

ДЕКЛАРАЦИЯ О СОВМЕСТИМОСТИ

Технотон и Teltonika подтверждают:

датчик уровня топлива
DUT-E S7

и

GPRS/GNSS трекер с Bluetooth
FMB120



совместимы по стандарту беспроводной передачи данных

СП «Технотон» - ЗАО



UAB TELTONIKA



Основание: протоколы испытаний от 30.08.2019
Рекомендации по подключению и настройке: см. приложение



Рекомендации по подключению и настройке терминала Teltonika FMB 120 и датчика уровня топлива DUT-E S7

1. Подключение DUT-E S7.

Датчик уровня топлива DUT-E S7 перевести в рабочий режим согласно инструкции по эксплуатации.

Для получения MAC адреса DUT-E S7, нужно номер датчика перевести из десятичного в шестнадцатеричный код.



2. Подключение Teltonika FMB 120 (прошивка 03.25.10 Rev:52).

Установить сим карту и подать напряжение питания на терминал.

3. Настройка оборудования и калибровка датчика уровня топлива.

3.1. Настройки Терминала в сервисной программе Configurator v1.3.19.17487

Настроить данные GPRS оператора сим карты и адрес телематического сервера (Рис.1):

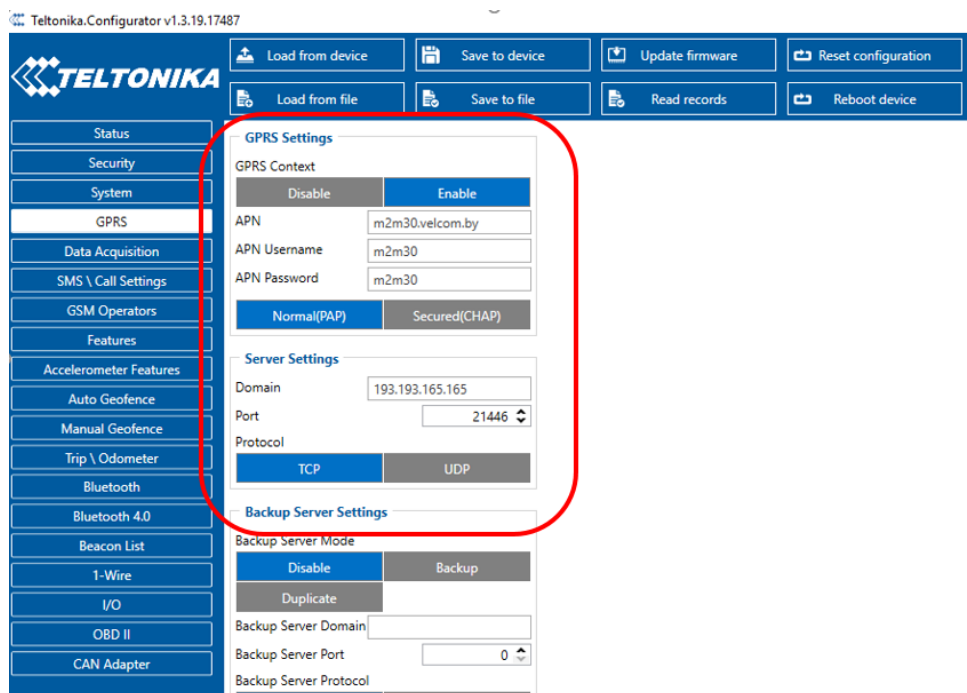


Рисунок 1

Включить протокол данных (Рис.2):

