



# Quantum View<sup>®</sup> - Package JSON Developer Guide

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## Chapter 1: Introduction

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In this document, you will find guidance and instructions for integrating the Quantum View® 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 *Quantum View® XML Developer Guide*.

## Chapter 2: Customer Integration Environment (CIE)

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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.

## JSON Testing and Production URLs

### IMPORTANT:

- Quantum View Data files are updated once an hour.
- After three failed login attempts in a 24-hour period with an invalid User ID and/or password, the user will be locked out for 5 minutes.



URLs are case sensitive.

<b>Testing:</b>	<a href="https://wwwcie.ups.com/rest/QVEvents">https://wwwcie.ups.com/rest/QVEvents</a>
<b>Production:</b>	<a href="https://onlinetools.ups.com/rest/QVEvents">https://onlinetools.ups.com/rest/QVEvents</a>

## Chapter 3: JSON Examples

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### QuantumViewRequest

```
{
  "AccessRequest": {
    "AccessLicenseNumber": "Your Access License",
    "UserId": "Your User Id",
    "Password": "Your Password"
  },
  "QuantumViewRequest": {
    "Request": {
      "TransactionReference": {
        "CustomerContext": "Your Customer Context"
      },
      "RequestAction": "QVEvents"
    },
    "SubscriptionRequest": {
      "Name": "Subscription Name"
    }
  }
}
```

### QuantumView Response

```
{
  "QuantumViewResponse": {
    "Response": {
      "TransactionReference": "",
      "ResponseStatusCode": "1",
      "ResponseStatusDescription": "Success"
    },
    "QuantumViewEvents": {
      "SubscriberID": "SubScriptAll",
      "SubscriptionEvents": {
        "Name": "OutboundFull",
        "Number": "45BD09FCCEEA27BA",
        "SubscriptionStatus": {
          "Code": "A",
          "Description": "Active"
        },
        "SubscriptionFile": [
          {
            "FileName": "Subscription_FileName",
            "StatusType": {
              "Code": "U",
              "Description": "Unread"
            },
            "Manifest": [
```

```
{
  "Shipper": {
    "Name": "BILLY CO",
    "ShipperNumber": "ShipperNumber",
    "Address": {
      "AddressLine1": "3406 BUFORD HWY",
      "City": "DULUTH",
      "StateProvinceCode": "GA",
      "PostalCode": "300963551",
      "CountryCode": "US"
    }
  }
  "ShipTo": {
    "Address": {
      "ConsigneeName": "RSD",
      "AddressLine1": "26021 ATLANTIC OCEAN DRIVE",
      "City": "LAKE FOREST",
      "StateProvinceCode": "CA",
      "PostalCode": "926308831",
      "CountryCode": "US"
    }
  }
  "ReferenceNumber": [
    {
      "Code": "00",
      "Value": "123456789"
    },
    {
      "Code": "PO",
      "Value": "444789"
    }
  ],
  "Service": {
    "Code": "001"
  }
  "PickupDate": "20070824",
  "DocumentsOnly": "3",
  "Package": {
    "Activity": {
      "Date": "20070824",
      "Time": "132526"
    },
    "Description": "MerchandiseDescription",
    "Dimensions": {
      "Length": "00000000",
      "Width": "00000000",
      "Height": "00000000"
    },
    "DimensionalWeight": {
      "UnitOfMeasurement": {
```



```

        "Code": "LBS"
      },
      "Weight": "0000020"
    },
    "PackageWeight": {
      "Weight": "+0002.0"
    },
    "TrackingNumber": "TrackingNumber",
    "ReferenceNumber": [
      {
        "Code": "00",
        "Value": "123456789"
      },
      {
        "Code": "PO",
        "Value": "444789"
      },
      {
        "Code": "00",
        "Value": "A1"
      }
    ],
    "PackageServiceOptions": {
      "COD": ""
    }
  }
  "ShipmentServiceOptions": {
    "CallTagARS": {
      "Code": "8"
    }
  }
  "ShipmentChargeType": "P/P",
  "BillToAccount": {
    "Option": "01",
    "Number": "QVDR01"
  }
},
{
  "Shipper": {
    "Name": "BILLY CO",
    "ShipperNumber": "QVDR01",
    "Address": {
      "AddressLine1": "3406 BUFORD HWY",
      "City": "DULUTH",
      "StateProvinceCode": "GA",
      "PostalCode": "300963551",
      "CountryCode": "US"
    }
  }
  "ShipTo": {

