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## **Version History:**

S.N	Version	Date	Description	Editor
0				
1	1.0	02-15-2021	Document Created	Burt Kandel
2	1.1	06-04-2021	Added Container Availability specifications, Updated the Priority description to include in yard containers, Added VIP service workflow diagram	Burt Kandel

3	1.2	08-03-2021	Minor changes to the	Burt Kandel
			vip service	
			descriptions for ease	
			of understanding	
4	1.3	08-04-2021	Added sample of	
			"Cancel" request for a	
			VIP service	

## Introduction

In this document, you will learn about the different Fenix services that Fenix Commercial Interface (FCI) provides to our partners, as well as providing steps on how to access and use these features. Today, you will be able to access our VIP services through FCI. These are premium services that your customers will be able to use on your platform for a single additional fee per service use. These services include automatically setting up the best possible appointment for a container using the HONE AI algorithm, reserving a premium appointment time slot, requesting an expedited service that allows containers mounted on a chassis and ready to go much earlier than usual, and allowing your customers to view the availability of their containers.

## Scope

#### **VIP Services**

Third party systems make use of an Online Service to subscribe to VIP services in Fenix.

#### Assumptions:

- 1. The Online Commercial Portal can give companies access to VIP services.
- 2. The company requesting an appointment has the Express VIP service active.

FMS currently provides the below types for performing the VIP service.

#### 1. EXPRESS

Third Party vendors can make use of the ICU requests to subscribe to our Express Service (automatic appointments). The service creates an appointment for the selected containers using our Al algorithm(HONE) to create the best possible appointment. Once the workflow is complete, a service completion response is sent back to the vendor.

Agents can also use the ICU request to reschedule an appointment. When a "reschedule" request is desired, the partner portal will send an appointment reschedule request. Fenix will cancel the associated appointment that was created by the Express service and send a response to the agent on successful cancellation. The subscription to the service will not be canceled. Instead, the agent will

receive another appointment for the specified container. This reschedule will only happen once per service. If the rescheduled appointment is cancelled, the agent must pay again for the service.

#### 2. PREFERRED

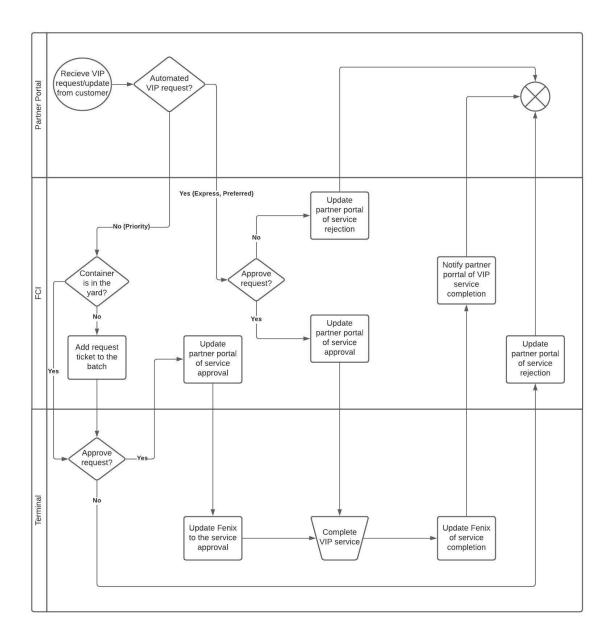
The Preferred service allows a partner portal to reserve an appointment even when there are no appointment time slots available. By requesting Fenix Preferred, agents ensure that they have the best and earliest appointments available. This service will expedite the agent's shipment with access to earlier appointments. Since this service is performed immediately after approval, there is no way for end users to cancel this service.

#### 3. PRIORITY

Fenix Priority is a service that mounts a selected container on wheels and is ready to go as soon as it comes off the vessel. This service is a two-step process. Fenix receives the request from third party vendors and sends the request into a batch to await approval. After twenty four hours before vessel arrival, the service is approved or rejected. Upon approval/rejection, the third party vendor is notified.

Fenix Priority also allows customers to request the service for containers that are already in the yard. These requests are not put in a batch and are approved or rejected immediately like the Express and Preferred service.

### VIP Service Workflow



## **Fenix Web Service API**

The web service in general refers to a standardized way of integrating different applications hosted over a network. In Fenix, the web service always represents SOAP based services which complies to the WSDL standards. Third party systems can make use of the below service available for integrating with Fenix.

