
tck-id-operational-behavior-host-application-connect-birth-topic	MUST	SessionEstablishment	2026-10-05 17:49:08.093	PASS
tck-id-operational-behavior-host-application-connect-will	MUST	SessionEstablishment	2026-10-05 17:49:08.093	PASS
tck-id-operational-behavior-host-application-connect-will-payload	MUST	MultipleBroker	2026-10-05 17:56:56.615	PASS
tck-id-operational-behavior-host-application-connect-will-qos	MUST	SessionEstablishment	2026-10-05 17:49:08.093	PASS
tck-id-operational-behavior-host-application-connect-will-retained	MUST	SessionEstablishment	2026-10-05 17:49:08.093	PASS
tck-id-operational-behavior-host-application-connect-will-topic	MUST	SessionEstablishment	2026-10-05 17:49:08.093	PASS
tck-id-operational-behavior-host-application-death-payload	MUST	SessionTermination	2026-10-05 17:49:54.609	PASS
tck-id-operational-behavior-host-application-death-qos	MUST	SessionTermination	2026-10-05 17:49:54.609	PASS
tck-id-operational-behavior-host-application-death-retained	MUST	SessionTermination	2026-10-05 17:49:54.609	PASS
tck-id-operational-behavior-host-application-death-topic	MUST	SessionTermination	2026-10-05 17:49:54.609	PASS
tck-id-operational-behavior-host-application-disconnect-intentional	MAY optional	SessionTermination	2026-10-05 17:49:54.609	PASS
tck-id-operational-behavior-host-application-host-id	MUST	SessionTermination	2026-10-05 17:49:54.609	PASS
tck-id-operational-behavior-host-application-multi-server-timestamp	MUST	MultipleBroker	2026-10-05 17:56:56.615	NOT EXECUTED
tck-id-operational-behavior-host-application-termination	MUST	SessionTermination	2026-10-05 17:49:54.609	PASS
tck-id-operational-behavior-primary-application-state-with-multiple-servers-state	MUST	MultipleBroker	2026-10-05 17:56:56.615	PASS
tck-id-operational-behavior-primary-application-state-with-multiple-servers-state-subs	MUST	MultipleBroker	2026-10-05 17:56:56.615	PASS
tck-id-payloads-dcmd-qos	MUST	SendCommand	2026-10-05 17:53:53.449	PASS
tck-id-payloads-dcmd-retain	MUST	SendCommand	2026-10-05 17:53:53.449	PASS
tck-id-payloads-dcmd-seq	MUST	SendCommand	2026-10-05 17:53:53.449	PASS
tck-id-payloads-dcmd-timestamp	MUST	SendCommand	2026-10-05 17:53:53.449	PASS
tck-id-payloads-name-cmd-requirement	MAY optional	SendCommand	2026-10-05 17:53:53.449	PASS
tck-id-payloads-ncmd-qos	MUST	SendCommand	2026-10-05 17:53:53.449	PASS
tck-id-payloads-ncmd-retain	MUST	SendCommand	2026-10-05 17:53:53.449	PASS
tck-id-payloads-ncmd-seq	MUST	SendCommand	2026-10-05 17:53:53.449	PASS
tck-id-payloads-ncmd-timestamp	MUST	SendCommand	2026-10-05 17:53:53.449	PASS
tck-id-payloads-sequence-num-incrementing	MUST	MessageOrdering	2026-10-05 17:56:11.865	PASS
tck-id-payloads-state-birth	MUST	SessionEstablishment	2026-10-05 17:49:08.093	PASS
tck-id-payloads-state-birth-payload	MUST	SessionEstablishment	2026-10-05 17:49:08.093	PASS

