

PTV Timetable API – V2 to V3 Migration Guide

Introduction

The PTV Timetable API exists in two distinct versions – Version 2 (first launched in March 2014 and subsequently updated), and a new Version 3 (launched in October 2016). The current versions of the API at the date of this document are:

- > Version 2.3.0
- > Version 3.0.0

This document has been created to assist users transitioning from Version 2 of the API to Version 3.

Key improvements in Version 3

- > Both calls in the Version 3 Departure API accept GTFS stop_id as an input (using the optional “gtfs” parameter), effectively creating a Broad Next Departures (GTFS Input) API, in addition to Specific Next Departures (GTFS Input).
- > The Version 3 Disruptions API allows you to search for disruptions by route_id (and even by specific disruption id), so you can focus on the disruptions that are relevant to your query.
- > The Version 3 Search API has been augmented with optional location inputs (i.e. latitude and longitude parameters), effectively merging the Version 2 Search and Transport POIs by Map APIs and broadening the search functionality.
- > The Version 3 Departures API returns key data for each departure but makes stop, route, run, direction and even disruption information optional in your response; so you can choose how much data – or how little – is returned.
- > Legacy object properties that were redundant have been removed.
- > The Version 3 API structure is more streamlined.
- > Terminology in the Version 3 API is consistent throughout calls.

APIs

Version 2 APIs and Version 3 equivalents

API V2	V2 objects returned	V3 equivalent API	v3 URL	v3 response
Healthcheck	indicators for: - security token - client clock - memory cache - database	n/a - health of system returned as part of all APIs	n/a	"health" property in the V3.Status object returned at the end of all responses
Stops Nearby	stop object returned within 'result' object	Stops	v3/stops/location/{latitude},{longitude}	stop objects
Transport POIs by Map	stop and outlet POI objects	Search (plus optional parameters)	v3/search/{search_term}	stop, route and outlet objects
Search	stop and line objects	Search (plus optional parameters)	v3/search/{search_term}	stop, route and outlet objects
Lines by Mode	line objects	Routes API (plus optional parameters)	v3/routes	route objects
Stops on a Line	stop objects	Stops	v3/stops/route/{route_id}/route_type/{route_type}	stop objects
Stop facilities	stop facilities object	Stops	v3/stops/{stop_id}/route_type/{route_type}	stop details object

API V2	V2 objects returned	V3 equivalent API	v3 URL	v3 response
Stop facilities (GTFS input)	stop facilities objects	n/a – stop_id obtained from Departures API can be used as input to Stops API	n/a	stop details object
Broad Next Departures*	departure time 'values' object and applicable disruption information	Departures	/v3/departures/route_type/{route_type}/stop/{stop_id}	departure objects (and optional stop, route, run, direction and/or disruption objects)
Specific Next Departures	departure time 'values' object and applicable disruption information	Departures	/v3/departures/route_type/{route_type}/stop/{stop_id}/route/{route_id}	departure objects (and optional stop, route, run, direction and/or disruption objects)
Specific Next Departures (GTFS input)	departure time 'values' object and applicable disruption information	Departures (plus optional parameter)	/v3/departures/route_type/{route_type}/stop/{stop_id}/route/{route_id}	departure objects (and optional stop, route, run, direction and/or disruption objects)
Stopping Pattern	departure time 'values' object and applicable disruption information	Patterns	/v3/pattern/run/{run_id}/route_type/{route_type}	departure and disruption objects
Disruptions	disruption information and applicable line and direction objects	Disruptions (plus optional parameters)	v3/disruptions	disruption objects and applicable route and direction objects

Response objects

Version 2 objects and Version 3 equivalents

V2 object name	V2 object properties	V3 object name	V3 object properties
values (i.e. timetable)	time_timetable_utc, time_realtime_utc, flags, platform object, run object, disruptions object	V3.Departures	stop_id, route_id, run_id, direction_id, disruption_ids, scheduled_departure_utc, estimated_departure_utc, at_platform, platform_number, flags
platform	platform_number, at_platform_now, realtime_id, stop object, direction object	see V3.Departures	n/a
run	transport_type route_type, run_id, num_skipped, destination_id, destination_name, status	V3.Run	run_id, route_type, final_stop_id, destination_name, status
stop	distance, suburb, transport_type route_type, stop_id, location_name, lat, lon	V3.StopOnRoute, V3.StopGeosearch, V3.ResultStop	stop_distance ¹ , stop_name, stop_id, route_type, stop_latitude, stop_longitude

¹ stop_distance only returned in V3.StopGeosearch and V3.ResultStop objects; not relevant to V3.StopOnRoute object.