1. argo-service.wsdl – genericInvoke Web Service used for Gate, ICU, HPU. FMS UAT: [Link will be provided separately]

## **Request & Response parameters**

All calls to the common Web Service API have the same general form:

- 1. The scope of the request, i.e., the terminal operator, complex, facility, and Yard. (FMS/USSPQ/FMS/FMS).
- 2. User credentials (will be generated and shared to each Partner)
  Create the SOAP request by encoding the user credentials as a base64 token and send the Authentication parameter as part of the MIME header.
- 3. XML payload for the specific operation

The response from Fenix has a common format:

- 1. Any messages that have been generated during the call (info, warning or severe).
- 2. A single status code indicating the worst level of any of the messages.
- 3. Results from the specific operation.

Note: The response message would have the status of API failed or succeeded and error messages as free format text. The error messages are subject to change.

## Web Service from VIP Clients

Third-party Customers must submit an ICU request to the Fenix web service API for subscribing to the VIP services from Fenix. Fenix Web Services APIs treat the third-party client application as an authorized user. The client application must include a valid username and password combination, and topology information with each request.

#### Message Structure

The Incremental Container Update (ICU) is a standard Fenix web-service API that allows external systems to update properties of an existing Unit in Fenix. The request is identified by the root element icu. The naming conventions and node elements are as follows.

Tag	Data Type	Purpose	Sample Data
units	node		NA
unit-identity	node		
id	attribute	The Unit number to be updated in FCI as an identifier.	CMAU1290824
type	attribute		CONTAINERIZED
properties	node		
property	node		
tag	attribute	The Property name of the Unit that needs to be updated in FCI	vip-type
value	attribute	The Property value of the Unit that is to be updated in FCI	EXPRESS

#### **Properties**

Following are the properties expected in the **property** tag of the incoming ICU request.

External Tag	Sample Input	Description
vip-type	EXPRESS	VIP Type – Type of service the Unit is being designated with. Can be one of the below.  - EXPRESS - PRIORITY - PREFERRED - CANCEL
partner-id	MAE	Partner ID – Id of the VIP Client that is configured in FCI as an Agent
exempt	YES	(Optional) Identifier for Appointment Override (aka Fenix Preferred). Can be one of the below.  - YES - NO

## Sample Request for subscribing to VIP service:

```
<icu>
<units>
<unit-identity id="CMAU1230907" type="CONTAINERIZED">
</unit-identity>
</units>
<properties>
<property tag="vip-type" value="EXPRESS"/>
<property tag="partner-id" value="MAE"/>
<property tag="exempt" value="NO"/>
</properties>
</icu>
```

The value attribute of vip-type will differ for the different services.

## Sample Response:

When the request is processed successfully, the below response will be generated, with status code "0" and status-id "OK".

### Sample Request for cancelling a VIP service:

#### **Error Response:**

A response with status code "3" and status-id "SEVERE" is returned in case of failure in processing the request.

#### **Fenix Preferred Service**

Vendors can use the below request to perform *Appointment Exemption(override)*. Fenix expects the ICU request to be sent with the "exempt" attribute set to "YES" which will provide new appointment creation options for Gate processing.

```
<icu>
<units>
<unit-identity id="CMAU1241898" type="CONTAINERIZED">
</unit-identity>
</units>
<properties>
<property tag="partner-id" value="XYZ"/>
<property tag="vip-type" value="PREFERRED"/>
<property tag="exempt" value="YES"/>
</properties>
</icu>
```

The above request is expected with property exempt set to "NO" or "" for canceling the Exemption.

## Pre-record Truck details - Web Service for Appointment update

FMS provides a custom WS request to perform updates to Appointment created by Express service in Fenix. Vendors can use this request to make the updates. The request will replace the dummy data for the truck license plate number and the trucking company that is used automatically in VIP service requests. On successful update of the Appointment, a response message will be sent to the Agent.

#### Message Structure

The Update appointment request is identified by the root element **custom** with two attributes, class as "FMSAppointmentWSHandler" and type as "extension". The naming conventions and node elements are mentioned below.

