# **FASTTRAK TECHNOLOGIES**

Partner API V2 Integration Guide

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# FASTTRAK Partner API V2 Integration Guide

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# **Available Integrations Overview**

In the past, most integrations to partners were direct, using a specific API for the given partner. Although this allowed a tighter coupling of integration logic, it also required extensive development to get integrated into the FASTTRAK environment. Additionally, the existing <u>FASTTRAK Web Service API</u> (SOAP/XML) was somewhat difficult to integrate with, especially from the latest web technologies. For this reason, FASTTRAK has developed and will continue extending, a new <u>Partner API</u> allowing for quicker/streamlined integrations using the latest web technologies.

Note: The latest version of the API is V2. V1 has been deprecated and will be retired in the future.

In addition to the standard "Partner to FASTTRAK API" integrations, we are also introducing a Real Time Message Dispatch Architecture that will automatically push JSON data objects to HTTPS endpoints as configured for each integrator. This allows a partner to accept standard FASTTRAK data objects automatically to an endpoint they manage instead of interacting with the FASTTRAK API directly. In addition to global partners, non-global web service users also have the ability to configure webhooks directly from the Partner API.

FASTTRAK intends to target the Partner API and Real Time Message Dispatch architecture for new functionality longer term. For example, access to GPS real time driver locations, trip audit and GEO Search capabilities are only available via the Partner API. The FASTRAK Web Service API will continue to be supported; however, new methods will NOT be added in the future.

#### This documentation is broken into two primary areas

- FASTTRAK Partner API V2
  - For partners the want to access the latest JSON/API to access a FASTTRAK database.
- FASTTRAK Real Time Message Dispatch (subscribe/publish)
  - For partners that with to receive Real Time update from the FASTTRAK Message
     Dispatch server, including GPS, Status Updates, Trip Updates and Driver Updates.

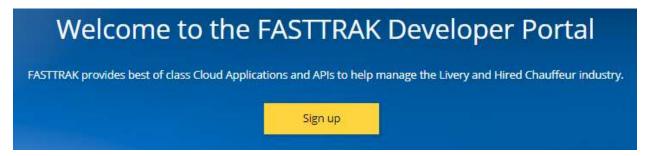
**Note:** You must be subscribed to FASTTRAK Web Services to be eligible to access the Partner API or receive messages via the FASTTRAK Real Time Message Dispatch. If you do not see the Web Service User & GPS Setup tab under System Settings, Web Service integration is not enabled for the customer account. Please contact support@fasttrakcloud.com.



#### FASTTRAK Partner API V2

The Partner API as currently implemented supports a variety of methods. However, as we move forward in the future, FASTTRAK will extend current functionality such that available methods of the Partner API will surpass the legacy FASTTRAK Web Service API sometime in early 2020.

The latest documentation can be reviewed at <a href="https://developer.ifasttrak.com">https://developer.ifasttrak.com</a>.



### **Developer Portal Access Overview**

- 1. Go to https://developer.ifasttrak.com and create a new account.
- 2. Once created, click on the auto-generated email to confirm your email address.
- 3. Log into the portal and click the Products/APIs section from the main menu
- 4. Click on the FASTTRAK API Products link, enter a subscription name, agree to the terms of the API, and click Subscribe
  - a. You will be asked to set a name for you API access. This is a descriptive name of your choosing and simply needs to describe the integration you want to complete.
  - b. This will notify FASTTRAK that you are requesting access
  - c. Depending on the access requested, your account will be provisioned, and you will receive a notification that setup is complete.
  - d. You can see the status of your API request from the User Profile menu option
- 5. Once your access is granted log into the portal and access the Profile option from the main menu. From here you can retrieve your API keys for access to the portal.



# **Operator Access Overview**

The FASTTRAK Partner API allows both Trusted Partner and Authenticated Web Service User access to operator databases. The API includes methods that allow a wide variety of access including quotes, reservations, employees ... and many more to come.

What is the difference between a "**Trusted**" Web Service User and an "**Authenticated**" Web Service User?

It comes down to how the API developer gets access to the operator's system. <u>Trusted</u> users are pre-setup with specific permissions and authentication for simpler setup. <u>Trusted</u> users have agreed to a specific set of guidelines for access to the API and have signed an agreement with FASTTRAK to govern use of the API.

<u>Authenticated</u> Web Service Users are setup specifically for use in a single operator database. Additionally, the operator can choose which permissions to allow specific to that user.

