

Blume Visibility Milestones API Integration Guide (Push)

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1. Blume Visibility Milestones API Integration Guide (Push)

The latest version is: **v1.0**

This document outlines the Application Programming Interfaces (APIs) connected to the Blume Visibility™ system, known here into as “Visibility”. The API in this document is the Shipment Milestone API. The purpose of this API is for the user to track shipments in Visibility.

1.1. Milestone RESTful API

The document contains the following sections

<p>#unique_2 (on page)</p> <p>The primary audience for this document includes internal developers and partner developers who will integrate Visibility with their systems. Additionally, the supply chain manager may refer to this document for integration context. A basic understanding of APIs, Hyper Text Transfer Protocol (HTTP), and Representational State Transfer (REST) may be required to understand the concepts described in this document.</p>	<p>Documentation (on page)</p> <p>The Shipment Milestone API provides users with an electronic data exchange method for tracking shipments in the Blume Visibility platform. This section also provides the API guidelines that will need to be followed.</p>
<p>Milestones (on page)</p> <p>The Shipment Milestone API enables users to track a shipment through a series of events. An Event is something that changes the state of a shipment. We differentiate between three types of event dates; planned, estimated, and actual event dates. Planned dates are assessed automated based on historic system data. Estimated and actual dates are provided by different sources like carriers or other third parties.</p>	<p>#unique_5 (on page)</p> <p>This section provides a list of common error codes that appear with the documentation.</p>

1.2. Where to Start

We strongly recommend you start with the `#unique_2` (on page) to learn the structure of the Milestone RESTful API.

2. Introduction

The primary audience for this document includes internal developers and partner developers who will integrate Visibility with their systems. Additionally, the supply chain manager may refer to this document for integration context. A basic understanding of APIs, Hyper Text Transfer Protocol (HTTP), and Representational State Transfer (REST) may be required to understand the concepts described in this document.

3. API Overview

Blume Delivers milestones data as and when new events are received.

3.1. Domains

To be whitelisted during implementation.

The API Endpoint will be provided by the customer for Blume to deliver milestone data.

4. Shipment Milestones

Blume will provide the details of milestones to the customer as the events are received. An Event is something that changes the state of a shipment. We differentiate between three types of event dates; planned, estimated, and actual event dates. Planned dates are assessed automated based on historic system data. Estimated and actual dates are provided by different sources like carriers or other third parties. Events are defined by the event name. The event names apply to the different locations/stops of the respective shipment. Only the events mapped with the user's organization will be available. Shipments can be tracked using a container ID and a reference number.

4.1. Shipment Mode Vs Reference Parameter

Shipments can be tracked using below reference numbers based on the mode of the shipment.

Shipment Mode	Reference Parameter
Air	HouseBill or MasterWayBillNumber
Ocean	BookingNumber or billofLading
Dray	WorkOrderNumber or BookingNumber or billofLading
Rail	BookingNumber or billofLading
Parcel	TrackingNumber
LTL	proNumber

4.2. Sample Data Format for the Shipment Milestone Details

Blume will provide the shipment milestone details to the customer in the following format:

```
{
  "shipmentStatus": "Active",
  "reference": "COSU02220143",
  "unitId": "VMLU2202243",
  "stops": [
    {
      "stopNumber": 1,
      "locationType": "PORT",
      "location": "Haiphong",
      "city": "Haiphong",
      "state": "Haiphong",
    }
  ]
}
```

```

    "country": "VN",
    "latitude": 20.84491,
    "longitude": 106.68808,
    "timezone": "Asia/Bangkok",
    "milestones": [
      {
        "eventCode": "AE",
        "eventName": "Container Load",
        "estimatedDate": "2022-09-08T21:00:00.000+00:00",
        "plannedDate": "2022-09-08T21:00:00.000+00:00"
      },
      {
        "eventCode": "VD",
        "eventName": "Vessel Departure",
        "estimatedDate": "2022-09-09T00:00:00.000+00:00",
        "actualDate": "2022-09-07T20:34:00.000+00:00",
        "plannedDate": "2022-09-09T00:00:00.000+00:00"
      }
    ]
  },
  {
    "stopNumber": 2,
    "locationType": "PORT",
    "location": "Yantian",
    "city": "Yantian",
    "state": "Fujian",
    "country": "CN",
    "latitude": 26.85000,
    "longitude": 119.86667,
    "timezone": "Asia/Shanghai",
    "milestones": [
      {
        "eventCode": "CT",
        "eventName": "Customs Release"
      },
      {
        "eventCode": "VA",
        "eventName": "Vessel Arrival",
        "estimatedDate": "2022-12-08T09:27:00.000+00:00",
        "plannedDate": "2022-09-11T05:00:00.000+00:00"
      },
      {
        "eventCode": "UV",
        "eventName": "Container Unload",
        "estimatedDate": "2022-12-10T08:27:00.000+00:00",
        "plannedDate": "2022-09-13T04:00:00.000+00:00"
      }
    ]
  },