V2 object name	V2 object properties	V3 object name	V3 object properties
direction	linedir_id, direction_id, direction_name, line object	V3.Direction	direction_id, direction_name, route_id, route_type
line	transport_type route_type, line_id, line_name, line_number, line_name_short, line_number_long	V3.Route	route_type, route_id, route_name, route_number
outlet	outlet_type, suburb, business_name, distance, location_name, lat, lon	V3.ResultOutlet	outlet_distance, outlet_name, outlet_business, outlet_latitude, outlet_longitude
disruptions	disruption_id, title, url, description, status, type, publishedOn, lastUpdated, fromDate, toDate, service_time, line object(s)	V3.Disruption	disruption_id, title, url, description, disruption_status, disruption_type, published_on, last_updated, from_date, to_date, routes array
line (relating to disruptions)	transport_type route_type, line_id, line_name, line_number, line_name_short, line_number_long, direction object	V3.DisruptionRoute	route_type, route_id, route_name, route_number, direction object

V2 object name	V2 object properties	V3 object name	V3 object properties
direction (relating to disruption)	linedir_id, direction_id, direction_name, service_time	V3.DisruptionDirection	route_direction_id, direction_id, direction_name, service_time
stop facilities	stop_id, stop_mode_id, stop_type, stop_type_description, location object, amenity object, accessibility object	V3.StopDetails	station_type, station_description, route_type, stop_location object, stop_amenities object, stop_accessibility object, stop_id, stop_name
location	suburb, gps object, postcode, municipality, municipality_id, primary_stop_name, road_type_primary, second_stop_name, road_type_second, bay_nbr	V3.StopLocation	gps object
gps	latitude, longitude	V3.StopGps	latitude, longitude
amenity	toilet, taxi_rank, car_parking, cctv	V3.StopAmenityDetails	toilet, taxi_rank, car_parking, cctv
accessibility	lighting, stairs, escalator, lifts, hearing_loop, tactile_tiles, wheelchair object	V3.StopAccessibility	lighting, stairs, escalator, lifts, hearing_loop, tactile_tiles, wheelchair object

V2 object name	V2 object properties	V3 object name	V3 object properties
wheelchair	accessible_ramp, accessible_parking, accessible_phone, accessible_toilet	V3.StopAccessibility Wheelchair	accessible_ramp, accessible_parking, accessible_phone, accessible_toilet

Terminology

Version 2 terms and Version 3 equivalents

(list ordered alphabetically)

business_name	<i>context: outlet object property</i> V3 equivalent: outlet_business (see V3 Swagger #Search)
destination_id	<i>context: property in run object</i> V3 equivalent: final_stop_id (see V3 Swagger #Runs)
line_id	<i>context: line object property</i> V3 equivalent: route_id (see V3 Swagger #Routes)
line_name	<i>line object property</i> V3 equivalent: route_name (see V3 Swagger #Routes)
line_name_short	<i>line object property</i> V3 equivalent: n/a (see V3 Swagger #Routes for more information about route objects)
line_number	<i>line object property</i> V3 equivalent: route_number (see V3 Swagger #Routes)
line_number_long	<i>line object property</i> V3 equivalent: n/a (see V3 Swagger #Routes for more information about route objects)
linedir_id	<i>direction object property</i> V3 equivalent: route_direction_id (see V3 Swagger #Disruptions - V3.DisruptionDirection)
location_name	<i>stop object property</i> V3 equivalent: stop_name (see V3 Swagger #Stops and #Search)
location_name	<i>outlet object</i> V3 equivalent: outlet_name (see V3 Swagger #Search)
mode	<i>parameter (multiple APIs)</i> V3 equivalent: route_type
nightrider	<i>a value of transport_type, mode and poi</i> V3 equivalent: Night Bus

num_skipped	<i>run object property</i> V3 equivalent: n/a (see V3 Swagger #Runs for more information about run objects)
outlet_type	<i>outlet object property</i> V3 equivalent: n/a (see V3 Swagger #Search for more information about outlet objects)
poi	<i>parameter (Transport POIs by Map API)</i> V3 equivalent: route_type parameter (note: outlets are not included in V3 route_type; see V3 Swagger #Search include_outlets parameter)
realtime_id	<i>timetable value object property</i> V3 equivalent: n/a (see V3 Swagger #Departures and #Patterns for more information about departures objects)
stop_point_id	<i>parameter (Stop Facilities (GTFS Input) API)</i> V3 equivalent: n/a (see V3 Swagger #Stops v3/stops/{stop_id}/route_type/{route_type} for more information about stop objects)
time_realtime_utc	<i>timetable value object property</i> V3 equivalent: estimated_departure_utc (see V3 Swagger #Departures and #Patterns)
time_timetable_utc	<i>timetable value object property</i> V3 equivalent: scheduled_departure_utc (see V3 Swagger #Departures and #Patterns)
transport_type	<i>stop/line/run object property</i> V3 equivalent: n/a (this attribute was deprecated in V3 in favour of route_type)

