EDI Web API

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# Web API

Coupled with ***JSON***, this Web API is an ASP.NET CORE HTTP hosting service written in c#.

Its purpose is to facilitate the transfer/exchange of EDI related information (e.g. 204, 214, 210, etc.)

It’s designed to act as a listener, waiting for requests from the client. Data will never be pushed to the client; only returned.

# Web API Documentation

## Web API Base URL

[https://anc-edi.com:5000/](https://anc-edi.com:5000/edi)

## Authentication

Basic Authentication

Base64-encoded string containing user name and password

## Credentials

Two sets of credentials will be given:

1. Test: Provided for sandbox/testing
2. Production: Provided prior to go-live

## EDI Requests

### Post Methods

#### Milestone Update [214]

URL: <https://anc-edi.com:5000/MilestoneUpdates>

***Expected*** updates per each load: Arrive, loaded, empty, check calls, ETA to Delivery. See MilestoneEvent enum in provided code source.

##### Payload Example:

[

{

"TransactionGuid": "884beca8-cfff-42be-adee-9e7ee2eba8d0",

"EDIPartner":

{

"name" : "Sears",

"Id" : 111111

},

"OrderNumber": "12345",

"PartnerOrderNumber": "A12345",

"StopNumber": 1,

"BrokeredShipment":

{

"BrokerSCACCode": "GPSX",

"BrokerTruckNumber": "Truck123"

},

"ReferenceNumbers":

[

{

"Type" : "BookingNumber",

"Value" : "123BN321"

}

],

"Stops":[

{

"StopEntity" :

{

"Type" : "Pickup",

"Name" : "Sears Pick-up Warehouse",

"Location":

{

"AddressLine1" : "123Addr1",

"State" : "MI",

"Lat" : 45.232349

}

}

},

{

"StopEntity" :

{

"Type" : "Delivery",

"Name" : "Sears Delivery Warehouse",

"Location":

{

"AddressLine1" : "123Addr1",

"State" : "MI"

}

}

}

],

"MilestoneDateTime" : "2018-01-10T00:00:00Z",

"MilestoneTotalParts" :

{

"Quantity" : 1,

"Weight" : "20.5",

"WeightQualifier" : "Gross",

"WeightUnitCode": "Pounds",

"BOL" : "bol2",

"POD" : "pod"

},

"MilestoneEvent" : "ArrivedAtPickupLocation",

"MilestoneLocation" :

{

[

{

"TransactionGuid": "884beca8-cfff-42be-adee-9e7ee2eba8d0",

"EDIPartner":

{

"name" : "Sears",

"Id" : 579

},

"OrderNumber": "12345",

"PartnerOrderNumber": "A12345",

"StopNumber": 1,

"BrokeredShipment":

{

"BrokerSCACCode": "GPSX",

"BrokerTruckNumber": "Truck123"

},

"ReferenceNumbers":

[

{

"Type" : "BookingNumber",

"Value" : "123BN321"

}

],

"Stops":[

{

"StopEntity" :

{

"Type" : "Pickup",

"Name" : "Sears Pick-up Warehouse",

"Location":

{

"AddressLine1" : "123Addr1",

"State" : "MI",

"City" : "Ann arbor",

"Zip" : 48109,

"CountryCode": "US",

"Lat" : 42.3032191,

"Lng" : -83.6802387

}

}

},

{

"StopEntity" :

{

"Type" : "Delivery",

"Name" : "Sears Delivery Warehouse",

"Location":

{

"AddressLine1" : "123Addr1",

"State" : "MI",

"City" : "Detroit",

"Zip" : 48202,

"CountryCode": "US",

"Lat" : 42.3751564,

"Lng" : -83.0948781

}

}

}

],

"MilestoneDateTime" : "2018-01-10T00:00:00Z",

"MilestoneTotalParts" :

{

"Quantity" : 1,

"Weight" : "20.5",

"WeightQualifier" : "Gross",

"WeightUnitCode": "Pounds",

"BOL" : "bol2",

"POD" : "pod"

},

"MilestoneEvent" : "ArrivedAtPickupLocation",

"MilestoneLocation" :

{

"AddressLine1" : "123Addr1",

"State" : "MI",

"Lat" : 45.232349

}

}

]

#### Load Tender Response [990]

URL: [https://anc-edi.com:5000/LoadTenderResponse](https://anc-api:5000/edi/LoadTenderResponse)s

##### Payload Example:

[

{

"TransactionGuid": "6787b328-4a3a-4b52-a8de-b4aadc470f40",

"EDIPartner": {

"name" : "Sears",

"Id" : 579

},

"OrderNumber": "12345",

"PartnerOrderNumber": "A12345",

"ReservationStatus":{

"status": "Accepted"

}

},

{

"TransactionGuid": "a549660d-7cb2-410a-b5fb-49206b50d703",

"EDIPartner": {

"name" : "K-Mart",

"Id" : 22222

},

"OrderNumber": "12346",

"PartnerOrderNumber": "A12346",

"ReservationStatus":{

"status": "Declined"

}

}

]

