

Give me an update of the latest new features in PTV Developer RouteOptimization Optiflow 1.61.

Ment

Bernd Welter (29/04/2026 10:29:07)

Give me an update of the latest new features in PTV Developer RouteOptimization Optiflow 1.61. Mention all new - endpoints - input parameters / properties - output properties

Create a diagram of the new elements.

Create a sample request that demonstrates all new elements.

PTV Mira (29/04/2026 10:30:14)

No results for version "1.61" specifically. Let me check what versions are available and look for the latest changes. The version is "1.61.0". Let me fetch those changes. Now I have the full picture. The new feature in version 1.61.0 adds two new properties to `BatteryStateOfCharge` : `minimumAfterCharging` and `minimumAtEnd` . Let me also check if there's any output schema change related to this. I now have all the information needed. The 1.61.0 release adds two new **input** properties to `BatteryStateOfCharge` . There are no new endpoints or output properties — this is purely an input enhancement. Let me also check the `VehicleBattery` schema for completeness. Now I have everything. Let me compile the answer.

Here's the update for **PTV OptiFlow Route Optimization API v1.61.0** (released 28/04/2026):

What's New in v1.61.0

Feature: Minimum state of charge constraints for EV batteries — define a minimum battery level after charging and at the end of a route.

New Endpoints

None — no new endpoints in this release.

New Input Properties

Two new fields on `vehicle.battery.stateOfCharge` :

Property	Type	Description
<code>minimumAfterCharging</code>	number (0.0–1.0)	Minimum battery level required after a charging event
<code>minimumAtEnd</code>	number (0.0–1.0)	Minimum battery level required at the end of the route

These complement the existing fields: - `initial` — battery level at route start - `minimum` — minimum level allowed at any point during the route

New Output Properties

None — no new output properties in this release.

Diagram

```

vehicle.battery
├─ capacity: number (kWh) [required]
├─ consumption
│  └─ perHundredKilometers: number [required]
└─ stateOfCharge
   ├─ initial: number (0.0–1.0) [existing]
   ├─ minimum: number (0.0–1.0) [existing]
   ├─ minimumAfterCharging: number (0.0–1.0) ← NEW 1.61
   └─ minimumAtEnd: number (0.0–1.0) ← NEW 1.61

```

Constraint logic:

```

Route Start — Driving — Charging — Driving — Route End
|           |           |           |           |
initial    minimum    minimumAfterCharging    minimum    minimumAtEnd
(0.8)     (0.1)       (0.5)                 (0.1)       (0.3)

```

Sample Request (demonstrating all new elements)

```

{
  "locations": [
    {
      "id": "DEPOT",
      "latitude": 50.85,
      "longitude": 4.35,

```

```

"chargingStations": [
  {
    "id": "CHARGER_DEPOT",
    "maximumPower": 50,
    "preparationDuration": 300,
    "completionDuration": 180
  }
],
{
  "id": "CUSTOMER_1", "latitude": 50.92, "longitude": 4.42},
{
  "id": "CUSTOMER_2", "latitude": 51.05, "longitude": 4.30}
],
"vehicles": [
  {
    "id": "EV_VAN_1",
    "start": {"locationId": "DEPOT", "earliestStartTime": "2026-04-29T06:00:00Z"},
    "end": {"locationId": "DEPOT", "latestEndTime": "2026-04-29T16:00:00Z"},
    "battery": {
      "capacity": 75,
      "stateOfCharge": {
        "initial": 0.9,
        "minimum": 0.1,
        "minimumAfterCharging": 0.5,
        "minimumAtEnd": 0.3
      },
      "consumption": {
        "perHundredKilometers": 20
      }
    },
    "costs": {"perHour": 40, "perKilometer": 0.35}
  }
],
"orders": [
  {"id": "ORDER_1", "type": "DELIVERY", "locationId": "CUSTOMER_1", "duration": 600},
  {"id": "ORDER_2", "type": "DELIVERY", "locationId": "CUSTOMER_2", "duration": 600}
],
"depots": [{"id": "DEPOT_MAIN", "locationId": "DEPOT"}],
"settings": {"duration": 60}
}

```

What the new fields do in this example: - `minimumAfterCharging: 0.5` — the vehicle must charge to at least 50% before leaving a charging station (prevents short, inefficient charging stops) - `minimumAtEnd: 0.3` — the vehicle must return to the depot with at least 30% battery remaining (ensures readiness for next shift)

More details: [PTV Developer API Changes](#)