```

```
"Address": {
  "ConsigneeName": "RSD",
  "AddressLine1": "26021 ATLANTIC OCEAN DRIVE",
  "City": "LAKE FOREST",
  "StateProvinceCode": "CA",
  "PostalCode": "926308831",
  "CountryCode": "US"
}
}
"ReferenceNumber": [
  {
    "Code": "00",
    "Value": "123456789"
  },
  {
    "Code": "PO",
    "Value": "444789"
  }
],
"Service": {
  "Code": "001"
}
"PickupDate": "20070824",
"DocumentsOnly": "3",
"Package": {
  "Activity": {
    "Date": "20070824",
    "Time": "134527"
  },
  "Description": "MerchandiseDescription",
  "Dimensions": {
    "Length": "00000000",
    "Width": "00000000",
    "Height": "00000000"
  },
  "DimensionalWeight": {
    "UnitOfMeasurement": {
      "Code": "LBS"
    },
    "Weight": "0000020"
  },
  "PackageWeight": {
    "Weight": "+0002.0"
  },
  "TrackingNumber": "TrackingNumber",
  "ReferenceNumber": {
    "Code": "PO",
    "Value": "444789"
  },
  "PackageServiceOptions": {
```

```

        "COD": ""
      }
    }
    "ShipmentServiceOptions": {
      "CallTagARS": {
        "Code": "8"
      }
    }
    "ShipmentChargeType": "P/P",
    "BillToAccount": {
      "Option": "01",
      "Number": "QVDR01"
    }
  }
]
},
{
  "FileName": " Subscription_FileName ",
  "StatusType": {
    "Code": "U",
    "Description": "Unread"
  },
  "Generic": [
    {
      "ActivityType": "VM",
      "TrackingNumber": "TrackingNumber",
      "ShipperNumber": "QVDR01",
      "Service": {
        "Code": "001"
      }
    },
    {
      "Activity": {
        "Date": "20070824",
        "Time": "130533"
      },
      "BillToAccount": {
        "Option": "03",
        "Number": "QVDR03"
      },
      "ShipTo": {
        "ReceivingAddressName": "RSDTCNTRL-LAKEFOREST"
      }
    },
    {
      "ActivityType": "VM",
      "TrackingNumber": "TrackingNumber",
      "ShipperNumber": "QVDR01",
      "Service": {
        "Code": "001"
      }
    },
    {
      "Activity": {

```

```

        "Date": "20070824",
        "Time": "134438"
    },
    "BillToAccount": {
        "Option": "03",
        "Number": "QVDR03"
    },
    "ShipTo": {
        "ReceivingAddressName": "RSDTCNTRL-LAKEFOREST"
    }
}
],
{
    "FileName": "Subscription_FileName",
    "StatusType": {
        "Code": "U",
        "Description": "Unread"
    },
    "Exception": {
        "ShipperNumber": "QVDR01",
        "TrackingNumber": "TrackingNumber",
        "Date": "20070824",
        "Time": "101000",
        "UpdatedAddress": {
            "ConsigneeName": "MMX",
            "StreetNumberLow": "1801",
            "StreetName": "SANDALWOOD",
            "StreetType": "DR",
            "PoliticalDivision2": "ATLANTA",
            "PoliticalDivision1": "GA",
            "CountryCode": "US",
            "PostcodePrimaryLow": "30350"
        },
        "ReasonCode": "78",
        "ReasonDescription": "THE SHIPPER HAS REQUESTED A DELIVERY INTERCEPT FOR THIS PACKAGE",
        "Resolution": {
            "Code": "AH",
            "Description": "THE ADDRESS HAS BEEN CORRECTED. THE DELIVERY HAS BEEN RESCHEDULED"
        },
        "BillToAccount": {
            "Option": "03",
            "Number": "QVDR03"
        }
    },
    "Origin": {
        "PackageReferenceNumber": [
            {

```

```
        "Code": "00",
        "Value": "QAST ROW PKG 01"
      }
    {
      "Code": "33",
      "Value": "12345"
    }
  ],
  "ShipmentReferenceNumber": {
    "Code": "00",
    "Value": "04ROW01"
  },
  "ShipperNumber": "QVDR01",
  "TrackingNumber": "TrackingNumber",
  "Date": "20070824",
  "Time": "101000",
  "ActivityLocation": {
    "AddressArtifactFormat": {
      "PoliticalDivision2": "ROSWELL-ROSWELL",
      "PoliticalDivision1": "GA",
      "CountryCode": "US"
    }
  },
  "BillToAccount": {
    "Option": "03",
    "Number": "QVDR03"
  }
}
}
```

## Appendix

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### JSON Error Codes

Code	Description
1	<b>Unrecognized Error</b> Any error, other than those listed below, causing an issue with the request. <ul style="list-style-type: none"><li>• Verify the request headers are correct.</li><li>• Retry the request again later</li></ul>
2	<b>Unknown Operation</b> The UPS system does not understand the operation and is unable to forward the request to the correct API. <ul style="list-style-type: none"><li>• Verify the request headers are correct.</li><li>• Check request structure.</li></ul>
3	<b>Network Error</b> Transient error indicating the network is hindering request submission. <ul style="list-style-type: none"><li>• Retry the request again later.</li></ul>
4	<b>JSON Syntax Error</b> Indicates a problem with the JSON syntax. <ul style="list-style-type: none"><li>• Verify your request syntax is correct.</li></ul>