Carrier Integration Process Flow

Real-Time Rating API Implementation Services

(if needed), first SCAC/VAT

Shippers can request real time rate quotes when applying a dynamic routing guide or when opening the TMS rate shop. The TMS will call the carrier's endpoint and expects an instant response.

Endpoints Supported:

POST/
Requests a real-time rate for a shipment from a carrier in which a contract rate is not on file for the particular load.

NOTE: Currently truckload (TL) mode is supported.

Technical notes:

If EDI-enabled and not already using version 11 of the e2open Transportation Management for Shippers EDI 204 (Load Tender) message, the carrier has the option to upgrade to that version to receive, in the L11 QUT segment of the 204, the unique bid identifier (referred to as the 'carrierRateReference') that was submitted with the related bid via the Real-time Rating API.

NOTE: carrierRateReference is an optional attribute. To take advantage of this feature, the carrier must send a unique carrierRateReference value with each Real-time Rating response.

Spot Market API Implementation Services

(if needed), first SCAC/VAT

Shippers post loads to the SpotMarket to retrieve bids on loads that they need covered. Carriers will ping the e2open endpoint to retrieve all available SpotMarket postings and then choose the postings for which they want to submit bids.

Endpoints Supported:

GET/ – Get all loads available on the Spot Market.
This is generally the first request a carrier makes to view what loads are available on the Spot Market. Carriers can use this endpoint to return all possible loads available to them, or they can use filterable parameters to narrow down the results by attributes such as shipper, equipment type, or pick date as well as view the loads that the carrier currently has offers on. This endpoint is generally a starting point if a carrier isn't aware of a specific load they want to view more information on.

GET/load/{loadID}/ –
Get a particular load available on the Spot Market.
Similar to the endpoint above, this would be a good starting point for a carrier if they want to search for a specific Spot Market load. Note the use of this endpoint isn't limited solely to the "discovery" of loads to bid on, but rather is a way for a carrier to check on a Spot Market load should it have been modified by the shipper since its original posting. It is recommended to perform a get call to retrieve the most recent details associated with the posting before placing a bid.

GET/load/{loadID}/offer/ –
Get Spot Market Offer History by Load.
This endpoint should be used after a carrier submits a bid to view their offer history. This will show the history of offers (if any) a carrier has submitted for a particular SpotMarket load. Each offer is assigned an ID, which should be referenced in requests to update or withdraw a SpotMarket offer (see last two endpoints).

POST/load/{loadID}/offer/ –
Create a Spot Market Offer on a Load.
This endpoint is used to POST a bid for an available load and is typically used after either of the first two GET endpoints are used to view what loads are available to place an offer on.

GET/load/{loadID}/offer/{offerID} –
Get Current Spot Market Offer Details by offer ID.
Similar to the endpoint above, this should only be used after the carrier has submitted a bid for a load. The Get Spot Market Offer History by Load ID endpoint (above) provides an exhaustive list of the offer history (each offer having its own offer ID), and when requests are made to this endpoint referencing that offer ID, we return more granular details about the offer like the status, offer amount, and if it's the lowest offer on the load or not (if the shipper has configured the Spot Market to allow such visibility).

PUT/load/{loadID}/offer/{offerID} –
Update a Spot Market offer on a Load.
This endpoint is only used after a bid is submitted in order to modify it. This would be used after the carrier submits a POST to the Create a Spot Market Offer on a Load.

DELETE/load/{loadID}/offer/{offerID} –
Withdraws an offer from the Spot Market load.
This endpoint is only used after a bid is submitted in order to delete it. This would be used after the carrier submits a POST to the Create a Spot Market Offer on a Load.

Billing (Rate Change Request) API Implementation Services
(if needed), first SCAC/VAT

Carriers can request rate changes to add accessorials or modify base rates by submitting requests via integration. This allows carriers to post requests to an API endpoint to add, remove, or modify changes for a rate change request or request a base rate adjustment. Carriers can only submit requests for loads tendered to their company, and shippers' rate change request rules are enforced.

Endpoints Supported:

GET/load/{loadid}/chargecodes/ –
Get the list of charge codes that are able to be requested for the load.
This endpoint allows a call to retrieve all available charge codes by load ID and requires the carrier to have a load ID to call this endpoint.