#### Invoice [210]

URL: <https://anc-edi.com:5000/Invoices>

##### Payload Example:

[

{

"TransactionGuid": "884beca8-cfff-42be-adee-9e7ee2eba8d0",

"EDIPartner":

{

"name" : "Sears",

"Id" : 579

},

"OrderNumber": "12345",

"PartnerOrderNumber": "A12345",

"InvoiceNumber": "123450A",

"InvoiceDate": "2018-01-25T00:00:00Z",

"FirstPickupDate": "2018-01-25T00:00:00Z",

"LastDeliveryDate": "2018-01-25T00:00:00Z",

"ReferenceNumbers":

[

{

"Type" : "BookingNumber",

"Value" : "123BN321"

}

],

"BuisnessEntities":[

{

"Type" : "BillTo",

"Name" : "Sears Headquaters",

"Location": {

"AddressLine1" : "123Addr1",

"State" : "MI",

"City" : "Romulus",

"Zip" : 48174,

"CountryCode": "US",

"Lat" : 42.2030778,

"Lng" : -83.4167955

}

}

],

"LineItems":[

{

"Description" : "Linehaul by Mileage",

"Rate" : 675.11,

"Quantity" : 1,

"LineCharge":"675.11",

"ChargeDescriptionType": "Linehaul",

"RateUnitOfMeasureType": "Flat"

},

{

"Description" : "Fuel Surcharge %",

"Rate" : 0.19,

"Quantity" : 657.32,

"LineCharge":"124.89",

"ChargeDescriptionType": "Fuel",

"RateUnitOfMeasureType": "Percent"

}

],

"Currency" : "USD",

"Stops":[

{

"StopEntity" :

{

"Type" : "Pickup",

"Name" : "Sears Pick-up Warehouse",

"Location":

{

"AddressLine1" : "123Addr1",

"State" : "MI",

"City" : "Ann arbor",

"Zip" : 48109,

"CountryCode": "US",

"Lat" : 42.3032191,

"Lng" : -83.6802387

}

}

},

{

"StopEntity" :

{

"Type" : "Delivery",

"Name" : "Sears Delivery Warehouse",

"Location":

{

"AddressLine1" : "123Addr1",

"State" : "MI",

"City" : "Detroit",

"Zip" : 48202,

"CountryCode": "US",

"Lat" : 42.3751564,

"Lng" : -83.0948781

}

}

}

],

"TotalParts" :

{

"Quantity" : 1,

"Weight" : "20.5",

"WeightQualifier" : "Gross",

"WeightUnitCode": "Pounds"

}

}

]

### Get Methods

#### Load Tenders [204]

URL: [https://anc-edi.com:5000/LoadTenders](https://anc-api:5000/edi/LoadTenders)

[

{

"TransactionGuid": "59fbc481-dfa9-452f-b9c0-46d94f47abcd",

"EDIPartner": {

"name" : "Sears",

"Id" : 111111

},

"OrderNumber": "12345",

"PartnerOrderNumber": "A12345",

"MethodOfPayment": "Prepaid",

"LoadTenderStatus": "Original",

"MustRespondByDateTime": "2018-01-25T00:00:00Z",

"ReferenceNumbers":[

{

"Type" : "BookingNumber",

"Value" : "123BN321"

}

],

"Instructions":[

{

"Type" : "Alert",

"Value" : "123BN321"

}

],

"BuisnessEntities":[

{

"Type" : "BillTo",

"Name" : "Sears Headquaters",

"Location": {

"AddressLine1" : "123Addr1",

"State" : "MI",

"City" : "Detroit",

"Zip" : 48202,

"CountryCode": "US",

"Lat" : 42.3751564,

"Lng" : -83.0948781

}

},

{

"Type" : "RemitToParty",

"Name" : "Sears C/O CASS",

"Location": {

"AddressLine1" : "123Addr1",

"State" : "MI",

"City" : "Ann arbor",

"Zip" : 48109,

"CountryCode": "US",

"Lat" : 42.3032191,

"Lng" : -83.6802387

}

}

],

"Stops":[

{

"StopNumber": 1,

"ReferenceNumbers":[

{

"Type" : "BookingNumber",

"Value" : "123BN321"

}

],

"Instructions":[

{

"Type" : "Alert",

"Value" : "123BN321"

}

],

"Parts":[

{

"Weight" : "20.5",

"Quantity" : "8",

"WeightQualifier" : "Gross",

"WeightUnitCode": "Pounds",

"BOL": "BOL123"

}

],

"DateTimes":[

{

"TimeQualifier" : "Earliest",

"Value" : "2018-01-25T00:00:00Z",

"TimeZone" : "EasternTime"

},

{

"TimeQualifier" : "Latest",

"Value" : "2018-01-25T00:00:00Z",

"TimeZone" : "EasternTime"

}

],

"StopEntity" : {

"Type" : "Pickup",

"Name" : "Sears Pick-up Warehouse",

"Location": {

"AddressLine1" : "123Addr1",

"State" : "MI",

"City" : "Ann arbor",

"Zip" : 48109,

"CountryCode": "US",

"Lat" : 42.3032191,

"Lng" : -83.6802387

}

}

},

{

"StopNumber": 2,

"ReferenceNumbers":[

{

"Type" : "BookingNumber",

"Value" : "123BN555"

