



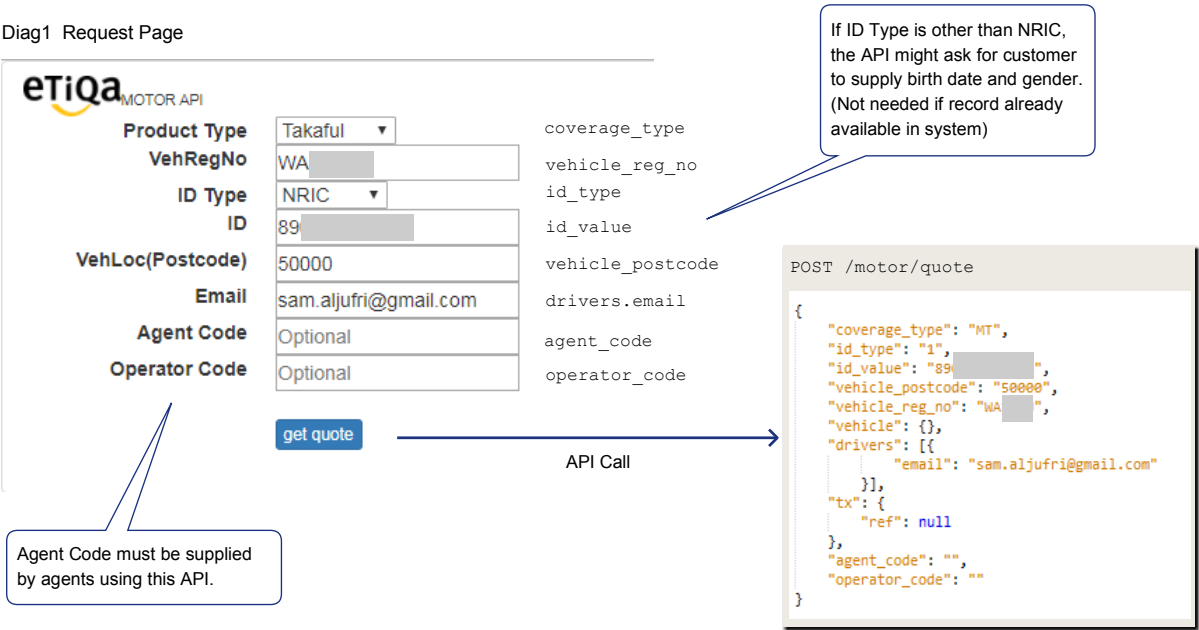
Motor API Reference Implementation for UI
Technical Specification Document (TSD)

v 0.4

Last modified: Mar 3rd 2018
prepared by Syed Abd Mutalib

Motor API UI Reference Implementation

Diag1 Request Page



Diag2 Response for /quote request

```
{
  "code": null,
  "message": null,
  "status": "OK",
  "data": {
    "tx": {
      "ref": "QQTAyHOvPRmSDVb3C6e-Sw"
    },
    "drivers": [{
      "name": "Nur [REDACTED]",
      "marital": "Single",
      "gender": "Female",
      "email": "sam.aljufri@gmail.com",
      "birth_date": "[REDACTED]",
      "id_value": "89[REDACTED]",
      "driver_no": "0",
      "residential_address1": "[REDACTED]",
      "residential_address2": "[REDACTED]",
      "residential_address3": "54200 Kuala Lumpur Wp",
      "mobile_no": "",
      "residential_state": "",
      "residential_postcode": "54200",
      "age": 28
    }],
    "vehicle": {
      "make": "PERODUA",
      "variant": "SE ZHS-4 SP AUTOMATIC-1298",
      "model": "MYVI",
      "reg_no": "[REDACTED]",
      "chassis_no": "PM2M602S002206287",
      "make_code": "33",
      "make_year": "2014",
      "variant_code": "INM14A",
      "model_code": "06"
    },
    "quotation": {
      "pa": null,
      "basic_contribution": "1097.80",
      "ncd_pct": "25.00",
      "ncd_amt": "274.45",
      "proposed_sum_covered": "29000.00",
      "sum_covered_min": "27000.00",
      "sum_covered_max": "34000.00",
      "gross_contribution": "823.35",
      "rebate_pct": "10.00",
      "contribution_after_rebate_amt": "741.01",
      "gst_pct": "6.00",
      "gst_amt": "44.46",
      "stamp_duty": "10.00",
      "total_contribution": "795.47",
      "insured_period": "20171119-20181118",
      "coverage_type": "MT",
      "addons": [],
      "total_payable": "795.47"
    },
    "addons_list": [
      {
        "code": "C57A",
        "name": "Basic Flood Cover",
        "display_order": "1"
      },
      {
        "code": "B057",
        "name": "Extended Flood Cover",
        "display_order": "2"
      },
      {
        "code": "P14B",
        "name": "Compensation for Assessed Repair Time (14 Daysx100)",
        "display_order": "3"
      },
      {
        "code": "P10B",
        "name": "Loss of Use (LOU)",
        "display_order": "4"
      },
      {
        "code": "PA",
        "name": "Personal Accident",
        "display_order": "5"
      },
      {
        "code": "B072",
        "name": "Legal Liability of Passenger for Acts of Negligence Coverage",
        "display_order": "6"
      },
      {
        "code": "B089",
        "name": "Windscreen Coverage",
        "display_order": "7"
      }
    ],
    "quotation_no": "DS22018M-00015429-001",
    "agent_code": "V0003926",
    "operator_code": ""
  }
}
```