POST /load/{loadid}/raterequest/ –
Request a rate change request for the load.
This endpoint allows a carrier to request a rate change request for a load ID based on the available charge codes that can be requested. This endpoint requires the carrier to have a load ID to POST a rate change request.

GET/load/{loadid}/raterequesthistory/ –
Get the rate change request history for the load.
If a rate change request has been submitted, this endpoint allows a carrier to perform a GET call to view the status of the rate change request.

NOTE: This endpoint will not return any results if there have not been any rate change requests on the load.

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Communications (Load) API Implementation

Services (if needed), first SCAC/VAT

Allows carriers to pull load information and supports a range of load functionality, including the retrieval and addition of load notes, retrieval of current rate, stop ID, dates, and lading quantity. The load note functionality specifically works by allowing carriers to retrieve and add notes to a load and post load documents.

Endpoints Supported:
Load Operations

GET/{loadid} – Retrieve a load.
This endpoint allows a carrier to retrieve information about a load that they have in 'Accepted' status such as the stop information and shipment references,

GET/ – Retrieve a load by query.
This endpoint allows a carrier to retrieve information about a group of loads that they have in 'Accepted' status such as the stop information and shipment references.

Filterable criteria which can be used includes vehicle, pick date, pick location reference, drop date, and drop location reference.

GET/{loadid}/notetypes –
Retrieve load note types for a specific load.
This endpoint allows a carrier to retrieve all of the available load note types enabled by the shipper for a particular load.

GET/{loadid}/notes –
Retrieve load notes for a specific load.
This endpoint allows a carrier to retrieve all of the load notes visible by the carrier on a particular load.

POST/{loadid}/notes – Add notes to a specific load
This endpoint allows a carrier to post a load note on a particular load. It is highly recommended to first retrieve the available load note types available on the load via the prior GET endpoint before attempting to POST a load note type that may not be supported.

POST/{loadid}/documents –
Upload load document to a specific load.

This endpoint allows a carrier to POST a document to upload to a load as well as select a stop ID if the document only applies to a particular stop on the load as long as the shipper has allowed for carrier uploaded documents in their TMS configuration.

NOTE: The document upload endpoint requires the carrier to have both the document_type_id (consistent across all shippers) and the document_type_key (configurable per shipper) in order to successfully upload a document.

GET/{loadid}/rates –
Retrieve current rates for a specific load.
This endpoint allows a carrier to retrieve both the current base and accessorial charge codes, amount, and cost basis on the load by load ID.

Stop Operations

GET/{loadid}/stop/{stopid} –
Retrieve details for a stop on a load.
This endpoint allows a carrier to retrieve information about a stop on a load including location id, location ref, lat/long, location name, location address, contact information, and dates associated with the stop.