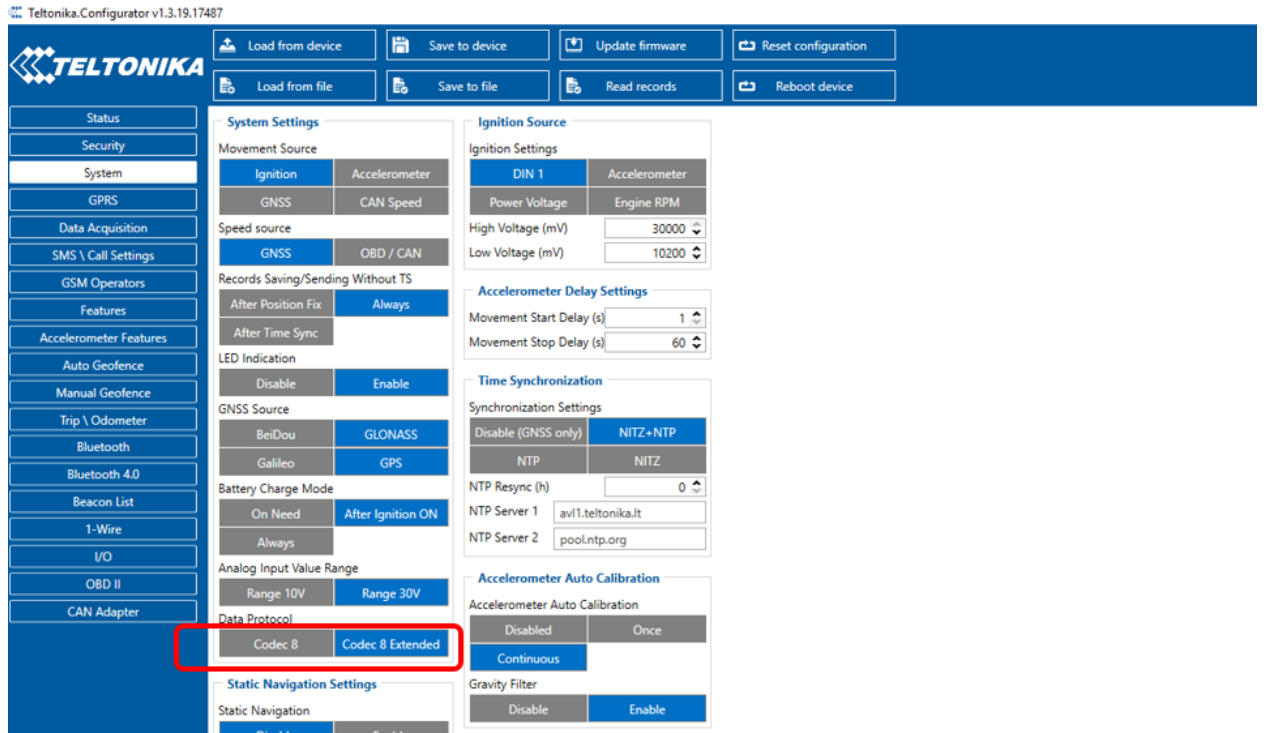


Рисунок 2

3.2. Подключение датчика уровня топлива к терминалу.

Расположить датчики вблизи терминала.

Произвести поиск датчиков уровня топлива (Рис.3-4):