At the end of the day, it simply allows for slightly simpler setup and the decision on how the permissions are managed/controlled, as well as unified access for the partner across systems.

There are several steps to setup access via the API. However, it is helpful to understand the varying systems that need to be accessed.

- 1) **Developer Portal API Access Key:** Access to the API is governed by the developer.ifasttrak.com portal. Once you have an account here, you will be able to subscribe and generate keys to access the Partner API.
- Operator Access Setup: Access to an individual operator system is governed by that operator system. It is in the system where you will create the Trusted Partner or Authenticated Web Service User account.

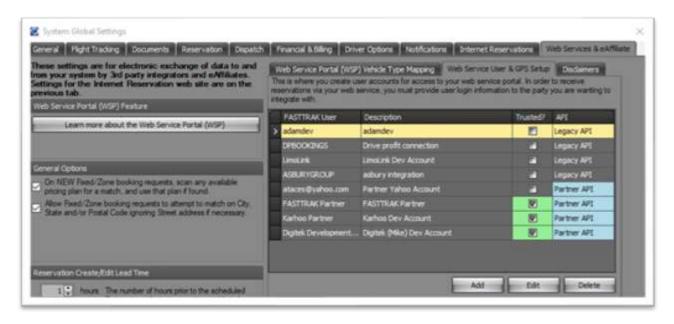
Note: Both steps must be completed before accessing an operator database.

See Operator Access Setup section for details on setting up access to an individual Operator system.



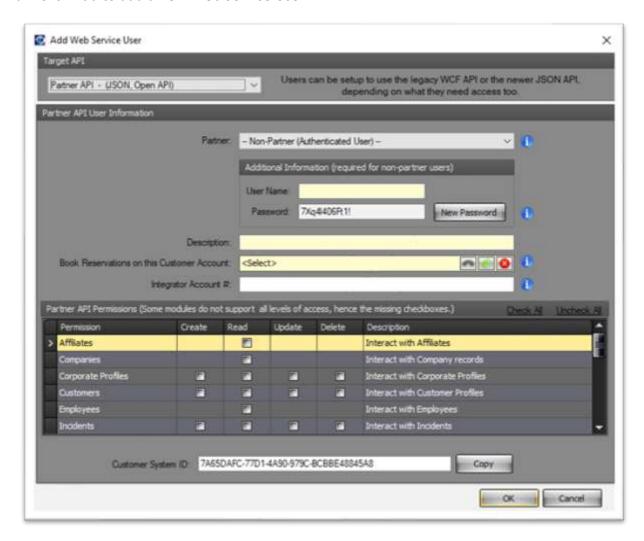
# **Operator Access Setup**

- a. Log into the operator database
- b. Create a target Customer Profile as necessary (see section below)
- c. Open Web Service User setup from FASTTRAK System Settings
  - a. Menu → System, Company & User Setup → System Global Settings
  - b. [Web Services & eAffiliate] → [Web Service User & GPS Setup]





d. Click Add to add a new Web Service User



- e. Select Partner API from the Target API dropdown.
- f. Select a Trusted Partner from the Partner dropdown if you are a trusted partner OR Non-Partner (Authenticated User) if this is not a trusted partner account.
- g. If an Authenticated User is selected, enter your username and password
  - a. Username: Same email from the developer portal
  - b. Password: Autogenerated for internal use
- h. Enter a description of the user
- i. Select the target Customer Profile for use with this user
- Select the necessary permissions for this user access (see section below)
- k. Copy the System-ID for inclusion as a header when making requests to this operator database.



#### **Customer Profile**

The target Customer Profile is required when configuring access to an operators database. It is this Customer Profile that dictates a variety of default values; including pricing, vehicle type, reservation defaults, etc., depending on the API method being used.

#### **Pricing**

When booking via the Quote methods, if a Customer Profile is not specified, the target Customer Profile configured for the Web Service User will be used to setup pricing. Otherwise, if the Web Service User has been given appropriate access, the API can be used to create reservations directly, including pricing dictated by a specific pricing profile ID value.

For example, a web service user who has been given reservation create permission, can create a reservation and generate pricing by setting a specific pricing ID. Otherwise, a web service user that only has access to the Quote methods, will only be able to generate pricing based on the Web Service User target Customer Profile.

#### **Permissions**

What the Web Service User has access to is dictated by the Web Service User permissions. For example, a user will have the ability to retrieve Employee Information if they have been given Employee Read permission. If the Web Service User tries to access a method that has not been granted permission, they will receive an error status from the API.