tck-id-payloads-state-subscribe	MUST	SessionEstablishment	2026-10-05 17:49:08.093	PASS
tck-id-payloads-state-will-message	MUST	SessionEstablishment	2026-10-05 17:49:08.093	PASS
tck-id-payloads-state-will-message-payload	MUST	MultipleBroker	2026-10-05 17:56:56.615	PASS
tck-id-payloads-state-will-message-qos	MUST	SessionEstablishment	2026-10-05 17:49:08.093	PASS
tck-id-payloads-state-will-message-retain	MUST	SessionEstablishment	2026-10-05 17:49:08.093	PASS
tck-id-payloads-timestamp-in-utc	MUST	MessageOrdering	2026-10-05 17:56:11.865	PASS
tck-id-principles-birth-certificates-order	MUST	SessionEstablishment	2026-10-05 17:49:08.093	PASS
tck-id-topics-dcmd-mqtt	MUST	SendCommand	2026-10-05 17:53:53.449	PASS
tck-id-topics-dcmd-payload	MUST	SendCommand	2026-10-05 17:53:53.449	PASS
tck-id-topics-dcmd-timestamp	MUST	SendCommand	2026-10-05 17:53:53.449	PASS
tck-id-topics-dcmd-topic	MUST	SendCommand	2026-10-05 17:53:53.449	PASS
tck-id-topics-ncmd-mqtt	MUST	SendCommand	2026-10-05 17:53:53.449	PASS
tck-id-topics-ncmd-payload	MUST	SendCommand	2026-10-05 17:53:53.449	PASS
tck-id-topics-ncmd-timestamp	MUST	SendCommand	2026-10-05 17:53:53.449	PASS
tck-id-topics-ncmd-topic	MUST	SendCommand	2026-10-05 17:53:53.449	PASS
tck-id-topic-structure	MUST	MultipleBroker	2026-10-05 17:56:56.615	PASS
tck-id-topic-structure-namespace-a	MUST			
tck-id-topic-structure-namespace-valid-group-id	MUST	MessageOrdering	2026-10-05 17:56:11.865	PASS

Sparkplug Profile: Edge

Aliases Group

Assertion count: 4 Number passed: 0 Number failed: 0 Percent passed: 0%

Assertion ID	Assertion Type	Test	Time	Result
tck-id-operational-behavior-data-commands-rebirth-name-aliases	MUST			
tck-id-payloads-alias-birth-requirement	MUST			
tck-id-payloads-alias-data-cmd-requirement	MUST			
tck-id-payloads-alias-uniqueness	MUST			

Datasets Group

Assertion count: 7 Number passed: 0 Number failed: 0 Percent passed: 0%

Assertion ID	Assertion Type	Test	Time	Result
tck-id-payloads-dataset-column-num-headers	MUST			
tck-id-payloads-dataset-column-size	MUST			
tck-id-payloads-dataset-parameter-type-req	MUST			
tck-id-payloads-dataset-types-def	MUST			
tck-id-payloads-dataset-types-num	MUST			
tck-id-payloads-dataset-types-type	MUST			
tck-id-payloads-dataset-types-value	MUST			

Properties Group

Assertion count: 7 Number passed: 0 Number failed: 0 Percent passed: 0%

Assertion ID	Assertion Type	Test	Time	Result
tck-id-payloads-metric-propertyvalue-type-req	MUST			
tck-id-payloads-metric-propertyvalue-type-type	MUST			
tck-id-payloads-metric-propertyvalue-type-value	MUST			
tck-id-payloads-propertyset-keys-array-size	MUST			

tck-id-payloads-propertyset-quality-value-type	MUST			
tck-id-payloads-propertyset-quality-value-value	MUST			
tck-id-payloads-propertyset-values-array-size	MUST			