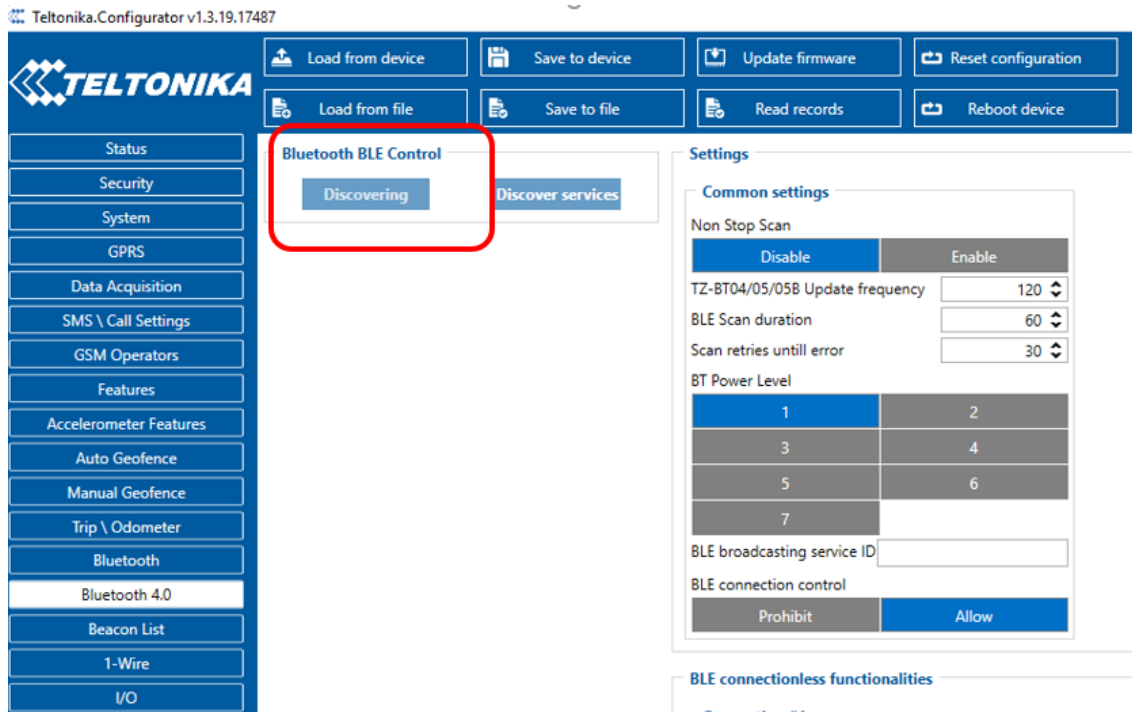


Рисунок 3

Bluetooth BLE Control

Discover BLE Discover services

Discovered BLE Devices

Address	Signal Strength	Name
7D4A5DD8196E	-78	N/A
7BE380E59148	-80	N/A
4E8612D0A63D	-52	N/A
7C3DC75F74E1	-98	N/A
003F18EFAC2B	-95	N/A
01014735C022	-86	N/A
010182D08A24	-71	N/A
003F18EFAC2A	-92	N/A
01014735C035	-71	N/A
0018E9D58661	-90	N/A
0018E9C64447	-71	N/A
0018E9C64437	-56	N/A
0018E9C64466	-71	N/A

Settings

Common settings

Non Stop Scan: Disable Enable

TZ-BT04/05/05B Update frequency: 120

BLE Scan duration: 60

Scan retries until error: 30

BT Power Level

1	2
3	4
5	6
7	

BLE broadcasting service ID:

BLE connection control: Prohibit Allow

BLE connectionless functionalities

Connection #1

Mode

Working mode: Disabled TZ-BT04/05/05B sensor Advanced

Settings

MAC:

1st Sensor

Type	Data Offset	Data Size	Action
FF	4	2	Match
FF	5	4	Save

Рисунок 4

Записываем MAC адрес датчика в поле настроек (Рис.5):

Bluetooth BLE Control

Discover BLE Discover services

Discovered BLE Devices

Address	Signal Strength	Name
7D4A5DD8196E	-78	N/A
7BE380E59148	-80	N/A
4E8612D0A63D	-52	N/A
7C3DC75F74E1	-98	N/A
003F18EFAC2B	-95	N/A
01014735C022	-86	N/A
010182D08A24	-71	N/A
003F18EFAC2A	-92	N/A
01014735C035	-71	N/A
0018E9D58661	-90	N/A
0018E9C64447	-71	N/A
0018E9C64437	-56	N/A

Settings

Common settings

Non Stop Scan: Disable Enable

TZ-BT04/05/05B Update frequency: 120

BLE Scan duration: 60

Scan retries until error: 30

BT Power Level

1	2
3	4
5	6
7	

BLE broadcasting service ID:

BLE connection control: Prohibit Allow

BLE connectionless functionalities

Connection #1

Mode

Working mode: Disabled TZ-BT04/05/05B sensor Advanced

Settings

MAC:

1st Sensor

Type	Data Offset	Data Size	Action
FF	4	2	Match
FF	5	4	Save

Рисунок 5

Производим настройку терминала для передачи данных от датчика уровня топлива (Рис.6):

BLE connectionless functionalities

Connection #1

Mode

Working mode

Settings

MAC 0018E9C64447

Advanced

1st Sensor

Type	Data Offset	Data Size	Action	IO	Match	Endianess	Multiplier	Offset
FF	4	2	Match	None	2DF7	Little Endian	1	0
FF	5	4	Save	Fuel Frequency		Big Endian	1	0
FF	9	1	Save	Temperature		Little Endian	1	-50
	0	0	Match	None		Little Endian	1	0
	0	0	Match	None		Little Endian	1	0
	0	0	Match	None		Little Endian	1	0
	0	0	Match	None		Little Endian	1	0
	0	0	Match	None		Little Endian	1	0
	0	0	Match	None		Little Endian	1	0