# FASTTRAK Real Time Message Dispatch (subscribe/publish)

The Real Time Message Dispatch architecture is simply a lightweight, partner-agnostic, automated delivery of reservation information (JSON) based on specific FASTTRAK events. Currently, both individual web service users (operator specific) and global partners can have webhooks enabled.

Individual web service users integrating with the Partner API can configure webhooks directly using the Partner API /api/webhooks endpoints. Global Partner webhooks are NOT operator specific, and instead are configured globally across all FASTTRAK operators. For this reason, FASTTRAK will work with the Global Partner directly to "configure" the global webhooks.

### **Rule Configuration**

Rules can support several configuration options. Although robust, we will work with partners if additional options are required. The table below summarizes the available options.

Option	Information				
SSL Endpoint	The primary URL to deliver the message. This URL can be configured to				
	include additional information from the "Database Fields" below.				
Rule Type	Currently, rules can be configured to send GPS Location Updates and				
	Reservation Updates (record, status, cancel, etc.)				
HTTP Method	GET, POST, PUT				
Farm In/Out	The rule can target reservations where the partner farmed IN the				
	reservation or received a farmed-OUT reservation. This allows rules to fire				
	differently for Farm-IN or Farm-Out.				
Database Fields	The following fields can be included as Headers or URL paths/parameters:				
	<ul> <li>ExternalAccountId: Set in FT Web Service User (Farm IN)</li> </ul>				
	<ul> <li>ExternalAffiliateCode: Set in Affiliate Definition (Farm OUT)</li> </ul>				
	PartnerId: Partner API Integrator ID				
	<ul> <li>InternalBookingId: Internal FT Reservation ID</li> </ul>				
	ExternalPartnerBookingId: From Partner				
	ExternalAffiliateBookingId: From Partner				
	<ul> <li>SystemToken: Security token used by some partners to identify</li> </ul>				
	FASTTRAK database (Carey)				
	System-Id: FT Customer System ID				

### POST/PUT Request Content

Depending on the rule type (Location or Reservation Update), the request content will include an "Asset Location" or "Trip Update Request" JSON object.

The JSON objects are the same definition as contained within the Partner API spec. In the case of the Reservation Update object, the "fieldsToUpdate" field describes the fields that have been updated and map directly to the Trip Detail object; i.e. if the "fieldsToUpdate" field contains the value "PassengerName", then the "TripDetail.PassengerName" field will contain the updated value. Alternatively, if the "forceUpdateAllFields" field is true, then all fields are updated, and none will be specified in the "fieldToUpdate" field.

The definitions of these can be found in the API docs or in the <u>Object Model</u> section at the end of this document.

### Example Rule (Simple POST to URL)

The example rule below describes a legacy partner update for real-time driver GPS locations. All driver locations for external partner reservation "RES123456" that were created by a web service user with External AccountID "AffiliateXYA" will post to the URL below.

#### Headers:

- InternalBookingId: "98765"
- SystemId: "e51db27d-1327-4b71-8b9c-a0ef1e750a78"

URL: (POST) https://www.somepartnerurl.com/accept/AffiliateXYZ?id=RES123456

- ExternalAccountID: "AffiliateXYA"
- ExternalPartnerBooking Id: "RES123456"

The supported database fields can be added to the URL, parameters and headers as necessary to support the partners HTTP request requirement.



# Real Time Integration Object Model Reference

The references below are for supporting detail and are not meant to supersede spec pf the Partner API.

#### **Asset Location**

```
"driverId": 117,
"vehicleId": 80,
"internalBookingId": 77100,
"latitude": 33.4396290039976,
"longitude": -112.035986598941,
"direction": {
  "Unit": "KPH",
  "Magnitude": 0,
  "Heading": 354
"locationDateTime": "2021-03-01T22:43:49.564867Z",
"locationDateEpoch": {
  "date": "2021-03-01T22:43:49.564867Z",
  "epoch": 1614638629
"source": "DRIVER_APP",
"systemId": "7A65DAFC-77D1-4A90-979C-BCBBE48845A8",
"documentType": "ASSET_LOCATION",
"creationDate": "2021-03-01T22:43:49.7166757Z",
"modifiedDate": "2021-03-01T22:43:49.7166757Z",
"deletionDate": "0001-01-01T00:00:00",
"deleted": false
```