Tag	Data Type	Purpose	Sample Data
appointment	node		
appointment-identity	node		
ctrNbr	attribute	Container number in Fenix as an identifier.	TRLU4859943
type	attribute	Transaction type of the Appointment that requires update PICKUP (Delivery transaction) - DROPOFF (Receive transaction)	PICKUP
apptNbr	attribute	Appointment number in Fenix as an identifier.	1072695
extRefNbr	attribute	External reference number of the appointment in Fenix as an identifier.	FTA1233314
properties	node		

property	node		
tag	attribute	The Property name of the appointment that needs to be updated in Fenix	ApptTruckLicenseNbr
value	attribute	The Property value of the appointment that needs to be updated in Fenix	ZZ158

### **Properties**

Following are the properties that can be passed in the **property** tag of the incoming request. These are the attributes for which the updates will be performed.

External Tag	Sample Input	Description
ApptTruckLicenseNbr		License Plate of the Truck to be updated in Appointment.
ApptTruckId	107509	(Optional) Truck ld to be updated in Appointment.
TruckingCompanyIdRef	AAAD	A Unique id for the Trucking Company to update in Appointment.

## **Sample Request:**

#### Note:

The appointment is identified in Fenix by the *apptNbr* or *extRefNbr* (apptNbr takes precedence). If the apptNbr/ extRefNbr in the request is invalid or if the request does not have the appointment identifier, the second level of search will be based on the Container number and transaction type combination.

- If Fenix receives a request with type="PICKUP", the next pending Delivery Appointment created for container <ctrNbr> will be updated.
- If Fenix receives a request with type="DROPOFF", the next pending Receival Appointment created for container <ctrNbr> will be updated.

One of the three identifiers is sufficient for Fenix to process the request.

### **Sample Response:**

If the request is processed successfully, the below response will be generated, with status code "1"

```
<?xml version="1.0" encoding="UTF-8"?>
<argo-response status="1" status-id="INFO">
  <messages>
  <message message-id="APPT_DETAILS_UPDATED" message-severity="INFO"
message-text="Appointment details updated successfully." />
  </messages>
  <argo:custom-response xmlns:argo="http://www.navis.com/argo" />
  </argo-response>
```

#### **Error Response:**

If the request fails, a response with status code "3" and status-id "SEVERE" will be sent back.

```
<?xml version="1.0" encoding="UTF-8"?>
<argo-response status="3" status-id="SEVERE">
  <messages>
    <message message-id="ERROR_APPOINTMENT_FOR_ID_DOES_NOT_EXIST" message-severity="SEVERE"
    message-text="No appointment with id '112' exists for the facility." message-detail="No appointment with id '112' exists for the facility." />
    </messages>
    <argo:custom-response xmlns:argo="http://www.navis.com/argo" />
    </argo-response>
```

The naming conventions and node elements for the service completion message is below.

Tag	Data Type	Purpose	Sample Data
appointments	root node		NA
mode	attribute	Represents the VIP mode. Listed below are the applicable modes that will be sent in responsecreate -update -cancel -expiry -gate-out	create
appointment	node		
gate-id	attribute	Gate Id for which the appointment was created in N4	MAIN

appointment-nbr	attribute	The unique Id generated in N4 on creation of appointment	23141
external-ref-nbr	attribute	The reference number to identify this gate appointment	E11588
service	attribute	Type of VIP that the client had subscribed to in N4.	EXPRESS
tran-type	attribute	The type of transaction for which the appointment is made for.	Pick Up Import
ctr-id	attribute	The id of the container for which this appointment is made.	CMAU1290824
license-nbr	attribute	The truck license number to identify the truck for this appointment.	ZZ1158
trucking-co-id	attribute	The trucking company defined this appointment. Hone will create an Appointment with a Fake SCAC.	HONE123
pin-nbr	attribute		3211
appointment-slot-start	attribute	Appointment slot start time.	2021-01-13T00:00:00
appointment-slot-end	attribute	Appointment slot end time.	2021-01-13T00:29:00

Below is the sample response message that will be sent from Fenix to the Partners. This message will be sent out from Fenix to the respective Agent on gate-out, Appointment creation, Appointment Expiry, Appointment usage and cancellation of Appointment. The mode for each trigger will differ as defined in the message structure. For instance., If the Appointment created by the VIP service has expired without usage, the response will be sent with mode="expiry".

```
<fci><appointments mode="create" activity-time="2021-01-13T00:00:00">
<appointment gate-id="MAIN" appointment-nbr="23141" external-ref-nbr="11588"
service="EXPRESS" tran-type="Pick Up Import" ctr-id="CMAU1290824" license-nbr="ZZ158"
trucking-co-id="AAAD"
pin-nbr="9054" appointment-slot-start="2021-01-13T00:00:00"
appointment-slot-end="2021-01-13T00:29:00">
</appointment>
</appointment>
</appointments>
<unit/>
</fci>
```

The above message will be sent on the following triggers, the mode will change for each trigger.