}

],

"Instructions":[

{

"Type" : "Alert",

"Value" : "123BN555"

}

],

"Parts":[

{

"Weight" : "20.5",

"Quantity" : "8",

"WeightQualifier" : "Gross",

"WeightUnitCode": "Pounds"

}

],

"DateTimes":[

{

"TimeQualifier" : "Scheduled",

"Value" : "2018-01-28T00:00:00Z",

"TimeZone" : "EasternTime"

}

],

"StopEntity" : {

"Type" : "Delivery",

"Name" : "Sears Delivery Warehouse",

"Location": {

"AddressLine1" : "123Addr1",

"State" : "MI",

"City" : "Detroit",

"Zip" : 48202,

"CountryCode": "US",

"Lat" : 42.3751564,

"Lng" : -83.0948781

}

}

}

],

"TotalParts" : {

"Quantity" : 1,

"WeightQualifier" : "Gross",

"BOL" : "bol2",

"POD" : "pod"

}

}

]

# JSON Response Example After a Successful Post Request

##### Below is an example of 2 of the transactions failing out of the 3. This can happen for any post type request.

{

"resultStatus": {

"errors": [

{

"message": "PICKUP FAILED FOR TRADING PARTNER 11111 DUE TO...",

"transactionGuid": "2a50ee5c-daa2-42f9-b2a3-35fd4213dced"

},

{

"message": "DELIVERY FAILED FOR TRADING PARTNER 11111 DUE TO...",

"transactionGuid": "7a1cc464-8866-4acf-8853-e73695479ef2"

}

],

"success": [

{

"transactionGuid": "f4b9f4ed-c050-47a9-9d38-d6cae705cce7"

}

]

}

}

# Additional Remarks

## Web API

* All dates/times are sent/received in UTC (universal time), unless a timezone is provided.
* Each request and response will contain a GUID (i.e. 128-bit Global Unique Identifier)
* When posting, if some transactions fail due to validation rules, it’ll still return a 200 HTTP OK status with the body containing the error message in json format
* A 500 HTTP server status error will just return a single line of text and not JSON

## EDI

* All Load Tenders (204) require a Load Tender Response (990)
* When sending a stop within the milestone (214) update, only the StopEntity (location, etc.) needs to be provided and NOT the full stop details
* Invoices (210) will not support rebills/credits; only the originals
* Milestone updates (214): Arrive, loaded, empty, check-calls, and *ETAs to final delivery* are expected for all active loads being tracked via this integration. Checkcalls are expected every hour
* Logs will be kept for 6 months

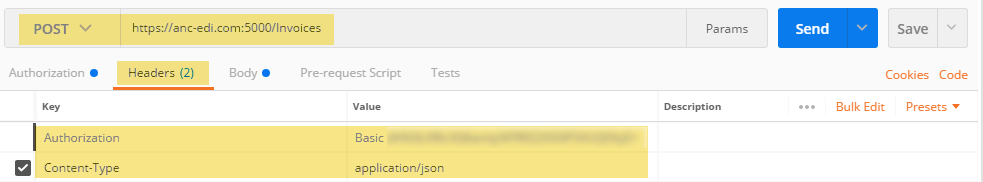
# Recommended Applications

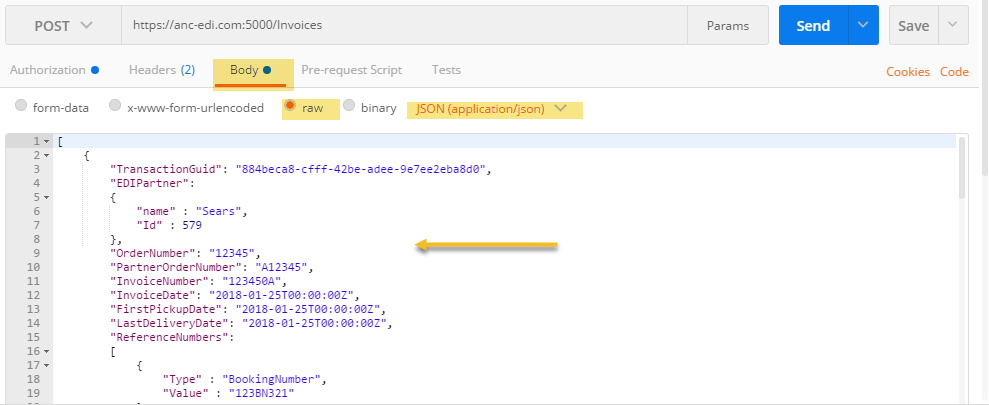
## Postman

A free GUI that aids in the testing of http(s) web requests

<https://www.getpostman.com/>

### Example Usage





## Telerik Fiddler

A free GUI that allows you to decipher/log/debug http(s) requests and responses

<https://www.telerik.com/download/fiddler-wizard>

## json2csharp

A tool that converts JSON to C# classes

<http://json2csharp.com/>