

MMS Probe 1.3

Parameters & Metrics

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1 Introduction

This document describes the parameters and metrics of MMS Probe in brief. For a more detailed description please refer to the MMS Probe Administration and Reference guide.

2 Parameters

The following set of parameters is used to configure MMS Probe per measurement. Additional parameters can be defined in configuration files and/or the web server configuration.

Target Host	Defines the IP address or hostname of the MMS Probe server used for sending MMS.
Port	Defines the IP port the MMS Probe server used for sending MMS is listening to. The standard port is 6744.
recv_host	Defines the IP address or hostname of the MMS Probe server used for receiving MMS messages. If the same MMS Probe server is used for sending and receiving, enter the same value as for Target Host.
recv_port	Defines the IP port the MMS Probe server used for receiving MMS is listening to. The standard port is 6744. If the same MMS Probe server is used for sending and receiving, enter the same value as for Target Host.
from	Specifies the MSISDN used to send MMS messages from. This is the MSISDN of the SIM card used in the sending MMS Probe server. The format must be exactly the same as used in the configuration of the MMS Probe server.
to	Specifies the MSISDN used to receive MMS messages. This is the MSISDN of the SIM card used in the receiving MMS Probe server. It can also be an Email address, when the receiving MMS Probe server is configured to receive Email via POP3. The format must be exactly the same as used in the configuration of the MMS Probe server.
probe_timeout	This parameter defines the timeout in seconds after which an MMS that has been sent but not received is regarded as lost. The MMS will be marked as lost and all relevant meta data will be removed from the system. You should set this value at least to twice the average RTT of MMS in the system.
store_timeout	This parameter defines the expiration timeout for samples in seconds. After this time, the sample is deleted from the store file. This is a cleanup function that prevents the store file from keeping old and invalid data forever. Data may remain in the store and become invalid in cases of system failures or changes in the configuration. Keep the value high enough to be sure the function does not affect the measurement. The value should be a multiple of the 'probe_timeout' parameter.

3 Metrics

The following metrics are determined by the probe:

Value Name	OVIS Metric Name	Type	Unit	Description
Sample timestamp	OVIS_METRIC_TIME	Long	Sec.	Start of sending timestamp in seconds since seconds since 1.1.1970 00:00 a.m. This parameter is used by OVIS internally
Time zone	OVIS_METRIC_TIMEZONE	Long	time zone	Local time zone. This parameter is used by OVIS internally
Availability	OVIS_METRIC_AVAILABILITY	Long	-	Availability of the service, can be 0 or 1
Setup time	OVIS_METRIC_SETUPTIME	Double	Sec.	Time necessary to setup probe. This is the average of the times required to setup the GPRS/UMTS context for sending and receiving the MMS.
RTT	OVIS_METRIC_RESPONSETIME	Double	Sec.	Round trip time of the MMS test message (time elapsed between message delivery started and message retrieval ended)
Transfer rate	OVIS_METRIC_TRANSFERTPUT	Double	Bytes/Sec.	Average data transfer rate of sending and receiving process of the MMS message
Send status	OVIS_METRIC_1	Double	-	Status code of the sending process. Status values are: 0: status undefined 1: OK 2: Failed
Sending time	OVIS_METRIC_2	Double	Sec.	Time elapsed between message sending started and message sending was finalized in seconds
Notification status	OVIS_METRIC_3	Double	-	Status code of notification. Status values are: 0: status undefined 1: OK 2: Failed
Notification time	OVIS_METRIC_4	Double	Sec.	Time elapsed between message sending finished and notification arrived in seconds
Recv status	OVIS_METRIC_5	Double	-	Status code of the receiving process. Status values are: 0: status undefined 1: OK 2: Failed
Recv time	OVIS_METRIC_6	double	Sec.	Time elapsed between message receiving started and message receiving

				finished in seconds
Signal Strength	OVIS_METRIC_7	double	Count	Signal strength value (0-31, 99) 0: -113 dBm or less 1: -111 dBm 2...30: -109... -53 dBm 31: -51 dBm or greater 99: not known or not detectable

The following diagram (Figure 1) shows the metrics in the context of requests and responses between the MMS Probe server and the MMS service:

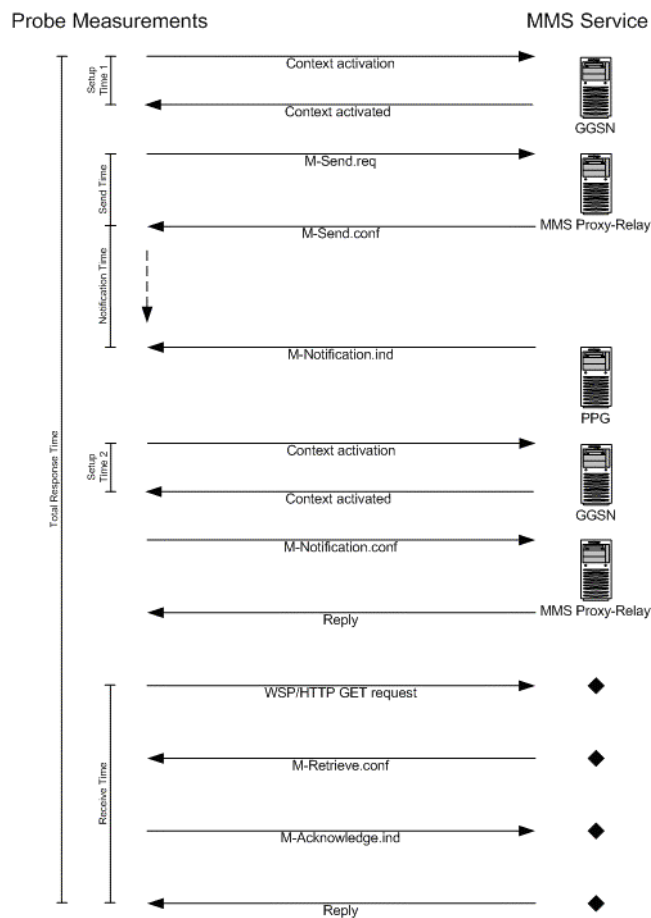


Figure 1: MMS Probe Metrics