tx.ref will be used in all subsequent requests to /quote and /policy API

Refer to Diag4 for display

Refer to Diag3 for display

Refer to Diag5

Shows list of available Addons for this customer. Certain types of users might not have one or more addons offered. In such case, the GUI shall not show them.

Diag3 Quotation Fragment

Quotation			modify or add addons
DS22018M-00015426-001			quotation_no
agent_code	Agent: V0003926 Operator:	operator_code	
Coverage Period: 20171119-20181118			quotation.insured_period
Basic Contribution			quotation.basic_contribution
quotation.ncd_pct	(-) NCD 25.00%	(RM 274.45)	quotation.ncd_amt
Sum Covered			quotation.proposed_sum_covered
Gross Contribution			quotation.gross_contribution
quotation.rebate_pct	Contribution After Rebate (10.00 %)	RM 741.01	quotation.contribution_after_rebate_amt
quotation.gst_pct	GST (6.00%)	RM 44.46	quotation.gst_amt
quotation.stamp_duty	Stamp Duty (RM10.00)	RM 10.00	quotation.stamp_duty
Total Contribution			quotation.total_contribution
total payable			quotation.total_payable
RM 795.47			

Diag4 Details Fragment

Driver		
Name	NU [REDACTED]	drivers[0].name
ID	89 [REDACTED]	drivers[0].id_value
BirthDate	Su [REDACTED]	drivers[0].birth_date
Marital	Single	drivers[0].marital
Gender	Female	drivers[0].gender
Residential Addr 1	No 9 [REDACTED]	drivers[0].residential_address1
Residential Addr 2	Tama [REDACTED]	drivers[0].residential_address2
Residential Addr 3	54200 Kuala Lumpur Wp	drivers[0].residential_address3
Residential Postcode	54200	drivers[0].residential_postcode
State		drivers[0].residential_state

Car Details		
vehicle make	PERODUA	vehicle.make
registration no	WA [REDACTED]	vehicle.reg_no
vehicle model	MYVI	vehicle.model
make year	2014	vehicle.make_year
variant	SE ZHS-4 SP AUTOMATIC-1298	vehicle.variant
chassis no	PM2M6028002206287	vehicle.chassis_no

Diag5 Modify Addons

Proposed Sum Insured

proposed RM 29000

Use slider to select sum insured value
Min: RM27000.00, Max: RM34000.00

`quotation.proposed_sum_covered`

`quotation.sum_covered_min`
`quotation.sum_covered_max`

Additional Coverage

Flood Coverage

Select only one or neither.

☒ Basic Flood Cover `{code:"C57A",value:true}`

☐ Extended Flood Cover `{code:"B057",value:false}`

Select only one or neither.

☒ Compensation when your car under repair (14 Days/RM100/day) `{code:"P14B",value:true}`

☐ Loss of Use (LOU) (10 Days X RM100) `{code:"P10B",value:false}`

☒ DPPA (MT), CAPS (MI) `{code:"PA",value:true}`

☒ Legal Liability of Passenger for Acts of Negligence Coverage `{code:"B072",value:true}`

Windscreen Coverage RM 200 `{code:"B089",value:"200"}`
(Minimum sum covered is RM200) - leave empty otherwise

Accepted values in slider will be multiple of 1000 between Min and Max values. Default value for slider will be *proposed_sum_covered*.

The GUI shall validate only one or neither of the following group selection is selected.

