

# Bidder API

## INTRODUCTION

This document specifies the interface between an ad exchange and a bidder.

Below you can find descriptions and examples for the bid request and bid response formats.

## REFERENCE

### Ask Bidder To Submit A Bid

The bidder receives bid requests from an ad exchange and it responds back either with a bid or without one. You can see examples of both cases below.

The bid request from the ad exchange contains info that is needed by the bidder to perform its operation.

**Method:** POST

**Url:** <http://bidder.pa.org/bid>

**Headers:**

Content-Type:application/json

**Response Code:** 200 (Bid Response With A Bid)

**Response Code:** 204 (Bid Response Without A Bid)

### Request Body (JSON SCHEMA)

```
{
  "$schema": "http://json-schema.org/draft-04/schema#",
  "type": "object",
  "properties": {
    "id": {
      "type": "string",
      "description": "The unique identifier of the bid request."
    },
    "app": {
      "type": "object",
      "properties": {
        "id": {
          "type": "string",
          "description": "The app unique identifier."
        },
        "name": {
          "type": "string",
          "description": "The app name."
        }
      },
      "required": [
        "id",
        "name"
      ],
      "description": "Details about the app where the traffic is coming from."
    }
  }
}
```

```

    },
    "device": {
      "type": "object",
      "properties": {
        "os": {
          "type": "string",
          "enum": [
            "Android",
            "iOS"
          ],
          "description": "Device operating system"
        },
        "geo": {
          "type": "object",
          "properties": {
            "country": {
              "type": "string",
              "description": "Country code using ISO-3166-1-alpha-3."
            },
            "lat": {
              "type": "number",
              "description": "Latitude from 90.0 to +90.0, where negative is
south."
            },
            "lon": {
              "type": "number",
              "description": "Longitude from 180.0 to +180.0, where negative is
west."
            }
          },
          "required": [
            "country"
          ],
          "description": "Location of the device assumed to be the user's
current location."
        }
      },
      "required": [
        "os",
        "geo"
      ],
      "description": "Details about the user's device to which the impression
will be delivered."
    },
    "required": [
      "id",
      "app",
      "device"
    ]
  }
}

```

### Request Body (example)

```

{
  "id": "e7fe51ce4f6376876353ff0961c2cb0d",
  "app": {
    "id": "e7fe51ce-4f63-7687-6353-ff0961c2cb0d",
    "name": "Morecast Weather"
  },
  "device": {
    "os": "Android",
    "geo": {

```

```

    "country": "USA",
    "lat": 0,
    "lon": 0
  }
}
}

```

### **Bid Response with A Bid**

#### **Response Body (JSON SCHEMA)**

```

{
  "$schema": "http://json-schema.org/draft-04/schema#",
  "type": "object",
  "properties": {
    "id": {
      "type": "string",
      "description": "The unique identifier of the bid request."
    },
    "bid": {
      "type": [
        "object",
        "null"
      ],
      "properties": {
        "campaignId": {
          "type": "string",
          "description": "The campaign id."
        },
        "price": {
          "type": "number",
          "description": "The bid price."
        },
        "adm": {
          "type": "string",
          "description": "The ad markup."
        }
      },
      "required": [
        "campaignId",
        "price",
        "adm"
      ],
      "description": "Information about the bid."
    }
  },
  "required": [
    "id"
  ]
}

```

#### **Response Body (Example)**

```

{
  "id": "e7fe51ce4f6376876353ff0961c2cb0d",
  "bid": {
    "campaignId": "5a3dce46",
    "price": 1.2,
    "adm": "<a href=\"http://example.com/click/qbFCjzXR9rkf8qa4\"><img
src=\"http://assets.example.com/ad_assets/files/000/000/002/original/banner_300_

```

```

250.png\" height=\"250\" width=\"300\" alt=\"\"/></a><img
src=\"http://example.com/win/qbFCjzXR9rkf8qa4\" height=\"1\" width=\"1\"
alt=\"\"/>\"
    }
}

```

## **Bid Response without A Bid**

### **Response Body (JSON SCHEMA)**

```
{
```

```

  "$schema": "http://json-schema.org/draft-04/schema#",
  "type": "object",
  "properties": {
    "id": {
      "type": "string",
      "description": "The unique identifier of the bid request."
    },
    "app": {
      "type": "object",
      "properties": {
        "id": {
          "type": "string",
          "description": "The app unique identifier."
        },
        "name": {
          "type": "string",
          "description": "The app name."
        }
      },
      "required": [
        "id",
        "name"
      ],
      "description": "Details about the app where the traffic is coming from."
    },
    "device": {
      "type": "object",
      "properties": {
        "os": {
          "type": "string",
          "enum": [
            "Android",
            "iOS"
          ],
          "description": "Device operating system"
        }
      },
      "geo": {
        "type": "object",
        "properties": {
          "country": {
            "type": "string",
            "description": "Country code using ISO-3166-1-alpha-3."
          },
          "lat": {
            "type": "number",
            "description": "Latitude from 90.0 to +90.0, where negative is
south."
          }
        }
      }
    }
  }
}

```

```

        },
        "lon": {
            "type": "number",
            "description": "Longitude from 180.0 to +180.0, where negative is
west."
        }
    },
    "required": [
        "country"
    ],
    "description": "Location of the device assumed to be the user's
current location."
},
    "required": [
        "os",
        "geo"
    ],
    "description": "Details about the user's device to which the impression
will be delivered."
},
    "required": [
        "id",
        "app",
        "device"
    ]
}

```

### Response Body (Example)

```

{
  "id": "e7fe51ce4f6376876353ff0961c2cb0d",
  "app": {
    "id": "e7fe51ce-4f63-7687-6353-ff0961c2cb0d",
    "name": "Morecast Weather"
  },
  "device": {
    "os": "Android",
    "geo": {
      "country": "USA",
      "lat": 0,
      "lon": 0
    }
  }
}

```