POST/{loadid}/stop/{stopid}/dates –
Update the load stop actuals for a stop on a load.
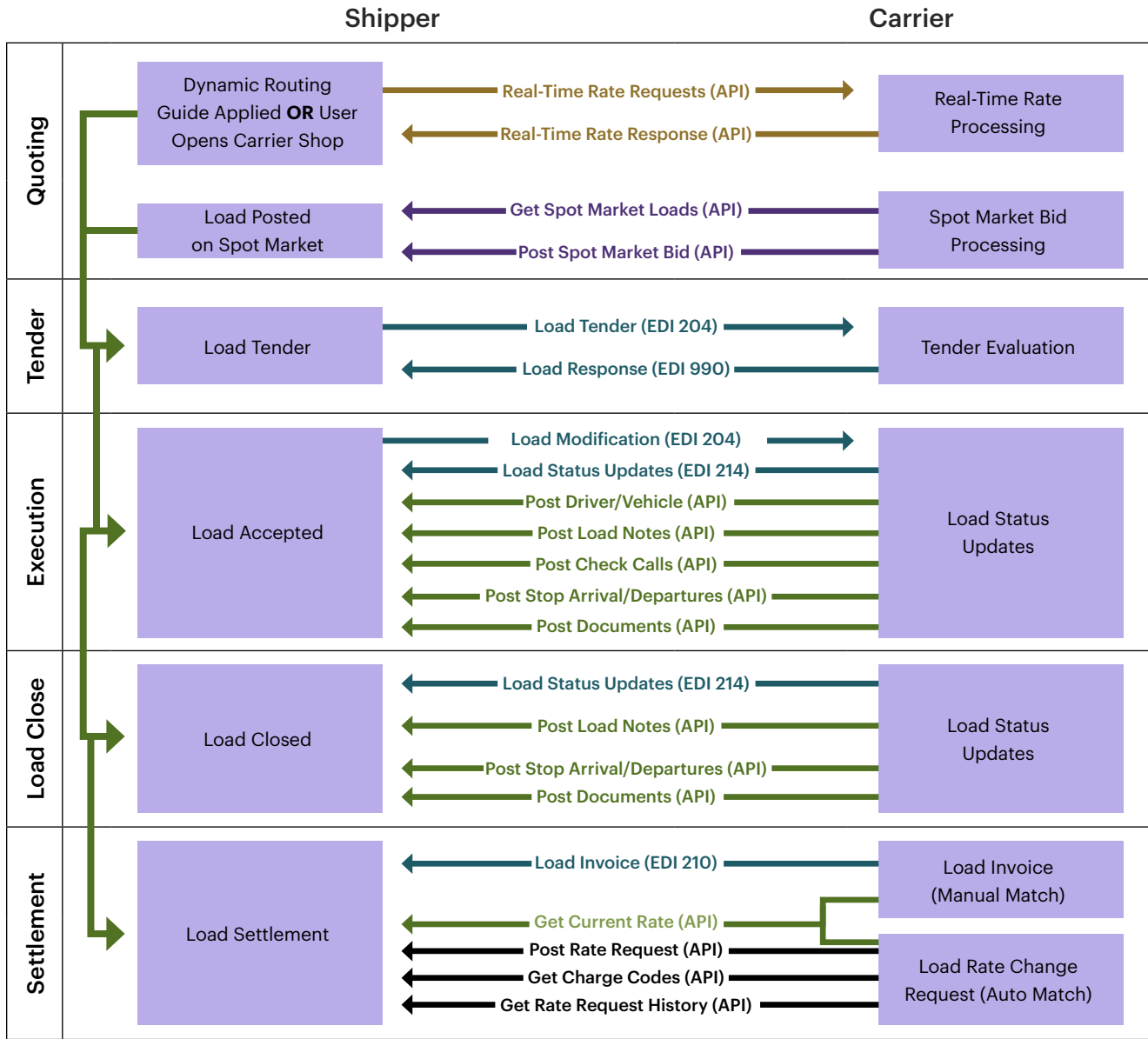This endpoint allows a carrier to POST arrival and departure times at a stop on a load.

POST/{loadid}/stop/{stopid}/checkcall –
Add a check call to a stop on a load.
This endpoint allows a carrier to post a check call associated with a stop on a load including the location date, location ETA, delayed status, and current location city, state, zip, country of the truck in transit.

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Shared Process

	Shipper		Carrier

Quoting

Shipper		Carrier
Dynamic Routing Guide Applied **OR** User Opens Carrier Shop	→ Real-Time Rate Requests (API) → / ← Real-Time Rate Response (API) ←	Real-Time Rate Processing
Load Posted on Spot Market	← Get Spot Market Loads (API) / ← Post Spot Market Bid (API)	Spot Market Bid Processing

Tender

Shipper		Carrier
Load Tender	→ Load Tender (EDI 204) → / ← Load Response (EDI 990) ←	Tender Evaluation

Execution

Shipper		Carrier
Load Accepted	→ Load Modification (EDI 204) → / ← Load Status Updates (EDI 214) ← / ← Post Driver/Vehicle (API) / ← Post Load Notes (API) / ← Post Check Calls (API) / ← Post Stop Arrival/Departures (API) / ← Post Documents (API)	Load Status Updates

Load Close

Shipper		Carrier
Load Closed	← Load Status Updates (EDI 214) / ← Post Load Notes (API) / ← Post Stop Arrival/Departures (API) / ← Post Documents (API)	Load Status Updates

Settlement

Shipper		Carrier
Load Settlement	← Load Invoice (EDI 210) / ← Get Current Rate (API) / ← Post Rate Request (API) / ← Get Charge Codes (API) / ← Get Rate Request History (API)	Load Invoice (Manual Match) / Load Rate Change Request (Auto Match)

Legend:
- ■ Real-Time Rating API
- ■ Communications (Load) API
- ■ Spot Market API
- ■ Billing (Rate Change Request) API
- ■ Carrier EDI

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