Update

POST /motor/quote

API call to /motor/quote with updated parameters

Diag5 Modify Details

Driver

Name	Nur
ID	89
Email	sam.aljufri@gmail.com
Mobile No	
Birth Date	
Marital	Single
Gender	
Residential Addr 1	
Residential Addr 2	
Residential Addr 3	54200 Kuala Lumpur Wp
Residential Postcode	54200
State	

Car Details

vehicle make	PERODUA
registration no	WA
vehicle model	MYVI
make year	2014
variant	SE ZHS-4 SP AUTOMATIC-1298
chassis no	PM2M602S002206287

In case customer details are not available at server's record (*Server will throw an error indicating this*), the customer can fill them up here.

From Diag2, use values in vehicle.make_code/vehicle.model_code/vehicle.make_year to get list of variants.

Customers have the opportunity to modify variant values in case previous record is incorrect.

e.g. POST /motor/vehicles/33/06/2014

Update

API call to /motor/quote with updated parameters

POST /motor/quote

Diag7 Modify Addons Request

POST /motor/quote

```
{
  "coverage_type": "MT",
  "id_type": "1",
  "id_value": "1",
  "vehicle_postcode": "50000",
  "vehicle_reg_no": "K",
  "proposed_sum_covered": 29000,
  "vehicle": {
    "make": "PERODUA",
    "variant": "SE ZHS-4 SP AUTOMATIC-1298",
    "model": "MYVI",
    "reg_no": "1",
    "chassis_no": "PM2M602S002206287",
    "make_code": "33",
    "make_year": "2014",
    "variant_code": "INM14A",
    "model_code": "06"
  },
  "drivers": [{
    "name": "1",
    "marital": "Single",
    "gender": "Female",
    "email": "sam.aljufri@gmail.com",
    "birth_date": "1",
    "id_value": "8",
    "driver_no": "0",
    "residential_address1": "No 1",
    "residential_address2": "Taman",
    "residential_address3": "54200 Kuala Lumpur Wp",
    "mobile_no": "",
    "residential_state": "",
    "residential_postcode": "54200",
    "age": 28
  }],
  "tx": {
    "ref": "QQTAyH0vPRmSDVb3C6e-Sw"
  },
  "addons": [{
    "code": "PA",
    "value": true
  }, {
    "code": "B089",
    "value": "200"
  }, {
    "code": "C57A",
    "value": true
  }, {
    "code": "P14B",
    "value": true
  }, {
    "code": "P10B",
    "value": false
  }, {
    "code": "B072",
    "value": true
  }, {
    "code": "B057",
    "value": false
  }
]
```

Addons as selected by customers. Values are either true or false except for B089 where it takes positive integer (as string) of min amount 200; or empty string if addon not selected