# **Trip Status Update**

#### **FASTTRAK Standard Status IDs are as follows:**

Order	Status Key	ID	Description
1	Quotation	1	Created in FT but not yet booked/accepted by customer
2	Booked	10	Confirmed by customer.
			Note: Primary status after initial creation of reservation.
3	Trip_Confirmed	2	Confirmed by operator
4	Driver_Scheduled	11	Driver has been scheduled and notified of trip assignment
5	Driver_Confirmed	3	Driver has accepted assignment
6	En_route	4	Driver is En Route to pick-up location
7	On_Location	5	Driver is On Location and awaiting passenger
8	On_Board	9	Passenger is on board and Driver is moving towards next
			stop
9	Dropped	6	Passenger has been dropped at final drop-off
10	No_Show	7	Passenger did not show at pick-up location
11	Cancelled	8	Trip was cancelled (generally before dispatched)

**Note:** These are equivalent in use to the API enumeration.



### **Trip Update Request**

Note: Same model as status but provides full reservation detail and filed update list.

```
"SystemId": "7A65DAFC-77D1-4A90-979C-BCBBE48845A8",
"InternalBookingId": "78539",
"ReservationUpdateDetail": {
  "IsNewReservation": false,
 "IsCancel": false,
  "IsStatusUpdate": false,
  "IsStopsUpdate": false,
  "ForceUpdateAllFields": false,
  "FieldUpdates": {
    "iEmployeeID": "74"
},
"ReservationInfo": {
  "ExternalBookingId": "592015",
  "DoInvoiceCustomerDirectly": false,
  "ReservationId": 78539,
  "VehicleId": 0,
  "EmployeeId": 74,
  "GreeterId": 0,
  "CompanyId": 1,
  "ReservationGroupId": 0,
  "CustomerId": 33,
  "CorporateProfileId": 0,
  "PricingId": 1,
  "InternalVehicleTypeId": 3,
  "ReservationStatus": "Driver_Scheduled",
  "TravelType": "Ground",
  "ReservationPhoneNumber": "",
  "ReferencePO": "592015",
  "CostCode": "",
  "BookingSource": "Internet",
  "BookingCategory": "Affiliate",
  "TripCategory": "Point-Point",
  "TripType": "Point to Point",
  "OrderedBy": "Reservations Europe",
  "OrderedByPhone": "",
  "TimeZoneName": "Pacific Standard Time",
  "ScheduledPickupTime": "2021-03-03T02:30:00Z",
  "EstimatedEndTime": "2021-03-03T04:30:00Z",
  "IsDatabaseTimezone": true,
  "TimeZoneUTCOffsetMinutes": -480.0,
  "DriverInTime": null,
  "DriverSpotTime": null,
  "EnRouteTime": null,
  "OnLocationTime": null,
  "ActualPickupTime": null,
 "DropoffTime": null,
  "NoShowTime": null,
  "CancelTime": null,
  "ReturnTime": null,
  "BillingStartTime": null,
  "BillingEndTime": null,
```



```
"ActualHours": 0.00000,
"EstimatedHours": 2.00000,
"BeginMileage": 0,
"EndMileage": 0,
"DriverNotes": ""
"DriverDispatchStatus": "",
"DispatchNotes": "",
"TripNotes": "FARM-IN: Always represent ABC Limo Inc. Ph# 800-555-1212",
"AffiliateNotes": ""
"TripPreferences": "**Do not call pax.",
"FromLocation": {
  "Latitude": 0.0,
  "Longitude": 0.0,
  "Address": {
    "Street1": "1111 N McDowell Blvd",
    "Street2": "",
    "City": "San Francisco",
    "Region": "CA",
    "PostalCode": "94954",
    "Country": "",
    "DisplayAddress": "1111 N McDowell Blvd San Francisco, CA 94954",
    "GeoLookupAddress": "1111 +N+McDowell+Blvd++San+Francisco+CA+94954",
    "CityRegionPostalCode": "San Francisco, CA 94954"
  "AdditionalInformation": "Be happy",
  "SummaryAddress": "1111 N McDowell Blvd San Francisco, CA 94954",
  "DisplayAddress": "1111 N McDowell Blvd San Francisco, CA 94954",
  "GeoLookupAddress": "1111 +N+McDowell+Blvd++San+Francisco+CA+94954"
"ToLocation": {
  "Latitude": 0.0,
  "Longitude": 0.0,
  "Address": {