Рисунок 6

Данные температуры и частоты отображаются в конфигураторе. Нажать кнопку Low для выбора отсылки параметра на сервер (Рис.7):

TELTONIKA

Load from device Save to device Update firmware Reset configuration

Load from file Save to file Read records Reboot device

Status Security System GPRS Data Acquisition SMS \ Call Settings GSM Operators Features Accelerometer Features Auto Geofence Manual Geofence Trip \ Odometer Bluetooth Bluetooth 4.0 Beacon List 1-Wire I/O

Input Name	Current Value	Units	Priority	Low Level	High Level	Event Only	Operand
Eco Score	0		None Low High Panic	0	0	Crash Yes No	Monitoring
User ID	0x0000000000000000		None Low High Panic	0	0	Crash Yes No	Monitoring
BLE Temperature #1	25	°C	None Low High Panic	0	0	Crash Yes No	Monitoring
BLE Temperature #2	25	°C	None Low High Panic	0	0	Crash Yes No	Monitoring
BLE Temperature #3	0	°C	None Low High Panic	0	0	Crash Yes No	Monitoring
BLE Temperature #4	0	°C	None Low High Panic	0	0	Crash Yes No	Monitoring
BLE Battery #1	0	%	None Low High Panic	0	0	Crash Yes No	Monitoring
BLE Battery #2	0	%	None Low High Panic	0	0	Crash Yes No	Monitoring
BLE Battery #3	0	%	None Low High Panic	0	0	Crash Yes No	Monitoring
BLE Battery #4	0	%	None Low High Panic	0	0	Crash Yes No	Monitoring
BLE Humidity #1	0	%RH	None Low High Panic	0	0	Crash Yes No	Monitoring
BLE Humidity #2	0	%RH	None Low High Panic	0	0	Crash Yes No	Monitoring
BLE Humidity #3	0	%RH	None Low High Panic	0	0	Crash Yes No	Monitoring
BLE Humidity #4	0	%RH	None Low High Panic	0	0	Crash Yes No	Monitoring
BLE Custom 1			None Low High Panic	0	0	Crash Yes No	Monitoring
BLE Custom 2	0000		None Low High Panic	0	0	Crash Yes No	Monitoring
BLE Custom 3			None Low High Panic	0	0	Crash Yes No	Monitoring
BLE Custom 4			None Low High Panic	0	0	Crash Yes No	Monitoring
BLE Fuel Level #1	0	kvants	None Low High Panic	0	0	Crash Yes No	Monitoring
BLE Fuel Level #2	0	kvants	None Low High Panic	0	0	Crash Yes No	Monitoring
BLE Fuel Level #3	0	kvants	None Low High Panic	0	0	Crash Yes No	Monitoring
BLE Fuel Level #4	0	kvants	None Low High Panic	0	0	Crash Yes No	Monitoring
BLE Luminosity #1	0	lx	None Low High Panic	0	0	Crash Yes No	Monitoring
BLE Luminosity #2	0	lx	None Low High Panic	0	0	Crash Yes No	Monitoring
BLE Luminosity #3	0	lx	None Low High Panic	0	0	Crash Yes No	Monitoring
BLE Luminosity #4	0	lx	None Low High Panic	0	0	Crash Yes No	Monitoring
BLE Fuel Frequency #1	3153646		None Low High Panic	0	0	Crash Yes No	Monitoring

Рисунок 7

4. Отображение данных на телематическом сервере.

Зарегистрировать терминал на телематическом сервере.
Настроить датчики температуры и уровня топлива.

4.1 Настройка датчика температуры (Рис.8-9):