- create
- update
- cancel

- expiry
- gate-out

#### **PRIORITY Workflow**

Priority request received from the partner portal.

```
<icu>
<units>
<unit-identity id="TCLU8683529" type="CONTAINERIZED">
</unit-identity>
</units>
<properties>
<property tag="vip-type" value="PRIORITY"/>
<property tag="partner-id" value="MAE"/>
</properties>
<event/>
</icu>
```

Successful Priority Response from Fenix:

On approval, the partner portal receives the below message.

```
<fci> <appointments/> <unit vip-type="PRIORITY" activity-time="2021-01-13T00:00:00" status="APPROVED"/> </fci>
```

If Fenix rejects the subscription, the partner portal receives the below message.

```
<fci><appointments/>
<unit vip-type="PRIORITY" activity-time="2021-01-13T00:00:00" status="REJECTED"/>
</fci>
```

## **Dispute Workflow**

Dispute received for a Unit subscribed with Express service.

### Successful response:

Once Fenix receives Approval from Zendesk, the partner portal will receive the below message.

```
<fci><appointments/>
<unit id ="WHSU2620331" vip-type="DISPUTE" ref-nbr="ZENDESK #"
activity-time="2021-02-15T00:00:00" status="APPROVED" note=""/>
</fci>
```

If the Dispute is rejected by Fenix, the partner portal receives the below message.

```
<fci><appointments/>
```

<unit id="WHSU2620331" vip-type="DISPUTE" ref-nbr="ZENDESK #"
activity-time="2021-02-15T00:00:00" status="REJECTED" note="Dispute
reason"/>
</fci>

# FMS Container Availability Specification

### **Availability API**

Container Availability is used to provide your customers with the status of their container. This api call will respond back with many parameters that are pertinent to your customer (view Response Parameters below).

### Request to Fenix UAT

http://honeuat.fenixmarineservices.com:10080/apex/api/codeextension?extensionname=FenixCheckCtrAvailability&operatorId=FMS&complexId=USSPQ&facilityId=FMS&yardId=FMS&PARM\_filterName=UNIT\_FINDER\_QUERY&PARM\_CTRNBR=CMAU2164395,TTNU1153492,OOLU9395758,TCNU1654280

SI No	Parameter Name	Description	Value	
1.	ExtensionName	Name of the Code Extension.	FenixCheckCtrAvailability	
2.	OperatorId	A single client who uses the system at the highest level of the organizational hierarchy.	FMS	
3.	ComplexId	Two or more facilities that function as one business unit. They share reference data, containers, bookings, and other business information. An operator can have multiple complexes.	USSPQ	
4.	FacilityId	A terminal, including its yards. A complex can have multiple facilities.		
5.	YardId A discrete area in a facility. A facility can have multiple yards.		FMS	
6.	FilterName	N4, a set of criteria that you define to limit the data that is displayed in a list view. For example, in the <b>Units</b> view, you can create a filter to display only the import containers.	UNIT_FINDER_QUERY	

7.	CTRNBR	ID of the selected Container.	Sample
			-CMAU2164395,TTNU1153492

Note – CTRNBR is the only parameter to be updated in the Request.

## **RESPONSE Parameters:**

SI No	Parameter Name	Description	Sample
1.	Last Move	A crane/vessel productivity metric. At vessel level, the latest of the last move times of all the cranes that worked on the vessel.	21-May-03 0433
2.	Unit Nbr	ID of the requested unit.	TCNU1654280
3.	Type ISO	A code that was established by the International Standards Organization (ISO) to describe equipment. For example, an ISO code of 2200 denotes a 20' long, 8' 6" high, general purpose container without ventilation.	45G1
4.	Frght Kind	The status of a unit, based on its contents:  • Empty: Empty container • FCL: Full Container Load • LCL: Less-than Container Load • B-bulk: Break-bulk	FCL
5.	Category	A legal designation or classification of a unit, such as Domestic, Export, Import, Storage, Through, or Transship.	Import
6.	V-State	A broad state that N4 uses to indicate when a unit is active for a particular facility in a complex. Visit states can be any of the following:  1. Advised: A unit that is incoming but not certain to arrive at the facility, such as a unit created via an EDI message. A unit in the Advised state is not visible in XPS.	Active
		<b>2. Active:</b> The current live use of a unit for a facility. The unit can be located on	

