

Prebid bug introduced starting version 8.15

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Tags	

Disclaimer: We recognize this feature as a bug, as it has the potential to result in different errors being triggered on the client and potentially on the server side (specifically, the server side of adapters)

Bug description

We have identified a flaw in prebid.js versions 8.15 and above that could significantly impact performance and potentially affect revenue on a page utilizing it, given certain configurations.

Conditions:

For this bug to manifest, two specific conditions must be met:

1. An identifier must be added to the pubprovided ids prebid module, with the source generated by an identity module.
2. An identity module (capable of producing an id with the source from point 1) must be initialized and generate an id.

Result:

Upon initiation of an auction and preparation of requests, the number of ids in the corresponding array for the previously mentioned source will increase.

Consequences:

As eids are included in the majority of outgoing requests:

1. The size of these requests will gradually grow over time, assuming the page continues to initialize additional auctions.
2. Requests may exceed the maximum allowed size.

Our case study

We have tested this on a sample test page that has configuration for p[ub]provided id and unified id module added manually:

```
function myf(){
return [
  {
    "uids": [
      {
        "ext": {
          "stype": "ppuid"
        },
        "id": "4a958e6e-de2c-45f1-bd66-836890a2e78a"
      }
    ],
    "source": "adserver.org"
  }
]
}

pbjs.setConfig({
  userSync: {
    userIds: [{
      name: "pubProvidedId",
      params: {
        eidsFunction: myf // any function that exists in the page
      }
    }]
  }
});

pbjs.refreshUserIds()
pbjs.setConfig({
  userSync: {
    userIds: [{
      name: "unifiedId",
      value: {"tdid": "D6885E90-2A7A-4E0F-87CB-7734ED1B99A3"}
    }]
  }
});

pbjs.refreshUserIds()
pbjs.setConfig({
  rubicon: {
    rendererConfig: {
      align: "center", // player placement: left|center|right (default is center)
      position: "append", // position relative to ad unit: append|prepend|before|after (default is after)
      closeButton: true, // display 'Close' button (default is false)
      label: "Advertisement", // custom text to display above the player (default is '-')
      collapse: true, // remove the player from the page after ad playback (default is true)
    },
  },
  debug: true,
  cache: {
    url: "https://prebid.adnxs.com/pbc/v1/cache",
  },
  userSync: {
    userIds: [
      {
        name: "unifiedId",
        value: { tdid: "XXXXXXXX-XXXX-XXXX-XXXX-7734ED1B99A3" },
      },
    ],
  },
});
```

```

    {
      name: "id5Id",
      params: {
        partner: 173, // change to the Partner Number you received from ID5
        // pd: 'MT1iNTBjY...', // optional, see table above for a link to how to generate this
        abTesting: {
          // optional
          enabled: true, // false by default
          controlGroupPct: 0.1, // valid values are 0.0 - 1.0 (inclusive)
        },
      },
      storage: {
        type: "html5", // "html5" is the required storage type
        name: "id5id", // "id5id" is the required storage name
        expires: 90, // storage lasts for 90 days
        refreshInSeconds: 8 * 3600, // refresh ID every 8 hours to ensure it's fresh
      },
    },
  ],
  auctionDelay: 50, // 50ms maximum auction delay, applies to all userId modules
},
});

```

In this case (when using prebid version 8.15) immediately after page initialization we have the following id in prebid stream:

```

▼ {pubProvidedId: Array(1), tdid: 'XXXXXXXX-XXXX-XXXX-XXXX-7734ED1B99A3', id5id: {...}} ⓘ
  ► id5id: {uid: 'ID5*3sGx9l4uz3uotz8KvmJdzJw02ZucBfqizCTnS10AzERYobmgEF1gnlboenYQMid2cqIwbfamldlQkBhIu5EucQ', ext: {...}}
  ▼ pubProvidedId: Array(1)
    ▼ 0:
      source: "adserver.org"
      ▼ uids: Array(4)
        ► 0: {ext: {...}, id: '4a958e6e-de2c-45f1-bd66-836890a2e78a'}
        ► 1: {id: 'XXXXXXXX-XXXX-XXXX-XXXX-7734ED1B99A3', atype: 1, ext: {...}}
        ► 2: {id: 'XXXXXXXX-XXXX-XXXX-XXXX-7734ED1B99A3', atype: 1, ext: {...}}
        ► 3: {id: 'XXXXXXXX-XXXX-XXXX-XXXX-7734ED1B99A3', atype: 1, ext: {...}}
          length: 4
        ► [[Prototype]]: Array(0)
        ► [[Prototype]]: Object
          length: 1
        ► [[Prototype]]: Array(0)
          tdid: "XXXXXXXX-XXXX-XXXX-XXXX-7734ED1B99A3"
        ► [[Prototype]]: Object

```

After running additional auction:

<https://github.com/prebid/Prebid.js/commit/425cf20b55c8b1cccae5cc66157ce7154d091c94>