

API Implementation Guide — Imaging

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Document Owner	XPO Less-Than-Truckload IT Service Governance Team
API Name	Imaging
API Description	The Imaging API is used to access imaged documents.
Document Purpose	This document details the use the imaging operation <code>getShipmentImagedDocuments</code> . Each operation will show the request and response interfaces for the operation, describing mandatory and optional elements. They will also specify values permitted for a field, any formatting constraints, as well as any errors that may be encountered.
Operation Descriptions	getShipmentImagedDocuments: returns images associated with a requested shipment.

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1 Introduction

1.1 Purpose

The purpose of this document is to provide a technical guide for the Imaging JSON API service.

For information on general XPO LTL API setup, including security; health check; rate limits; discovering API options; response structures; and test mode, see the API Help Center on LTL.XPO.com.

1.2 Scope

This document covers the execution environment, operation definitions, input and output descriptions, and sample inputs and outputs.

2 Imaging Execution

2.1 Production Environment

Endpoint:

Production: <https://api.ltl.xpo.com> (*this endpoint should be used for testing*)

Endpoint Resource Value:

Operation Name	URI Prefix	API Method
getShipmentImagedDocuments	/shipments/{proNbr}/imaged-docs	GET

3 getShipmentImagedDocuments

3.1 Description

This operation retrieves imaged documents for a single PRO number from DMS. The user may enter one or more image types. If the user does not enter an image type, all imaged documents will be retrieved.

Supported image types are:

- BL (Bill of Lading)
- DR (Delivery Receipt)
- DRR (Delivery Return Receipt)
- CUST (Customs Documents)
- IR (Inspection Report)
- LOA (Letter of Authority)
- NCIC (NMFC Certificate)
- WI (Weights and Corrections)
- WRFO (Weights and Research photos)

The user may also enter a specific image format. If the user does not enter a format, all imaged documents will be returned in TIFF format.

Post-conditions:

- If a PRO number and image type are provided, and the requested imaged document exists, then the image is returned. If multiple types are provided, multiple images are returned (if they exist).
- If an image format is provided, then images are returned in the requested image format.
- If the image doesn't exist for the requested PRO number and image type, then an "Image not found" message will appear.

Note that this operation has a multi-part response. The data is included in the first part (listed in the response elements below) and the second part includes the binary image or images. (See the samples in section 4.4.)

3.2 Request Elements

Element	Type/Length	Cardinality	Valid Values or Sample Values	Required/Optional (Y/N)	Description
proNbr	String		128-788844	Y	The PRO number (unique business identifier) of the shipment to which the documents are related
imageFormat	String		PDF, TIFF, PNG or JPEG	N	The image type to return for all the imaged documents; default is TIFF
imageType	String	Zero or More	BL, DR, DRRR, CUST, IR, LOA, NCIC, WI, WRFO	N	The imaged document type(s) related to the shipment to be returned (if they exist); returns all available documents if no image type is provided
multiPartResp	Boolean		True or False	N	Default is True. When False, image output is in Base64 format and only one image can be accessed.

3.3 Response Elements

Element	Type	Cardinality	Valid Values or Sample Values	Description
imagedDocument	Object	Zero or More		This contains information about the returned images as well as the images themselves.
imagedDocument.proNumber	String			This is a member of the imagedDocument object. It is the unique business identifier of the shipment to which the imaged document belongs.
imagedDocument.imageType	String			This is the type of document that is imaged: BL (Bill of Lading), DR

Element	Type	Cardinality	Valid Values or Sample Values	Description
				(Delivery Receipt), CUST (Customs Documents), DRRR (Delivery Return Receipt), IR (Inspection Report), LOA (Letter of Authority), NCIC (NMFC Certificate), WI (Weight and Correction Certificate), and WRFO (Weight and Research Photos).
imagedDocument.imageFormat	String			This indicates whether the image is pdf, jpeg, png, or tiff.
imagedDocument.imageFiles	Object	Zero or More		This is a member of the imagedDocument object. It contains an image and the file name of the image. Each page of the document will be represented in one image file.
imagedDocument.imageFiles.fileName	String			This is a member of the imageFiles object. It is the file name of the imaged document. The last number of the file name represents the page of the image file.
imagedDocument.imageFiles.contentType	String			This is a member of the imagedDocument object. It is the actual image file.
imagedDocument.scanDate	Date			This is a member of the imagedDocument object. It is the date when the document was scanned and imaged.