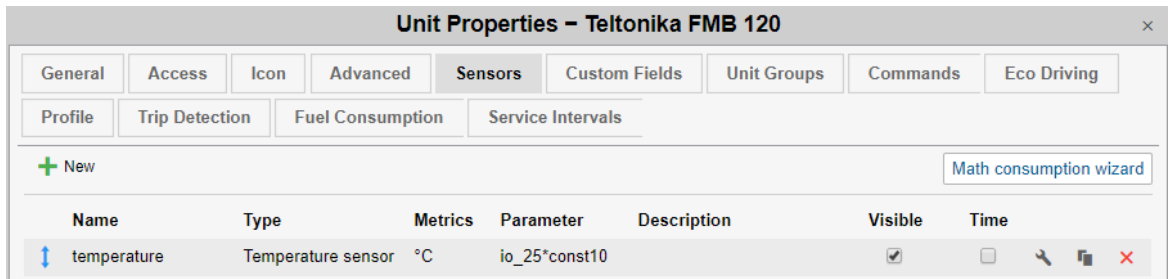


Рисунок 8

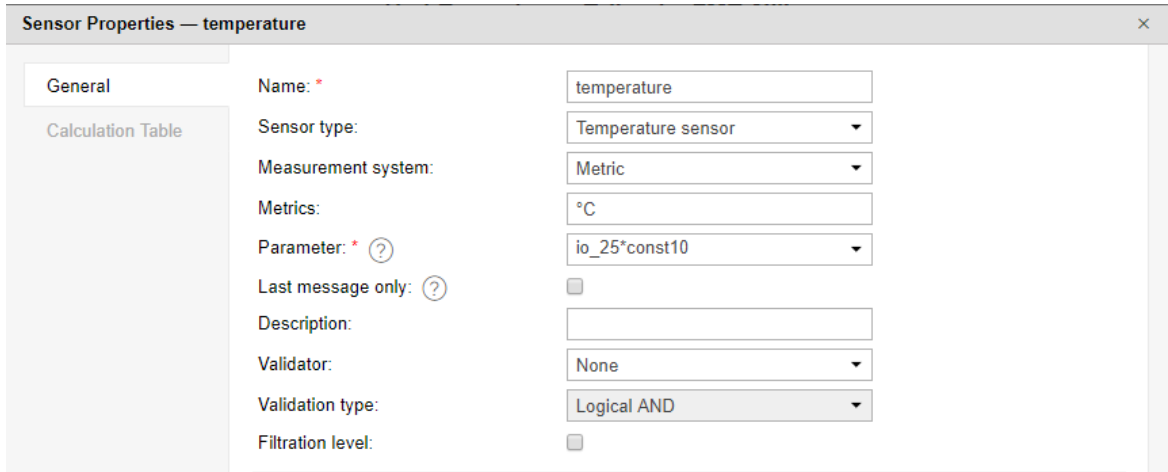


Рисунок 9

4.2 Настройка датчика уровня топлива (Рис.10-12):