		an inbound carrier, in the yard at the facility, or on an outbound carrier. A unit in the Active state is visible in XPS.  3.Departed: A unit that departed a facility on an outbound carrier. The unit is not located at the facility and is not visible in XPS.	
		<b>4. Retired:</b> A special state that indicates that the unit visit life cycle ended at the facility.	
7.	T-State	A state for a unit that N4 uses to describe the status in the terminal. Transit states can be any of the following:  1. Advised: Is incoming but not certain to arrive.  2. Inbound: Is incoming and located on an inbound carrier.  3. EC/In (or EC-In): Is incoming and at the facility. For example, a unit that is in a queue and waiting for the equipment control in XPS to place it in the yard.  4. Yard: Is in a specific position in a yard in a facility.  5. EC/Out (or EC-Out): Is in a queue at a facility and waiting for the equipment control in XPS to deliver it.  6. Loaded: Is loaded on an outbound carrier.  7. Departed: Departed on an outbound carrier.	Yard
		<b>8. Retired</b> : Is in a special state to indicate that the unit visit life cycle ended at the facility.	

8.	Position	The place of a unit in a facility. <b>Position</b> has the following components:	Grounded
		<ul> <li>o If the Unit is in Yard and in a</li> <li>Wheeled Location – Wheeled</li> <li>o If the Unit is in Yard and in a</li> <li>Grounded Location – Grounded</li> </ul>	
		If the Container is not in Yard, below format will be applicable.	
		<b>Location Type:</b> The location of the unit or equipment, which can have only one of the following values:	
		<ul> <li>T: Truck if the unit or equipment is on a truck</li> <li>R: Rail if the unit is on a train</li> <li>V: Vessel if the unit is on a vessel</li> </ul>	
		<b>Location ID:</b> Additional details for the location, or one of the following:	
		<ul><li>o Carrier visit ID if the unit is on a truck, vessel, or train.</li><li>o Yard block if the unit is in the yard.</li></ul>	
		Location slot if applicable	
9.	Line Op	A business that operates ships that it may or may not own. In relation to equipment, it is the shipping line responsible for the equipment.	СМА
10.	I/B Declared Carrier Mode	The carrier mode of transport, such as truck, vessel, or train, for the declared inbound carrier visit. Used when the declared inbound carrier mode the carrier visit is unknown, but the mode of arrival is known.	Vessel
11.	O/B Actual Mode	Outbound carrier mode of transport, such as truck, vessel, or train, for the actual inbound carrier visit	Truck

12.	POD	The routing point where a unit is expected to be discharged from the declared outbound carrier visit that takes the unit away from the complex.	SPQ
13.	Storage Charges	Pending charges owed for the Unit in consideration.	1200
14.	Impediments:Ro ad	A list of active holds and required permissions for service business rules that are associated with a gate event, such as a deliver event, for a unit.	CUSTOMS,BL LINE HOLD,TMF-HOLD
15.	Hold Status	Displays whether the holds/permissions associated with a unit.  On Hold – If there are Active Hold that prevents delivery.	On Hold
16.	Appt Status	Whether the appointment is in created, cancelled, expired, used or null.	EXPIRED
17.	Appt Slot Start Time	The start time of the first appointment time slot during the day using military time.	2021-05-20 00:00:00.0
18.	Appt Slot End Time	The end time of the last appointment time slot during the same day using military time.	2021-05-20 00:29:00.0
19.	Appointable Status	Denotes if the Container is Ready/ Available for creation of Appointment.	NO
20.	LastFreeDay	The last day until when a container can be stored at the terminal before it starts to incur demurrage.	Fri Feb 26 00:00:00 PST 2021

## Sample Requests and Responses

## Sample Request 1-

http://honeuat.fenixmarineservices.com:10080/apex/api/codeextension?extensionname=FenixCheckCtrAvailability&operatorId=FMS&complexId=USSPQ&facilityId=FMS&yardId=FMS&PARM\_filterName=UNIT\_FINDER\_QUERY&PARM\_CTRNBR=TCNU1654280

The following parameter "PARM\_CTRNBR" accepts comma separated container numbers.