Templates Group

Assertion count: 27 Number passed: 0 Number failed: 0 Percent passed: 0%

Assertion ID	Assertion Type	Test	Time	Result
tck-id-payloads-template-dataset-value	MUST			
tck-id-payloads-template-definition-is-definition	MUST			
tck-id-payloads-template-definition-members	MUST			
tck-id-payloads-template-definition-nbirth	MUST			
tck-id-payloads-template-definition-nbirth-only	MUST			
tck-id-payloads-template-definition-parameters	MUST			
tck-id-payloads-template-definition-parameters-default	MAY			
tck-id-payloads-template-definition-ref	MUST			
tck-id-payloads-template-instance-is-definition	MUST			
tck-id-payloads-template-instance-members	MUST			
tck-id-payloads-template-instance-members-birth	MUST			
tck-id-payloads-template-instance-members-data	MAY			
tck-id-payloads-template-instance-parameters	MAY			
tck-id-payloads-template-instance-ref	MUST			
tck-id-payloads-template-is-definition	MUST			
tck-id-payloads-template-is-definition-definition	MUST			
tck-id-payloads-template-is-definition-instance	MUST			
tck-id-payloads-template-parameter-name-required	MUST			
tck-id-payloads-template-parameter-name-type	MUST			
tck-id-payloads-template-parameter-type-req	MUST			
tck-id-payloads-template-parameter-type-value	MUST			
tck-id-payloads-template-parameter-value	MUST			
tck-id-payloads-template-parameter-value-type	MUST			
tck-id-payloads-template-ref-definition	MUST			
tck-id-payloads-template-ref-instance	MUST			
tck-id-payloads-template-version	MUST			
tck-id-topics-nbirth-templates	MUST			

Main Group

Assertion count: 155 Number passed: 13 Number failed: 0 Percent passed: 8%

Optional assertion count: 9 Optional number passed: 3 Percent passed without optional: 6%

Assertion ID	Assertion Type	Test	Time	Result
tck-id-case-sensitivity-metric-names	SHOULD optional			
tck-id-case-sensitivity-sparkplug-ids	SHOULD optional			
tck-id-intro-device-id-chars	MUST			
tck-id-intro-device-id-string	MUST			
tck-id-intro-edge-node-id-chars	MUST			
tck-id-intro-edge-node-id-string	MUST			
tck-id-intro-edge-node-id-uniqueness	MUST			
tck-id-intro-group-id-chars	MUST			
tck-id-intro-group-id-string	MUST			
tck-id-message-flow-device-birth-publish-dbirth-match-edge-node-topic	MUST			
tck-id-message-flow-device-birth-publish-dbirth-payload	MUST			
tck-id-message-flow-device-birth-publish-dbirth-payload-seq	MUST			
tck-id-message-flow-device-birth-publish-dbirth-qos	MUST			
tck-id-message-flow-device-birth-publish-dbirth-retained	MUST			
tck-id-message-flow-device-birth-publish-dbirth-topic	MUST			
tck-id-message-flow-device-birth-publish-nbirth-wait	MUST			
tck-id-message-flow-device-dcmd-subscribe	MUST			
tck-id-message-flow-edge-node-birth-publish-connect	MUST			
tck-id-message-flow-edge-node-birth-publish-nbirth-payload	MUST			
tck-id-message-flow-edge-node-birth-publish-nbirth-payload-bdseq	MUST			
tck-id-message-flow-edge-node-birth-publish-nbirth-payload-seq	MUST			

