

This document provides a business-level summary and overview of the Carrier Invoicing API. It is meant to guide stakeholders through the business flow and functional expectations of the API and explain its intended functionality.

Carrier Invoicing API:

The Carrier Invoicing API is a way for McLeod Software and external systems to exchange shipment information. With this API, carriers and partners can create, update, and retrieve shipment-level data such as pay details, accessorials, supporting documentation, and event subscription notifications.

Expected Business Flow:

The Carrier Invoicing API's business flow should follow the steps described below:

- The shipment is created and identified for invoicing.
- Applicable supporting documents (BOLs, delivery receipts, etc.) are uploaded and linked to the shipment.
- Carrier pay and other pay details are added and updated as needed (and as the information becomes available).
- Accessorial charges are created by specifying units/rate.
- Event subscriptions notify subscribers of status changes or notable activity, such as the creation of an invoice.

Schemas and Key Endpoints:

The Carrier Invoicing API contains the following schemas:

1. Shipments
2. Documents
3. Events
4. Actions

The key endpoints within these schemas are as follows:

1. **/shipments**. Retrieve/create shipment records. The entry point for carrier invoice processing.

2. **/shipments/{shipmentId}/carrier-pay.** Update carrier pay amounts. Currency is system-defined and read only. Updates include amount, pay status, and due date.
3. **/shipments/{shipmentId}/carrier-other-pay.** Update non-linehaul other pay amounts. Currency is system-defined.
4. **/shipments/{shipmentId}/accessorials.** Create new accessorial items. Users send units and rate, system calculates amount.
5. **/shipments/{shipmentId}/supporting-documents.** Retrieve/upload supporting documents (including invoices, BOLs, rate confirmations).
6. **/event-subscriptions.** Manage webhook event notifications. Allows partners to subscribe to invoice-related system events.

Partners can align their workflows to the above sequence of API calls to ensure that their integration mirrors McLeod's internal invoicing process.

Additional Endpoint Activity:

Shipments:

- **GET /shipments.** Lists the shipments that are eligible for invoicing (supports filtering as documented).
- **POST /shipments.** Creates or registers a shipment record.
- **GET /shipments/{shipmentId}.** Retrieves a shipment with current pay, documents, and status.
- **PATCH /shipments/{shipmentId}/update.** Updates a limited set of fields on the shipment record (BOL, weight, pieces/cases, pay amounts).

Carrier Pay and Other Pay:

- **PATCH /shipments/{shipmentId}/carrier-pay.** Updates carrier linehaul pay details (amount, status, due dates, notes). Currency is system-defined and not changeable.
- **PATCH /shipments/{shipmentId}/carrier-other-pay.** Updates aggregated carrier other pay details. Currency is system-defined and not changeable.

NOTE: PATCH endpoints perform partial updates and ignore fields that aren't specified.

Accessorials:

POST /shipments/{shipmentId}/accessorials. Creates an accessorial charge by providing units and rate (both values must be supplied). The system calculates amount by multiplying units and rate. Amount is not sent in the request and is read only in responses.

Supporting Documents:

- **GET /shipments/{shipmentId}/supporting-documents.** Lists the supporting documents that are tied to the shipment (BOL, POD, rate confirmation, etc.).
- **POST /shipments/{shipmentId}/supporting-documents.** Attaches/uploads a new supporting document to the shipment.
- **GET /supporting-documents/{documentId}.** Retrieves metadata for a single document.
- **GET /supporting-documents/{documentId}/content.** Downloads the raw document content.

NOTE: Supporting documents will be returned as metadata or file content, depending on the endpoint that is used.

Event Subscriptions:

- **GET /events.** Lists events relevant to carrier invoicing. Filterable by date/type.
- **GET /event-subscriptions.** Lists webhook subscriptions.
- **POST /event-subscriptions.** Creates a webhook subscription and receives notification on key milestones.
- **GET /event-subscriptions/{subscriptionId}.** Retrieves a single subscription by ID.
- **DELETE /event-subscription/{subscriptionId}.** Cancels a subscription.

NOTE: Event subscription endpoints require a valid webhook URL and a supported event type.

Acceptance Criteria:

- All shipment and pay-related updates validate required IDs and existing system references.
- The *Currency* field is preserved from existing shipment data and not overridden.
- Accessorial creation is successful when *units* and *rate* are supplied and the amount is correctly computed.
- Webhook events are generated for pay updates and invoice creation.
- API responses return proper HTTP status codes.