3.4 getShipmentImagedDocuments Samples

3.4.1 Get All Images Associated with a Shipment

Note: The default format is TIFF.

```
Request URL:
https://api.ltl.xpo.com/imaging/1.0/shipments/123456782/imaged-docs

Response message:

----1476901385627
Content-Type: application/json

{
  "code" : "200",
  "transactionTimestamp" : 1476901385627,
  "data" : {
    "imagedDocument" : [{
      "proNumber" : "123456782",
      "imageType" : "BL",
      "imageFormat" : "TIFF",
```

```
        "imageFiles" : [{
            "fileName" : "123456782_BL1.tiff",
            "contentType" : "image/tiff"
        }
    ],
    "scanDate" : 1464027785670
}, {
    "proNumber" : "123456782",
    "imageType" : "DR",
    "imageFormat" : "TIFF",
    "imageFiles" : [{
        "fileName" : "123456782_DR1.tiff",
        "contentType" : "image/tiff"
    }, {
        "fileName" : "123456782_DR2.tiff",
        "contentType" : "image/tiff"
    }
    ],
    "scanDate" : 1464373385920
}
]
}
}
----1476901385627
Content-Disposition: attachment; filename="123456782_BL1.tiff"
Content-Type: image/tiff

<<binary content of 123456782_BL1.tiff >>
----1476901385627
Content-Disposition: attachment; filename="123456782_DR1.tiff"
Content-Type: image/tiff

<< binary content of 123456782_DR1.tiff >>
----1476901385627
Content-Disposition: attachment; filename="123456782_DR2.tiff"
Content-Type: image/tiff

<< binary content of 123456782_DR2.tiff >>
----1476901385627-
```

3.4.2 Get All Images Associated with a Shipment (in PDF Format)

```
Request URL:
https://api.ltl.xpo.com/imaging/1.0/shipments/123456782/imaged-docs?imageFormat=pdf

Response message:
----1476901804606
Content-Type: application/json
{
    "code" : "200",
    "transactionTimestamp" : 1476901804606,
    "data" : {
        "imagedDocument" : [{
            "proNumber" : "123456782",
            "imageType" : "BL",
            "imageFormat" : "PDF",
            "imageFiles" : [{
```

```
        "fileName" : "123456782_BL.pdf",
        "contentType" : "application/pdf"
    },
    ],
    "scanDate" : 1464028204776
}, {
    "proNumber" : "123456782",
    "imageType" : "DR",
    "imageFormat" : "PDF",
    "imageFiles" : [{
        "fileName" : "123456782_DR.pdf",
        "contentType" : "application/pdf"
    }
    ],
    "scanDate" : 1464373807044
}
]
}
}
----1476901804606
Content-Disposition: attachment; filename="123456782_BL.pdf"
Content-Type: application/pdf

<<binary content of 123456782_BL.pdf >>
----1476901804606
Content-Disposition: attachment; filename="123456782_DR.pdf"
Content-Type: application/pdf

<<binary content of 123456782_DR.pdf >>
----1476901804606
```

3.4.3 Get Specific Image Type Associated with a Shipment (in PDF Format)

```
Request URL:
https://api.ltl.xpo.com/imaging/1.0/shipments/123456782/imaged-docs?imageFormat=PDF&imageType=BL

Response message:
----1476902152540
Content-Type: application/json

{
    "code" : "200",
    "transactionTimestamp" : 1476902152540,
    "data" : {
        "imagedDocument" : [{
            "proNumber" : "123456782",
            "imageType" : "BL",
            "imageFormat" : "PDF",
            "imageFiles" : [{
                "fileName" : "123456782_BL.pdf",
                "contentType" : "application/pdf"
            }
            ],
            "scanDate" : 1464028810068
        }
    ]
}
```

```

    }
}----1476902152540
Content-Disposition: attachment; filename="123456782_BL.pdf"
Content-Type: image/tiff

<<binary content of 123456782_BL.pdf >>
----1476902152540

```

3.4.4 Get Images in Base64 Format

```

Request URL:
https://api.ltl.xpo.com/imaging/1.0/shipments/893199941/imaged-docs?imageType=DR&multiPartResp=false

Response message:
----1516148438731
Content-Type: application/json

{
    "code": "200",
    "transactionTimestamp": 1516148438731,
    "data": {
        "imagedDocument": [{
            "proNumber": "123456782",
            "imageType": "DR",
            "imageFormat": "JPEG",
            "imageFiles": [{
                "base64Data":
                    "<<base64Data>>",
                "fileName":
                    "123456782_DR2.jpg",
                "contentType":
                    "image/jpeg"
            }],
            "scanDate": 1511396438854
        }],
    }
}
----1516148438731--

```

4 Version History

API Version	Date	Changes
1.0	11/1/2016	Initial version
1.0	8/1/2017	Changed the structure of the Endpoint Resource Value section (contents have not changed).

1.0	11/05/2017	Extracted the following sections into a common API page on LTO.XPO.com: <ul style="list-style-type: none">• API security• Rate limits• Health Check• Options• Structure
1.0	12/12/2017	Added .PNG as an acceptable image type
1.0	01/16/2017	Added Base64 image format input option
1.0.0	9/4/2019	Corrected sample request URL for getting images in base 64 format