tck-id-message-flow-edge-node-birth-publish-nbirth-qos	MUST			
tck-id-message-flow-edge-node-birth-publish-nbirth-retained	MUST			
tck-id-message-flow-edge-node-birth-publish-nbirth-topic	MUST			
tck-id-message-flow-edge-node-birth-publish-phid-offline	MUST			
tck-id-message-flow-edge-node-birth-publish-phid-wait	MUST			
tck-id-message-flow-edge-node-birth-publish-phid-wait-id	MUST			
tck-id-message-flow-edge-node-birth-publish-phid-wait-online	MUST			
tck-id-message-flow-edge-node-birth-publish-phid-wait-timestamp	MUST			
tck-id-message-flow-edge-node-birth-publish-will-message	MUST			
tck-id-message-flow-edge-node-birth-publish-will-message-payload	MUST			
tck-id-message-flow-edge-node-birth-publish-will-message-payload-bdseq	MUST	MessageOrdering	2026-10-05 17:56:11.865	PASS
tck-id-message-flow-edge-node-birth-publish-will-message-qos	MUST			
tck-id-message-flow-edge-node-birth-publish-will-message-topic	MUST			
tck-id-message-flow-edge-node-birth-publish-will-message-will-retained	MUST			
tck-id-message-flow-edge-node-ncmd-subscribe	MUST			
tck-id-operational-behavior-data-commands-rebirth-action-1	MUST			
tck-id-operational-behavior-data-commands-rebirth-action-2	MUST			
tck-id-operational-behavior-data-commands-rebirth-action-3	MUST			
tck-id-operational-behavior-data-commands-rebirth-datatype	MUST			
tck-id-operational-behavior-data-commands-rebirth-name	MUST			
tck-id-operational-behavior-data-commands-rebirth-value	MUST			
tck-id-operational-behavior-data-publish-dbirth	MUST	MessageOrdering	2026-10-05 17:56:11.865	PASS
tck-id-operational-behavior-data-publish-dbirth-change	SHOULD optional	MessageOrdering	2026-10-05 17:56:11.865	PASS
tck-id-operational-behavior-data-publish-dbirth-order	MUST			
tck-id-operational-behavior-data-publish-dbirth-values	MUST			
tck-id-operational-behavior-data-publish-nbirth	MUST			
tck-id-operational-behavior-data-publish-nbirth-change	SHOULD optional			
tck-id-operational-behavior-data-publish-nbirth-order	MUST			
tck-id-operational-behavior-data-publish-nbirth-values	MUST			
tck-id-operational-behavior-device-ddeath	MUST			
tck-id-operational-behavior-edge-node-birth-sequence-wait	MUST			
tck-id-operational-behavior-edge-node-intentional-disconnect-ndeath	MUST			
tck-id-operational-behavior-edge-node-intentional-disconnect-packet	MAY optional			
tck-id-operational-behavior-edge-node-termination-host-offline	MUST			
tck-id-operational-behavior-edge-node-termination-host-offline-reconnect	MUST			
tck-id-operational-behavior-edge-node-termination-host-offline-timestamp	MUST			
tck-id-operational-behavior-primary-application-state-with-multiple-servers-single-server	MUST			
tck-id-operational-behavior-primary-application-state-with-multiple-servers-state-subs	MUST			
tck-id-operational-behavior-primary-application-state-with-multiple-servers-walk	MUST			
tck-id-payloads-dbirth-order	MUST			
tck-id-payloads-dbirth-qos	MUST			
tck-id-payloads-dbirth-retain	MUST			
tck-id-payloads-dbirth-seq	MUST			
tck-id-payloads-dbirth-seq-inc	MUST			
tck-id-payloads-dbirth-timestamp	MUST			
tck-id-payloads-ddata-order	MUST			
tck-id-payloads-ddata-qos	MUST			
tck-id-payloads-ddata-retain	MUST			
tck-id-payloads-ddata-seq	MUST			
tck-id-payloads-ddata-seq-inc	MUST			
tck-id-payloads-ddata-timestamp	MUST			
tck-id-payloads-ddeath-seq	MUST			
tck-id-payloads-ddeath-seq-inc	MUST			
tck-id-payloads-ddeath-seq-number	MUST			
tck-id-payloads-ddeath-timestamp	MUST			
tck-id-payloads-metric-datatype-not-req	SHOULD optional			
tck-id-payloads-metric-datatype-req	MUST			
tck-id-payloads-metric-datatype-value	MUST			

