

Shipping Package

JSON Developer Guide

July 11, 2016



Important Information

UPS Developer Kit APIs

Your development of an application using UPS Developer Kit APIs is governed by the UPS Technology Agreement you entered into with UPS. The following are key legal requirements from these agreements for the UPS Developer Kit APIs. For more information on all requirements for the UPS Developer Kit APIs, please refer to the UPS Technology Agreement.

Defined terms used but not defined in this document have the meaning set forth in the UPS Technology Agreement.

Key Legal Requirements for UPS Developer APIs

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The application must not display information concerning any other provider of shipping services or such other shipping services on any page, whether comprising one or more frames, displaying information your application receives from the UPS Developer Kit APIs. Your application must present all data within each field received through the UPS Developer Kit APIs without amendment, deletion, or modification of any type.

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Chapter 1: Introduction

In this document, you will find guidance and instructions for integrating the Shipping Package JSON API into your application, service, or system.

IMPORTANT:

- If this is your first time working with the UPS Developer Kit, begin with the *Introduction to the UPS Developer Kit* guide. This guide serves as the foundation for all API-specific developer guides.
- For additional API, XPath, and Error Code information, refer to the *Shipping Package Web Service Developer Guide*.

Chapter 2: Customer Integration Environment

The Customer Integration Environment allows customers to test their application prior to launch. This environment is intended for integration testing of customer applications with the UPS servers.

Once your application has been thoroughly tested, you should redirect the application to the UPS Production Environment.



No stress testing should ever be performed by customers against any UPS systems.

To access testing and production sites the user must have an Access Key. You can request an Access Key after establishing a UPS profile and associating your shipping account.

System Availability

The Customer Integration Environment is available 24 hours a day, 7 days a week. Note, the system is occasionally down for server maintenance.

Integration Testing and Production URLs

Ship

https://wwwcie.ups.com/rest/Ship Testing: Production: https://onlinetools.ups.com/rest/Ship

Void Package

Testing: https://wwwcie.ups.com/rest/Void Production: https://onlinetools.ups.com/rest/Void

Label Recovery

https://wwwcie.ups.com/rest/LBRecovery Testing: Production: https://onlinetools.ups.com/rest/LBRecovery

To ensure that your application has the ability to process PDF and html responses correctly test your Label Recovery application using a set similar to 1Zs listed below:

NUMBER(S)	SCENARIO	EXPECTED RESULT
1Z12345E8791315509	Label returned in PDF format	Request is processed, label returned in PDF format
1Z12345E8791315413	Label returned in html format	Request is processed, label returned in html format

Chapter 3: Shipping Package JSON Examples

Published Rates ShipmentRequest

```
"UPSSecurity": {
 "UsernameToken": {
  "Username": "Your Username",
  "Password": "Your Password"
 "ServiceAccessToken": {
  "AccessLicenseNumber": "Your Access License Number"
"ShipmentRequest": {
 "Request": {
  "RequestOption": "validate",
  "TransactionReference": {
   "CustomerContext": "Your Customer Context"
 }
 "Shipment": {
  "Description": "Description",
  "Shipper": {
   "Name": "Shipper Name",
   "AttentionName": "Shipper Attn Name",
   "TaxIdentificationNumber": "123456",
   "Phone": {
    "Number": "1234567890",
    "Extension": "1"
   "ShipperNumber": "Your Shipper Number",
   "FaxNumber": "1234567890",
   "Address": {
    "AddressLine": "Address Line",
    "City": "City",
    "StateProvinceCode": "StateProvinceCode",
    "PostalCode": "PostalCode",
    "CountryCode": "CountryCode"
   }
  "ShipTo": {
   "Name": "Ship To Name",
   "AttentionName": "Ship To Attn Name",
   "Phone": {
    "Number": "1234567890"
   "Address": {
    "AddressLine": "Address Line",
    "City": "City",
    "StateProvinceCode": "StateProvinceCode",
    "PostalCode": "PostalCode",
    "CountryCode": "CountryCode"
   }
  },
  "ShipFrom": {
```

```
"Name": "Ship From Name",
  "AttentionName": "Ship From Attn Name",
  "Phone": {
   "Number": "1234567890"
  "FaxNumber": "1234567890",
  "Address": {
   "AddressLine": "Address Line",
   "City": "City",
   "StateProvinceCode": "StateProvinceCode",
   "PostalCode": "PostalCode",
   "CountryCode": "CountryCode"
  }
 "PaymentInformation": {
  "ShipmentCharge": {
   "Type": "01",
   "BillShipper": {
    "AccountNumber": "Your Account Number"
   }
  }
 },
 "Service": {
  "Code": "01",
  "Description": "Express"
 },
 "Package": {
  "Description": "Description",
  "Packaging": {
   "Code": "02",
   "Description": "Description"
  "Dimensions": {
   "UnitOfMeasurement": {
    "Code": "IN",
    "Description": "Inches"
   "Length": "7",
   "Width": "5",
   "Height": "2"
  "PackageWeight": {
   "UnitOfMeasurement": {
    "Code": "LBS",
    "Description": "Pounds"
   "Weight": "10"
}
},
"LabelSpecification": {
 "LabelImageFormat": {
  "Code": "GIF",
  "Description": "GIF"
 "HTTPUserAgent": "Mozilla/4.5"
}
```

```
}
}
```