    "Street1": "25 Matheson St",
    "Street2": "",
    "City": "Healdsburg",
    "Region": "CA",
    "PostalCode": "95448",
    "Country": "",
    "DisplayAddress": "25 Matheson St Healdsburg, CA 95448 ",
    "GeoLookupAddress": "25+Matheson+St++Healdsburg+CA+95448",
    "CityRegionPostalCode": "Healdsburg, CA 95448 "
  "AdditionalInformation": "Hotel Healdsburg",
  "SummaryAddress": "25 Matheson St Healdsburg, CA 95448 ",
  "DisplayAddress": "25 Matheson St Healdsburg, CA 95448 ",
  "GeoLookupAddress": "25+Matheson+St++Healdsburg,+CA+95448+"
},
"PassengerCount": 2,
"LuggageCount": 1,
"PrimaryPassenger": {
  "Name": "Forte/Steve",
  "Alias": "",
  "PhoneNumber": "888-555-1212",
  "EmailAddress": "steve@email.com",
  "DoEnablePassengerEmail": false,
  "DoEnablePassengerSMS": false
```



```
"NumAdditionalStops": 0,
"ReservationOrigin": "Web_Service",
"TotalCharges": 241.39000,
"AffiliatePay": 0.00000,
"IsInBilling": false,
"IsExcludedFromBilling": false,
"IsFinalized": false,
"IsInvoiced": false,
"IsDriverPayProcessed": false,
"IsDriverPayReadyForProcessing": true,
"IsChangedDayOfDispatch": false,
"IsRecurring": false,
"HasReservationNotes": false,
"HasIncidents": false,
"CollectionMethod": "Billing_Account",
"CollectionType": "Billing",
"CreditCardId": 3553,
"IsVip": true,
"IsSpecialHandling": false,
"SegmentId": "",
"AlternateContractId": 0,
"IsFarmIn": true,
"IsFarmOut": false,
"FarmInAffiliateSummary": {
  "AffiliateId": 0,
  "AffiliateTypeId": 3,
  "Name": "Affiliate ABC"
  "AffiliateReservationId": "592015",
  "IsElectronicAffiliate": true,
  "EmailAddress": "",
  "AffiliateCode": "aff12345"
"TotalDeposits": 0.00000,
"CreditCardAuthorizationAmount": 0.00000,
"CompanySummary": {
  "CompanyId": 1,
  "CompanyName": "ABC Limo Company"
},
"CustomerSummary": {
  "DoBillCorporate": false,
  "DoUseCorporatePricingOverrides": false,
  "ProfileNotes": "$69 base SF - SFO",
  "InvoiceMessage": "Thank you for choosing ABC Limo Transportation, Inc.",
  "InvoiceCreateHandlingType": "E_mail_invoice_automatically",
  "DeliveryMethod": "None",
  "DeliveryFrequency": "None",
  "CustomerId": 33,
  "CompanyId": 1,
  "FirstName": "",
  "LastName": "Customer 123",
  "MiddleName": "",
  "EmailAddress": "customer@somewhere.com",
  "PhoneNumber1": "555-555-1212",
  "CellPhoneNumber": "",
  "AccountNumber": "",
  "DoRequireReferencePo": false
```



```
"VehicleSummary": {
    "Id": 0,
    "AffiliateEquipmentId": 0,
    "InternalVehicleTypeId": 3,
    "InternalTypeName": "SUV",
    "ExternalVehicleTypeId": 22,
    "ExternalVehicleTypeImageId": 0,
    "Make": "",
    "Model": ""
    "Color": "",
    "Name": "",
    "Year": 0,
    "Capacity": 0,
    "VehiclePlate": "",
    "CurrentMileage": 0,
    "PhoneNumber": "",
    "HasExpiredLicense": false,
    "ColorRed": 0,
    "ColorGreen": 0,
    "ColorBlue": 0
  "VehicleTypeSummary": {
    "InternalVehicleTypeId": 0,
    "InternalVehicleTypeName": "SUV",
    "PassengerCapacity": 7,
    "BagCapacity": 6
  },
  "DriverSummary": {
    "EmployeeId": 74,
    "AffiliateId": 0,
    "AffiliateDriverId": 0,
    "FirstName": "John",
    "LastName": "Smith",
    "CellPhoneNumber": "888-555-1212",
    "EmailAddress": "driverdon@somewhere.com ",
    "Status": "On_Duty",
    "DriverType": "Employee"
  },
  "CustomerContactId": 0,
  "CorporateProfileContactId": 0,
  "CancelledBy": "",
  "ConfirmedBy": "",
  "CreateTime": "2021-02-24T16:00:04Z",
  "ModifiedTime": "2021-03-01T18:53:57Z"
},
"ExternalFieldList": []
```