#### Response:

Below Unit still has Active Holds in the system and hence is not available for delivery.

```
<?xml version="1.0" encoding="UTF-8"?>
<query-response>
  <data-table filter="UNIT FINDER QUERY" count="1">
    <columns>
      <column>Last Move</column>
      <column>Unit Nbr</column>
      <column>Type ISO</column>
      <column>Frght Kind</column>
      <column>Category</column>
      <column>V-State</column>
      <column>T-State</column>
      <column>Position</column>
      <column>Line Op</column>
      <column>I/B Dclrd Mode</column>
      <column>O/B Actual Mode</column>
      <column>POD</column>
      <column>Storage Charges</column>
      <column>Impediments:Road</column>
      <column>Hold Status</column>
      <column>Appt status</column>
      <column>Appt Slot Start Date</column>
      <column>Appt Slot End Date</column>
      <column>Appointable Status
      <column>LastFreeDay</column>
    </columns>
    <rows>
      <row primary-key="7408274">
        <field>21-May-03 0433</field>
        <field>TCNU1654280</field>
        <field>45G1</field>
       <field>FCL</field>
        <field>Import</field>
        <field>Active</field>
        <field>Yard</field>
        <field>Grounded</field>
        <field>CMA</field>
        <field>Vessel</field>
        <field>Vessel</field>
        <field>SPQ</field>
        <field>31330.0</field>
        <field>CUSTOMS, BL LINE HOLD, TMF-HOLD</field>
        <field>On Hold</field>
        <field>EXPIRED</field>
        <field>2021-05-20 00:00:00.0</field>
        <field>2021-05-20 00:29:00.0</field>
        <field>NO</field>
        <field>Fri Feb 26 00:00:00 PST 2021</field>
      </row>
    </rows>
  </data-table>
</query-response>
```

#### Sample Request 2:

http://honeuat.fenixmarineservices.com:10080/apex/api/codeextension?extensionname=FenixCheckCtrAvailability&operatorId=FMS&complexId=USSPQ&facilityId=FMS&yardId=FMS&PARM\_filterName=UNIT\_FINDER\_QUERY&PARM\_CTRNBR=CMAU0334363,TGHU0021612

#### Response:

```
<?xml version="1.0" encoding="UTF-8"?>
<query-response>
  <data-table filter="UNIT FINDER QUERY" count="2">
    <columns>
      <column>Last Move</column>
      <column>Unit Nbr</column>
      <column>Type ISO</column>
      <column>Frght Kind</column>
      <column>Category</column>
      <column>V-State</column>
      <column>T-State</column>
      <column>Position</column>
      <column>Line Op</column>
      <column>I/B Dclrd Mode</column>
      <column>0/B Actual Mode</column>
      <column>POD</column>
      <column>Storage Charges</column>
      <column>Impediments:Road</column>
      <column>Hold Status</column>
      <column>Appt status</column>
      <column>Appt Slot Start Date</column>
      <column>Appt Slot End Date</column>
      <column>Appointable Status
      <column>LastFreeDay</column>
    </columns>
    <rows>
      <row primary-key="7305050">
        <field>21-Apr-27 0708</field>
        <field>CMAU0334363</field>
        <field>22G1</field>
        <field>LCL</field>
        <field>Import</field>
        <field>Active</field>
        <field>Yard</field>
        <field>Grounded</field>
        <field>CMA</field>
        <field>Vessel</field>
        <field>Truck</field>
        <field>CH3</field>
        <field>26975.0</field>
        <field />
        <field />
        <field>EXPIRED</field>
        <field>2021-04-06 09:30:00.0</field>
        <field>2021-04-06 09:59:00.0</field>
        <field>NO</field>
        <field>Fri Mar 12 00:00:00 PST 2021</field>
      </row>
      <row primary-key="7302926">
        <field>21-Apr-23 0424</field>
        <field>TGHU0021612</field>
        <field>22G1</field>
        <field>FCL</field>
        <field>Import</field>
        <field>Active</field>
        <field>Yard</field>
        <field>Grounded</field>
        <field>CMA</field>
        <field>Vessel</field>
        <field>Truck</field>
        <field>SPQ</field>
        <field>10560.0</field>
        <field />
        <field />
        <field>EXPIRED</field>
        <field>2021-05-05 00:00:00.0</field>
```