Published Rates ShipmentResponse

```
"ShipmentResponse": {
 "Response": {
  "ResponseStatus": {
   "Code": "1",
   "Description": "Success"
  "TransactionReference": {
   "CustomerContext": "Your Customer Context"
  }
 },
 "ShipmentResults": {
  "ShipmentCharges": {
   "TransportationCharges": {
    "CurrencyCode": "USD",
    "MonetaryValue": "88.12"
   "ServiceOptionsCharges": {
    "CurrencyCode": "USD",
    "MonetaryValue": "0.00"
   "TotalCharges": {
    "CurrencyCode": "USD",
    "MonetaryValue": "88.12"
  "BillingWeight": {
   "UnitOfMeasurement": {
    "Code": "LBS",
    "Description": "Pounds"
   "Weight": "10.0"
  "ShipmentIdentificationNumber": "1ZWA82900191640782"
}
}
```

Negotiated Rates ShipmentRequest

```
"UPSSecurity": {
 "UsernameToken": {
  "Username": "Your Username",
  "Password": "Your Password"
 "ServiceAccessToken": {
  "AccessLicenseNumber": "Your Access License Number"
}
},
"ShipmentRequest": {
"Request": {
  "RequestOption": "validate",
  "TransactionReference": {
   "CustomerContext": "Your Customer Context"
 }
 },
 "Shipment": {
  "Description": "Description",
  "Shipper": {
   "Name": "Shipper Name",
   "AttentionName": "Shipper Attn Name",
   "TaxIdentificationNumber": "123456",
   "Phone": {
    "Number": "1234567890",
    "Extension": "1"
   "ShipperNumber": "Your Shipper Number",
   "FaxNumber": "1234567890",
   "Address": {
    "AddressLine": "Address Line",
    "City": "City",
    "StateProvinceCode": "StateProvinceCode",
    "PostalCode": "PostalCode",
    "CountryCode": "CountryCode"
   }
  "ShipTo": {
   "Name": "Ship To Name",
   "AttentionName": "Ship To Attn Name",
   "Phone": {
    "Number": "1234567890"
   "Address": {
    "AddressLine": "Address Line",
    "City": "City",
    "StateProvinceCode": "StateProvinceCode",
    "PostalCode": "PostalCode",
    "CountryCode": "CountryCode"
   }
  "ShipFrom": {
   "Name": "Ship From Name",
   "AttentionName": "Ship From Attn Name",
   "Phone": {
```

```
"Number": "1234567890"
  "FaxNumber": "1234567890",
  "Address": {
   "AddressLine": "Address Line",
   "City": "City",
   "StateProvinceCode": "StateProvinceCode",
   "PostalCode": "PostalCode",
   "CountryCode": "CountryCode"
  }
 },
 "PaymentInformation": {
  "ShipmentCharge": {
   "Type": "01",
   "BillShipper": {
    "AccountNumber": "Your Account Number"
   }
  }
 },
 "Service": {
  "Code": "01",
  "Description": "Express"
 "ShipmentRatingOptions": {
  "NegotiatedRatesIndicator": "0"
 },
 "Package": {
  "Description": "Description",
  "Packaging": {
   "Code": "02",
   "Description": "Description"
  "Dimensions": {
   "UnitOfMeasurement": {
    "Code": "IN",
    "Description": "Inches"
   "Length": "7",
   "Width": "5",
   "Height": "2"
  },
  "PackageWeight": {
   "UnitOfMeasurement": {
    "Code": "LBS",
    "Description": "Pounds"
   "Weight": "10"
 }
},
"LabelSpecification": {
 "LabelImageFormat": {
  "Code": "GIF",
  "Description": "GIF"
 "HTTPUserAgent": "Mozilla/4.5"
}
```

```
}
}
```