<div> <div>Quotation</div> <div> <div>DS22018M-00015426-001</div> <div>Agent: V0003926 Operator:</div> <div>Coverage Period: 20171119-20181118</div> </div> </div>	
Basic Contribution	RM 1097.80
(-) NCD 25.00%	(RM 274.45)
Additional Coverage	
Windscreen Coverage	RM 30.00
Basic Flood Cover	RM 72.50
Legal Liability of Passenger for Acts of Negligence Coverage	RM 7.50
Compensation for Assessed Repair Time (14 Daysx100)	RM 140.00
Sum Covered	RM 29000
Gross Contribution	RM 1073.35
Contribution After Rebate (10.00 %)	RM 966.01
GST (6.00%)	RM 57.96
Stamp Duty (RM10.00)	RM 10.00
Total Contribution	RM 1033.97
Driver & Passengers PA (CAPS/DPPA)	
Gross Contribution	RM 61.00
Contribution After Rebate (10.00 %)	RM 54.90
Fee	RM 4.00
(+) GST (6.00%)	RM 62.43
Stamp Duty (RM10.00)	RM 10
CAPS/DPPA Nett	RM 72.43
<div>total payable</div> <div>RM 1106.40</div>	

```

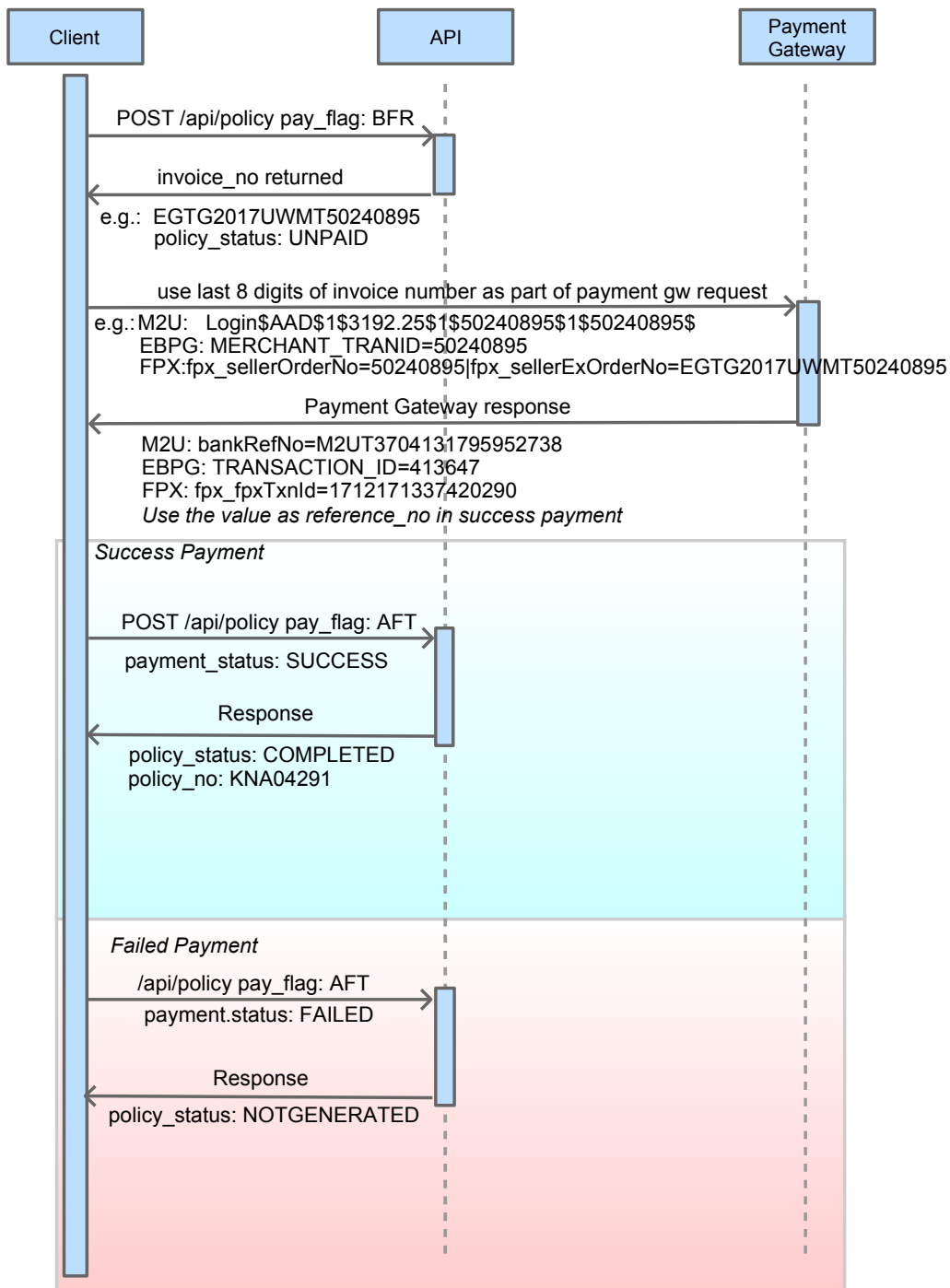
{
  "code": null,
  "message": null,
  "status": "OK",
  "data": {
    "tx": {
      "ref": "rA2lwHCI8600Xc73aIkjdg"
    },
    "drivers": [{
      "name": "Nur",
      "marital": " ",
      "gender": "F",
      "email": "sa",
      "birth_date": " ",
      "id_value": " ",
      "driver_no": " ",
      "residential": " ",
      "residential": " ",
      "residential": " ",
      "mobile_no": " ",
      "residential": " ",
      "residential": " ",
      "age": 28
    }],
    "vehicle": {
      "make": "PERODUA",
      "variant": "SE ZHS-4 SP AUTOMATIC-1298",
      "model": "MYVI",
      "reg_no": " ",
      "chassis_no": "PM2M602S002206287",
      "make_code": "33",
      "make_year": "2014",
      "variant_code": "INM14A",
      "model_code": "06"
    },
    "quotation": {
      "pa": {
        "pa_gross": "61.00",
        "pa_after_rebate": "54.90",
        "pa_fee": "4.00",
        "pa_after_gst": "62.43",
        "pa_net_premium": "72.43",
        "pa_rebate_pct": "10.00"
      },
      "basic_contribution": "1097.80",
      "ncd_pct": "25.00",
      "ncd_amt": "274.45",
      "proposed_sum_covered": "29000.00",
      "sum_covered_min": "27000.00",
      "sum_covered_max": "34000.00",
      "gross_contribution": "1073.35",
      "rebate_pct": "10.00",
      "contribution_after_rebate_amt": "966.01",
      "gst_pct": "6.00",
      "gst_amt": "57.96",
      "stamp_duty": "10.00",
      "total_contribution": "1033.97",
      "insured_period": "20171119-20181118",
      "coverage_type": "HT",
      "addons": [{
        "code": "B089",
        "name": "Windscreen Coverage",
        "amount": "30.00"
      }, {
        "code": "C57A",
        "name": "Basic Flood Cover",
        "amount": "72.50"
      }, {
        "code": "B072",
        "name": "Legal Liability of Passenger for Acts of Negligence Coverage",
        "amount": "7.50"
      }, {
        "code": "P14B",
        "name": "Compensation for Assessed Repair Time (14 Daysx100)",
        "amount": "140.00"
      }
    ],
      "total_payable": "1106.40"
    },
    "addons_list": [{
      "code": "C57A",
      "name": "Basic Flood Cover",
      "display_order": "1"
    }, {
      "code": "B057",
      "name": "Extended Flood Cover",
      "display_order": "2"
    }, {
      "code": "P14B",
      "name": "Compensation for Assessed Repair Time (14 Daysx100)",
      "display_order": "3"
    }, {
      "code": "P10B",
      "name": "Loss of Use (LOU)",
      "display_order": "4"
    }, {
      "code": "PA",
      "name": "Personal Accident",
      "display_order": "5"
    }, {
      "code": "B072",
      "name": "Legal Liability of Passenger for Acts of Negligence Coverage",
      "display_order": "6"
    }, {
      "code": "B089",
      "name": "Windscreen Coverage",
      "display_order": "7"
    }
  ],
  "quotation_no": "DS22018M-00015433-001",
  "agent_code": "V0003926",
  "operator_code": ""
}