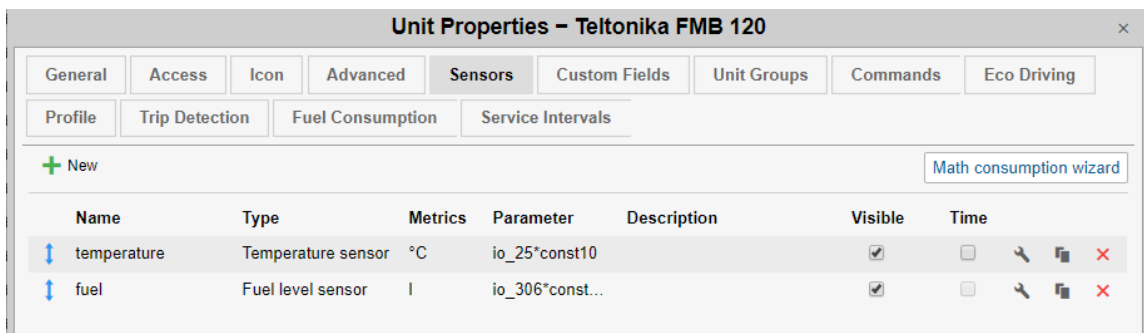


Рисунок 10

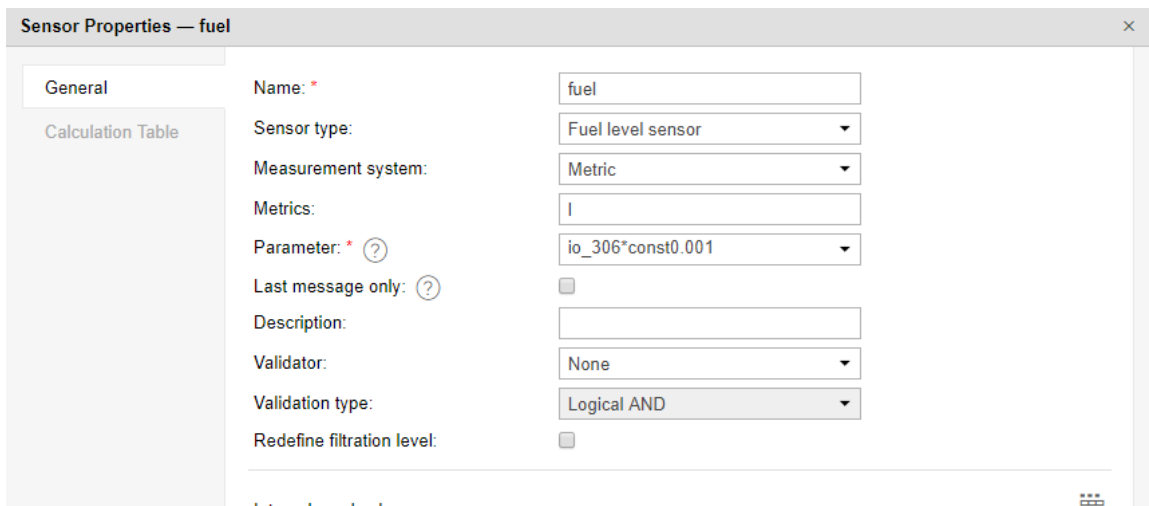


Рисунок 11

Производим тарировку датчика уровня топлива, соотношение выходной частоты с объемом топлива в баке.

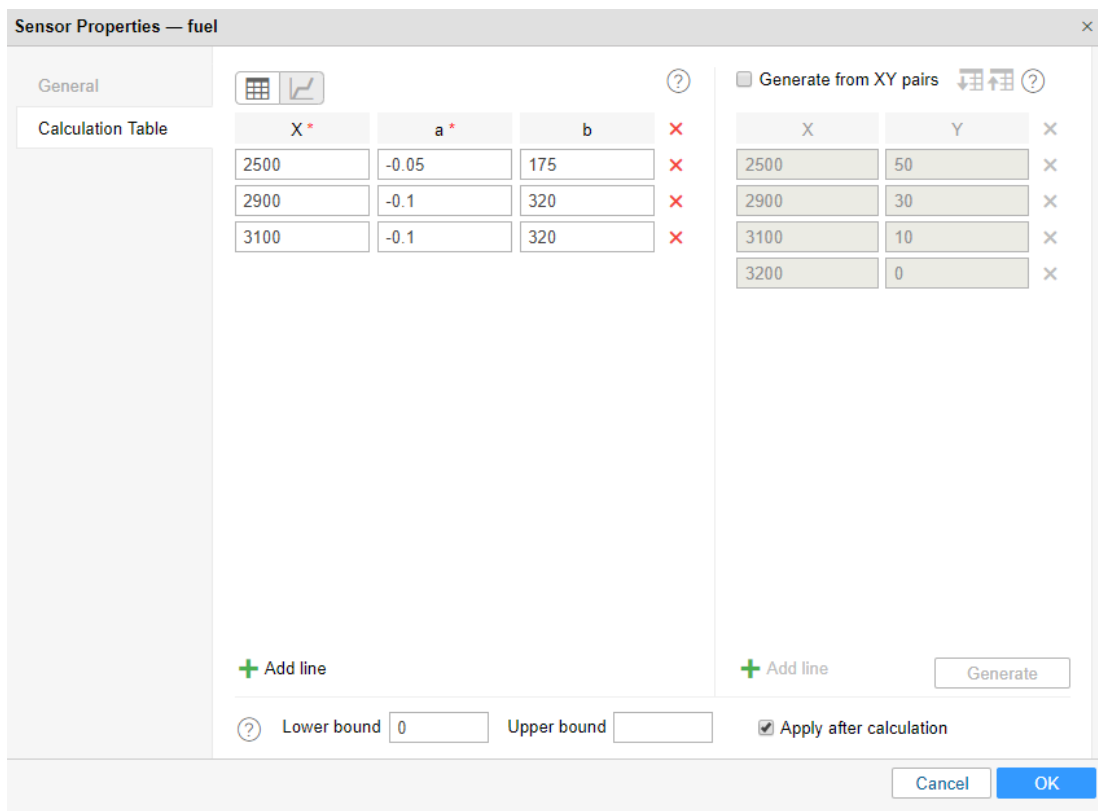


Рисунок 12

Работа по настройке завершена.

Начальник технического отдела

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