Negotiated Rates ShipmentResponse

```
"ShipmentResponse": {
 "Response": {
  "ResponseStatus": {
   "Code": "1",
   "Description": "Success"
  "TransactionReference": {
   "CustomerContext": "Your Customer Context"
  }
 },
 "ShipmentResults": {
  "ShipmentCharges": {
   "TransportationCharges": {
    "CurrencyCode": "USD",
    "MonetaryValue": "88.12"
   "ServiceOptionsCharges": {
    "CurrencyCode": "USD",
    "MonetaryValue": "0.00"
   "TotalCharges": {
    "CurrencyCode": "USD",
    "MonetaryValue": "88.12"
  "NegotiatedRateCharges": {
   "TotalCharge": {
    "CurrencyCode": "USD",
    "MonetaryValue": "70.00"
  },
  "BillingWeight": {
   "UnitOfMeasurement": {
    "Code": "LBS",
    "Description": "Pounds"
   "Weight": "10.0"
  "ShipmentIdentificationNumber": "1ZWA82900191640782"
}
```

LabelRecoveryRequest Example

```
"UPSSecurity": {
  "UsernameToken": {
   "Username": "Your User Id",
   "Password": "Your Password"
  "ServiceAccessToken": {
   "AccessLicenseNumber": "Your Access License Number"
 }
 },
 "LabelRecoveryRequest": {
  "LabelSpecification": {
   "LabelImageFormatCode": "GIF",
   "HTTPUserAgent": "Mozilla/4.5"
  "Translate": {
   "LanguageCode": "eng",
   "DialectCode": "GB",
   "Code": "01"
  "TrackingNumber": "Your Tracking Number"
}
```

LabelRecoveryResponse Example

```
"LabelRecoveryResponse": {
"Response": {
 "ResponseStatus": {
  "Code": "1",
  "Description": "Success"
 }
"LabelResults": [
  "TrackingNumber": "1Z1107YY8567985294",
  "Labellmage": {
   "LabellmageFormat": {
     "Code": "gif"
   "GraphicImage": "R0IGODdheAUgA+cAAAAAAEBAQICAgMD\n(Truncated)",
   "HTMLImage": "PCFET0NUWVBFIEhUTUwgUFVCTEIDICItLy\n(Truncated)",
   "PDF417": "R0IGODdhLAG8AucAAAAAAAEBAQICAgMD\n(Truncated)"
  "Receipt": {
   "HTMLImage": "PGh0bWw+PGhIYWQ+PHRpdGxlPIJIY2V\n(Truncated)"
 },
   "TrackingNumber": "1Z1107YY8586551109",
  "Labellmage": {
   "LabelImageFormat": {
    "Code": "gif"
```

```
},
"GraphicImage": "R0IGODdheAUgA+cAAAAAAAEBAQICAgMD\n(Truncated)",
"HTMLImage": "PCFET0NUWVBFIEhUTUwgUFVCTEIDICItLy\n(Truncated)",
"PDF417": "R0IGODdhLAG8AucAAAAAAEBAQICAgMD\n(Truncated)"
},
"Receipt": {
"HTMLImage": "PGh0bWw+PGhIYWQ+PHRpdGxIPIJIY2V\n(Truncated)"
}
}
]
}
```

VoidShipmentRequest Example

```
"UPSSecurity": {
 "UsernameToken": {
  "Username": "Your Username",
  "Password": "Your Password"
 "ServiceAccessToken": {
  "AccessLicenseNumber": "Your Access License Number"
}
},
"VoidShipmentRequest": {
 "Request": {
  "TransactionReference": {
   "CustomerContext": "Your Customer Context"
 },
 "VoidShipment": {
  "ShipmentIdentificationNumber": "Your Shipment Identification\nNumber"
}
}
```

VoidShipmentResponse Example

```
{
  "VoidShipmentResponse": {
    "ResponseStatus": {
      "Code": "1",
      "Description": "Success"
      },
      "TransactionReference": {
      "CustomerContext": "Your Customer Context"
      }
    },
    "SummaryResult": {
      "Status": {
      "Code": "1",
      "Description": "Voided"
      }
    }
}
```