Version 3 terms and Version 2 equivalents

(list ordered alphabetically)

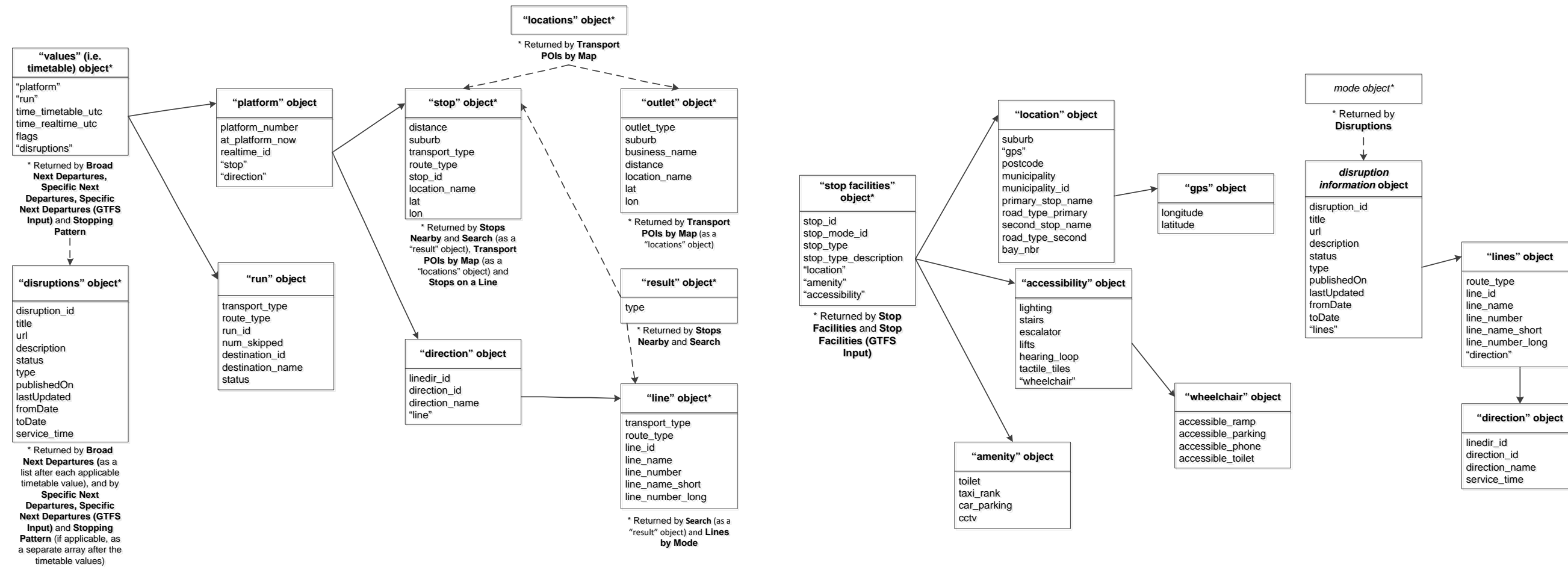
estimated_departure_utc	<i>V3.Departure object property</i> V2 equivalent: time_realtime_utc (see timetable value object)
final_stop_id	<i>V3.Runs object property</i> V2 equivalent: destination_id (see run object)
outlet_business	<i>V3.ResultOutlet object property</i> V2 equivalent: business_name (see outlet object)
outlet_name	<i>V3.ResultOutlet object property</i> V2 equivalent: location_name (see outlet object)
route_direction_id	<i>V3.DisruptionDirection object property</i> V2 equivalent: linedir_id (see direction object)
route_id	<i>V3.Route object property</i> V2 equivalent: line_id (see line object)
route_name	<i>V3.Route object property</i> V2 equivalent: line_name (see line object)

route_number	<i>V3.Route object property</i> V2 equivalent: line_number (see line object)
route_type	<i>parameter (multiple V3 APIs)²</i> V2 equivalent: mode or POI parameter (multiple V2 APIs)
scheduled_departure_utc	<i>V3.Departure object property</i> V2 equivalent: time_timetable_utc (see timetable value object)
stop_name	<i>V3.StopDetails, V3.ResultStop, V3.Stop and V3.StopGeosearch object property</i> V2 equivalent: location_name (see stop object)

² route_type is also used as an object property for multiple objects in both V3 (and V2); here it is only referenced in its role as a parameter in V3, and the V2 equivalent.

Appendix 1 - Object diagrams

Version 2 object structure



Version 3 object structure

