

ComDiagnosis_MQTT



The ComDiagnosis_MQTT class provides the user with an easily implementable Diagnosis interface for the MQTTClient_Interface class.

Relative information is shown on servers and can be refreshed on an event-driven or cyclic basis.

Implementation

To implement the ComDiagnosis_MQTT class, the user must simply place an instance thereof and connect the ComObject client to the ComDiagnosis server on a MQTTClient_Interface instance.

Information is shown on the relative servers and each value is updated upon calling the Read() method of the server.

The user can write to the CmdResetDiags server to reset all Diagnostic information.

Interfaces

Server

RefreshCnt	Server increments with every cycle.		
	Unit	-	Data type
	Value range	-	Write Protected
	Default value	0	Retentive
ConnectCnt	Number of connect attempts.		
	Unit	-	Data type
	Value range	-	Write Protected
	Default value	0	Retentive
ConnectFailCnt	Number of connect failures.		
	Unit	-	Data type
	Value range	-	Write Protected
	Default value	0	Retentive
RetryCnt	Number of connect retries.		
	Unit	-	Data type
	Value range	-	Write Protected
	Default value	0	Retentive
WatchdogCnt	Number of watchdog timeouts.		
	Unit	-	Data type
	Value range	-	Write Protected
	Default value	0	Retentive

ActErrorCode	Not used.		
	Unit	-	Data type UDINT
	Value range	-	Write Protected TRUE
	Default value	0	Retentive TRUE
LastErrorCode	Last non-successful return value from MQTTClient.		
	Unit	-	Data type UDINT
	Value range	-	Write Protected TRUE
	Default value	0	Retentive TRUE
ErrorCnt	Number of non-successful returns from MQTTClient.		
	Unit	-	Data type UDINT
	Value range	-	Write Protected TRUE
	Default value	0	Retentive TRUE
ReadCnt	Number of subscribe requests.		
	Unit	-	Data type UDINT
	Value range	-	Write Protected TRUE
	Default value	0	Retentive TRUE
ReadErrorCnt	Number of subscribe failures.		
	Unit	-	Data type UDINT
	Value range	-	Write Protected TRUE
	Default value	0	Retentive TRUE
WriteCnt	Number of publish requests.		
	Unit	-	Data type UDINT
	Value range	-	Write Protected TRUE
	Default value	0	Retentive TRUE

WriteErrorCnt	Number of publish failures.		
	Unit	-	Data type
	Value range	-	Write Protected
	Default value	0	Retentive
CmdResetDiags	Writing on this server will clear all diagnostic values.		
	Unit	-	Data type
	Value range	-	Write Protected
	Default value	0	Retentive
Unsubscribes	Number of unsubscribe requests sent from the MQTTClientInterface.		
	Unit	-	Data type
	Value range	-	Write Protected
	Default value	0	Retentive
UnsubscribeFails	Number of Unsubscribe Failures.		
	Unit	-	Data type
	Value range	-	Write Protected
	Default value	0	Retentive
PubSubListEntries	Number of entries in the PubSublist of the MQTTClientInterface.		
	Unit	-	Data type
	Value range	-	Write Protected
	Default value	0	Retentive
LogCount	Number of logs created from the MQTTClientInterface, the log counter will increment even if the log is not saved due to the filter setup on the _ComLogging object inside of the MQTTClientInterface class.		
	Unit	-	Data type
	Value range	-	Write Protected
	Default value	0	Retentive

Publish_QOS0	Number of QOS0 publish requests received.		
	Unit	-	Data type UDINT
	Value range	-	Write Protected TRUE
	Default value	0	Retentive TRUE
Publish_QOS1	Number of QOS1 publish requests received.		
	Unit	-	Data type UDINT
	Value range	-	Write Protected TRUE
	Default value	0	Retentive TRUE
Publish_QOS2	Number of QOS2 publish requests received.		
	Unit	-	Data type UDINT
	Value range	-	Write Protected TRUE
	Default value	0	Retentive TRUE
Subscribe_QOS0	Number of QOS0 subscribe requests received.		
	Unit	-	Data type UDINT
	Value range	-	Write Protected TRUE
	Default value	0	Retentive TRUE
Subscribe_QOS1	Number of QOS1 subscribe requests received.		
	Unit	-	Data type UDINT
	Value range	-	Write Protected TRUE
	Default value	0	Retentive TRUE
Subscribe_QOS2	Number of QOS2 subscribe requests received.		
	Unit	-	Data type UDINT
	Value range	-	Write Protected TRUE
	Default value	0	Retentive TRUE

DataMapElements	Number of registered DataMap elements.			
	Unit	-	Data type	UDINT
	Value range	-	Write Protected	TRUE
	Default value	0	Retentive	TRUE
TXRate	Mbps transfer rate of transmitted messages, only the payload size over time is considered, therefor the true transfer rate will be higher to compensate for: 1. Headers of messages. 2. Confirmations of messages (PUBACK, PUBREC, etc.). 3. Retransfer of failed / timed out messages.			
	Unit	-	Data type	UDINT
	Value range	-	Write Protected	TRUE
	Default value	0	Retentive	TRUE
RXRate	Mbps transfer rate of received messages, only the payload size over time is considered, therefor the true transfer rate will be higher to compensate for: 1. Headers of messages 2. Confirmations of messages (PUBACK, PUBREC, etc.) 3. Retransfer of failed / timed out messages.			
	Unit	-	Data type	UDINT
	Value range	-	Write Protected	TRUE
	Default value	0	Retentive	TRUE
TotalRXBytes	Total number of bytes received, only the summed payload size of received messages over time is considered, therefor the actual transfer rate will be higher to compensate for: 1. Headers of messages 2. Confirmations of messages (PUBACK, PUBREC, etc.) 3. Retransfer of failed / timed out messages. 4. Ping requests & responses, etc.			
	Unit	-	Data type	UDINT
	Value range	-	Write Protected	TRUE
	Default value	0	Retentive	TRUE

TotalTXBytes	<p>Total number of bytes transmitted, only the summed payload size of publish messages over time is considered, therefor the actual transfer rate will be higher to compensate for:</p> <ol style="list-style-type: none"> 1. Headers of messages 2. Confirmations of messages (PUBACK, PUBREC, etc.) 3. Retransfer of failed / timed out messages. 4. Ping requests & responses, etc. 		
	Unit	-	Data type UDINT
	Value range	-	Write Protected TRUE
	Default value	0	Retentive TRUE