```

Diag9 Payment (Before Paying to Payment Gateway)



Diag10 Integrating with Payment Gateway



Diag11 PostPayment Notification

Case 1: Payment Gateway Success

POST /motor/policy

```
{
  "declaration": {
    "pds": true,
    "ind": true,
    "pdpa": true,
    "lapse": false
  },
  "pay_flag": "AFT",
  "payment": {
    "method": "M2U",
    "status": "SUCCESS",
    "timestamp": "2018-01-23T03:46:38.646Z",
    "reference_no": "M2UT3704131795952737",
    "amount": "795.47",
    "currency": "MYR",
    "extra": ""
  },
  "tx": {
    "ref": "QQTAyHOVPRmSDVb3C6e-Sw"
  }
}
```

Supported methods: M2U, FPX and EBPB

Use Datetime Format:
ISO 8601

Refer to Diag10 for correct
reference_no using values
given by payment gateway.

Use Currency Format:
ISO 4217

Success Response

```
{
  "code": null,
  "message": null,
  "status": "OK",
  "data": {
    "tx": {
      "ref": "QQTAyHOVPRmSDVb3C6e-Sw"
    },
    "policy_no": "KNA04342",
    "pa_policy_no": "0",
    "policy_status": "COMPLETED",
    "invoice_no": "EGTG2018UWMT50241973"
  }
}
```

tx.ref will be invalidated after
policy_status is **COMPLETED**.

Policy number will be created
and displayed to customer.
ePolicy will be automatically
sent to customer's email.

Case 2: Payment Gateway Failed

POST /motor/policy

```
{
  "declaration": {
    "pds": true,
    "ind": true,
    "pdpa": true,
    "lapse": false
  },
  "pay_flag": "AFT",
  "payment": {
    "method": "M2U",
    "status": "FAILED",
    "timestamp": "2018-01-23T04:10:43.862Z",
    "reference_no": null,
    "amount": "795.47",
    "currency": "MYR",
    "extra": ""
  },
  "tx": {
    "ref": "3mmb8pJ9eeX99aQbZl0qtQ"
  }
}
```

Response:

```
{
  "code": null,
  "message": null,
  "status": "OK",
  "data": {
    "tx": {
      "ref": "3mmb8pJ9eeX99aQbZl0qtQ"
    },
    "policy_no": null,
    "pa_policy_no": null,
    "policy_status": "NOTGENERATED",
    "invoice_no": "EGTG2018UWMT50241998"
  }
}
```