```

```
{
  "eventCode": "AE",
  "eventName": "Container Load",
  "estimatedDate": "2022-12-12T06:27:00.000+00:00",
  "plannedDate": "2022-09-15T02:00:00.000+00:00"
},
{
  "eventCode": "VD",
  "eventName": "Vessel Departure",
  "estimatedDate": "2022-12-12T09:27:00.000+00:00",
  "plannedDate": "2022-09-15T05:00:00.000+00:00"
}
],
{
  "stopNumber": 3,
  "locationType": "PORT",
  "location": "Long Beach",
  "city": "Long Beach",
  "state": "California",
  "country": "US",
  "latitude": 33.76667,
  "longitude": -118.18333,
  "timezone": "America/Los_Angeles",
  "milestones": [
    {
      "eventCode": "CT",
      "eventName": "Customs Release"
    },
    {
      "eventCode": "VA",
      "eventName": "Vessel Arrival",
      "estimatedDate": "2023-01-06T11:27:00.000+00:00",
      "actualDate": "2022-09-27T20:34:00.000+00:00",
      "plannedDate": "2022-09-27T00:00:00.000+00:00"
    },
    {
      "eventCode": "UV",
      "eventName": "Container Unload",
      "estimatedDate": "2023-01-08T10:27:00.000+00:00",
      "plannedDate": "2022-09-28T23:00:00.000+00:00"
    },
    {
      "eventCode": "CA",
      "eventName": "Container Available",
      "estimatedDate": "2023-01-08T10:27:00.000+00:00",
      "plannedDate": "2022-09-28T23:00:00.000+00:00"
    }
  ]
}
```



```
}
]
}
]
}
```

4.3. Additional Sample Data Format for the Shipment Milestone Details

Blume will provide the shipment milestone details to the customer in the following format:

```
{
  "shipmentStatus": "Active",
  "reference": "BLMA02108937",
  "unitId": "LCLU0228937",
  "stops": [
    {
      "stopNumber": 1,
      "locationType": "DC",
      "location": "Rancho Cucamonga",
      "city": "Rancho Cucamonga",
      "state": "California",
      "country": "US",
      "latitude": 34.10000,
      "longitude": -117.58333,
      "timezone": "America/Los_Angeles",
      "milestones": [
        {
          "eventCode": "X3",
          "eventName": "Pick Up",
          "estimatedDate": "2022-11-18T00:00:00.000+00:00",
          "plannedDate": "2022-11-17T23:00:00.000+00:00"
        },
        {
          "eventCode": "OA",
          "eventName": "Gate Out",
          "estimatedDate": "2022-11-18T01:00:00.000+00:00",
          "actualDate": "2022-11-18T10:00:00.000+00:00",
          "plannedDate": "2022-11-18T00:00:00.000+00:00"
        }
      ]
    },
    {
      "stopNumber": 2,
      "locationType": "DC",
```

```

    "location": "Brownwood",
    "city": "Brownwood",
    "state": "Texas",
    "country": "US",
    "latitude": 31.70932,
    "longitude": -98.99116,
    "timezone": "America/Chicago",
    "milestones": [
      {
        "eventCode": "I",
        "eventName": "Gate In",
        "estimatedDate": "2022-11-19T20:17:00.000+00:00",
        "plannedDate": "2022-11-19T10:17:00.000+00:00"
      },
      {
        "eventCode": "X1",
        "eventName": "Delivered",
        "estimatedDate": "2022-11-19T21:17:00.000+00:00",
        "plannedDate": "2022-11-19T11:17:00.000+00:00"
      }
    ]
  }
]
}

```

4.4. Field Description

Attribute Names pertaining to date and time for example "actualDate" is represented as "MM-dd-yyyy HH:mm".

The field descriptions for the attributes listed in the JSON code block are provided below:

Table 1. Milestone API

Attribute Name	Type	Max Length	Description
stopNumber	bigint	2	Number of stops on the shipment leg
locationType	string	50	Location Type of shipment
location	string	200	Location Name of Shipment
city	string	50	City of shipment party

Table 1. Milestone API (continued)

Attribute Name	Type	Max Length	Description
state	string	20	State name of shipment party
country	string	20	Country Name of shipment party
latitude	decimal	20,5	Latitude coordinates of location
longitude	decimal	20,5	Longitude coordinates of location
timezone	string	3	Name of the timezone
eventCode	string	10	Identification code of the event
eventName	string	255	Name of the event
estimatedDate	datetime		Estimated date and time for the milestone
plannedDate	datetime		Planned date and time for the milestone
actualDate	datetime		Actual date and time for the milestone
purchaseOrderNumber	string	50	Represents Purchase Order Numbers (List)
masterShipmentReference	string	100	Represents Shipment Number
partyTypeName	string	100	Represents Party Type
partyName	string	250	Represents the Party Organization Name

Table 1. Milestone API (continued)

Attribute Name	Type	Max Length	Description
partyCode	string	250	Represents the Party Organization Code
billOfLading	string	255	Represents the BillOfLading Number
bookingNumber	string	100	Represent the Booking Number
houseWayBillNumber	string	100	Represents the HouseBill Number
masterWayBillNumber	string	100	Represents the Master Way Bill Number/Airway Bill Number
workOrderNumber	string	100	Represents the Work Order Number
proNmber	string	100	Represents Pro Number of the LTL Shipments
trackingNumber	string	100	Represents the Tracking Number of the Parcel Shipments
equipmentNumber	string	50	Represents the Container Id