



Shipping Ground Freight

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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This document can only be used in the countries of the Permitted Territory as defined in the UPS Technology Agreement, as applicable.

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The application must not be designed to allow distribution of information received through the UPS Developer Kit APIs to third parties, other than to persons having a bona fide interest in such information (e.g., the shipper, receiver, or the third party payer, or to your service providers authorized by UPS).

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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 Ground Freight 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 Ground Freight 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

Testing: <https://wwwcie.ups.com/rest/FreightShip>

Production: <https://onlinetools.ups.com/rest/FreightShip>

Chapter 3: Shipping Ground Freight JSON Examples

FreightShipRequest

```
{
  "UPSSecurity": {
    "UsernameToken": {
      "Username": "Your User Id",
      "Password": "Your Password"
    },
    "ServiceAccessToken": {
      "AccessLicenseNumber": "Your Access License Number"
    }
  },
  "FreightShipRequest": {
    "Request": {
      "RequestOption": "1",
      "SubVersion": "SubVersion",
      "TransactionReference": {
        "CustomerContext": "Your Customer Context"
      }
    },
    "Shipment": {
      "ShipFrom": {
        "Name": "Ship From Name",
        "Address": {
          "AddressLine": "Address Line",
          "City": "City",
          "StateProvinceCode": "StateProvinceCode",
          "PostalCode": "PostalCode",
          "CountryCode": "CountryCode"
        },
        "AttentionName": "Attention Name",
        "Phone": {
          "Number": "Shipper Phone number"
        }
      },
      "ShipperNumber": "Your Shipper Number",
      "ShipTo": {
        "Name": "Ship To Name",
        "Address": {
          "AddressLine": "Address Line",
          "City": "City",
          "StateProvinceCode": "StateProvinceCode",
          "PostalCode": "PostalCode",
          "CountryCode": "CountryCode"
        },
        "AttentionName": "Attention Name"
      },
      "PaymentInformation": {
        "Payer": {
          "Name": "Payer Name",
          "Address": {
            "AddressLine": "Address Line",
            "City": "City",
            "StateProvinceCode": "StateProvinceCode",
```

```
"PostalCode": "PostalCode",
"CountryCode": "CountryCode"
},
"ShipperNumber": "Payer Shipper Number",
"AccountType": "Your Account Type",
"AttentionName": "Attention Name",
"Phone": {
  "Number": "Phone Number"
}
},
"ShipmentBillingOption": {
  "Code": "ShipmentBillingOption"
}
},
"Service": {
  "Code": "Service code"
},
"HandlingUnitOne": {
  "Quantity": "HandlingUnitOne quantity",
  "Type": {
    "Code": "HandlingUnitOne type"
  }
},
"Commodity": {
  "Description": "Commodity Description",
  "Weight": {
    "UnitOfMeasurement": {
      "Code": "UnitOfMeasurement code"
    },
    "Value": "Weight"
  },
  "NumberOfPieces": "NumberOfPieces",
  "PackagingType": {
    "Code": "PackagingType code"
  },
  "FreightClass": "FreightClass"
},
"DensityEligibleIndicator": "",
"TimeInTransitIndicator": ""
}
}
}
```


FreightShipResponse

```
{
  "FreightShipResponse": {
    "Response": {
      "ResponseStatus": {
        "Code": "1",
        "Description": "Success"
      },
      "TransactionReference": {
        "CustomerContext": "Your Customer Context"
      }
    },
    "ShipmentResults": {
      "OriginServiceCenterCode": "OriginServiceCenterCode",
      "ShipmentNumber": "Shipment Number",
      "BOLID": "BOLID",
      "GuaranteedIndicator": "",
      "Rate": [
        {
          "Type": {
            "Code": "DSCNT",
            "Description": "DSCNT"
          },
          "Factor": {
            "Value": "Value",
            "UnitOfMeasurement": {
              "Code": "UnitOfMeasurement code"
            }
          }
        },
        {
          "Type": {
            "Code": "DSCNT_RATE",
            "Description": "DSCNT_RATE"
          },
          "Factor": {
            "Value": "Value",
            "UnitOfMeasurement": {
              "Code": "UnitOfMeasurement code"
            }
          }
        },
        {
          "Type": {
            "Code": "2",
            "Description": "2"
          },
          "Factor": {
            "Value": "Value",
            "UnitOfMeasurement": {
              "Code": "UnitOfMeasurement code"
            }
          }
        }
      ]
    }
  }
}
```

```
"Code": "LND_GROSS",
"Description": "LND_GROSS"
},
"Factor": {
  "Value": "Value",
  "UnitOfMeasurement": {
    "Code": "UnitOfMeasurement code"
  }
}
},
{
  "Type": {
    "Code": "AFTR_DSCNT",
    "Description": "AFTR_DSCNT"
  },
  "Factor": {
    "Value": "Value",
    "UnitOfMeasurement": {
      "Code": "UnitOfMeasurement code"
    }
  }
}
],
"TotalShipmentCharge": {
  "CurrencyCode": "CurrencyCode",
  "MonetaryValue": "MonetaryValue"
},
"BillableShipmentWeight": {
  "UnitOfMeasurement": {
    "Code": "UnitOfMeasurement code"
  },
  "Value": "BillableShipmentWeight"
},
"Service": {
  "Code": "Service code"
},
"TimeInTransit": {
  "DaysInTransit": "DaysInTransit"
}
}
}
```