tck-id-payloads-metric-datatype-value-type	MUST			
tck-id-payloads-metric-timestamp-in-utc	MUST			
tck-id-payloads-name-birth-data-requirement	MUST			
tck-id-payloads-name-requirement	MUST			
tck-id-payloads-nbirth-bdseq	MUST			
tck-id-payloads-nbirth-bdseq-repeat	MUST			
tck-id-payloads-nbirth-edge-node-descriptor	MUST			
tck-id-payloads-nbirth-qos	MUST			
tck-id-payloads-nbirth-rebirth-req	MUST			
tck-id-payloads-nbirth-retain	MUST			
tck-id-payloads-nbirth-seq	MUST	MessageOrdering	2026-10-05 17:56:11.865	PASS
tck-id-payloads-nbirth-timestamp	MUST			
tck-id-payloads-ndata-order	MUST			
tck-id-payloads-ndata-qos	MUST			
tck-id-payloads-ndata-retain	MUST			
tck-id-payloads-ndata-seq	MUST			
tck-id-payloads-ndata-seq-inc	MUST	MessageOrdering	2026-10-05 17:56:11.865	PASS
tck-id-payloads-ndata-timestamp	MUST			
tck-id-payloads-ndeath-bdseq	MUST			
tck-id-payloads-ndeath-seq	MUST			
tck-id-payloads-ndeath-will-message	MUST			
tck-id-payloads-ndeath-will-message-publisher	SHOULD optional			
tck-id-payloads-ndeath-will-message-publisher-disconnect-mqtt311	MUST			
tck-id-payloads-ndeath-will-message-publisher-disconnect-mqtt50	MUST			
tck-id-payloads-ndeath-will-message-qos	MUST			
tck-id-payloads-ndeath-will-message-retain	MUST			
tck-id-payloads-sequence-num-always-included	MUST			
tck-id-payloads-sequence-num-incrementing	MUST			
tck-id-payloads-sequence-num-req-nbirth	MUST			
tck-id-payloads-timestamp-in-utc	MUST			
tck-id-principles-birth-certificates-order	MUST			
tck-id-principles-persistence-clean-session-311	MUST			
tck-id-principles-persistence-clean-session-50	MUST			
tck-id-principles-rbe-recommended	SHOULD optional	MessageOrdering	2026-10-05 17:56:11.865	PASS
tck-id-topics-dbirth-metrics	MUST			
tck-id-topics-dbirth-metric-reqs	MUST	MessageOrdering	2026-10-05 17:56:11.865	PASS
tck-id-topics-dbirth-mqtt	MUST			
tck-id-topics-dbirth-seq	MUST			
tck-id-topics-dbirth-timestamp	MUST			
tck-id-topics-dbirth-topic	MUST			
tck-id-topics-ddata-mqtt	MUST			
tck-id-topics-ddata-payload	MUST			
tck-id-topics-ddata-seq-num	MUST			
tck-id-topics-ddata-timestamp	MUST			
tck-id-topics-ddata-topic	MUST			
tck-id-topics-ddeath-mqtt	MUST			
tck-id-topics-ddeath-seq-num	MUST			
tck-id-topics-ddeath-topic	MUST			
tck-id-topics-nbirth-bdseq-included	MUST			
tck-id-topics-nbirth-bdseq-increment	MUST	MessageOrdering	2026-10-05 17:56:11.865	PASS
tck-id-topics-nbirth-bdseq-matching	MUST			
tck-id-topics-nbirth-metrics	MUST			
tck-id-topics-nbirth-metric-reqs	MUST			
tck-id-topics-nbirth-mqtt	MUST			
tck-id-topics-nbirth-rebirth-metric	MUST			
tck-id-topics-nbirth-seq-num	MUST			
tck-id-topics-nbirth-timestamp	MUST			
tck-id-topics-nbirth-topic	MUST			

tck-id-topics-ndata-mqtt	MUST			
tck-id-topics-ndata-payload	MUST			
tck-id-topics-ndata-seq-num	MUST			
tck-id-topics-ndata-timestamp	MUST			
tck-id-topics-ndata-topic	MUST			
tck-id-topics-ndeath-payload	MUST			
tck-id-topics-ndeath-seq	MUST			
tck-id-topics-ndeath-topic	MUST			
tck-id-topic-structure	MUST			
tck-id-topic-structure-namespace-a	MUST			
tck-id-topic-structure-namespace-device-id-associated-message-types	MUST	MessageOrdering	2026-10-05 17:56:11.865	PASS
tck-id-topic-structure-namespace-device-id-non-associated-message-types	MUST	MessageOrdering	2026-10-05 17:56:11.865	PASS
tck-id-topic-structure-namespace-duplicate-device-id-across-edge-node	MAY optional	MessageOrdering	2026-10-05 17:56:11.865	PASS
tck-id-topic-structure-namespace-unique-device-id	MUST			
tck-id-topic-structure-namespace-unique-edge-node-descriptor	MUST			
tck-id-topic-structure-namespace-valid-device-id	MUST	MessageOrdering	2026-10-05 17:56:11.865	PASS
tck-id-topic-structure-namespace-valid-edge-node-id	MUST	MessageOrdering	2026-10-05 17:56:11.865	PASS
tck-id-topic-structure-namespace-valid-group-id	MUST			