



OpenRTB 3.0 Converter Mappings

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1. Introduction

Programmatic advertising has seen consistent growth over the last few years. However, due to varied requirements of different partners and the increasing complexity in the supply chain, it was felt that the underlying structure of OpenRTB was not scalable enough and needed to be changed.

OpenRTB 3.0 thus introduced a layered approach where the commerce transaction (e.g., auction parameters, deals, bids, etc.) was differentiated from the object specifications (e.g. ads, placements, users, devices, sites, publishers, etc). The commerce transaction is supposed to be the focus of OpenRTB while the objects being transacted was added to AdCOM (Advertising Common Object Model).

This has two benefits:

- The AdCOM layer can be reused in other specifications such as OpenDirect, AdManagementAPI and custom specifications
- The Object layer can be revised independent of the OpenRTB spec.

However, structural changes also mean that OpenRTB 3.0 is not backward compatible. This becomes problematic when different partners in the supply chain are on different versions of OpenRTB.

This is the problem which this documentation tries to address by presenting a standard mapping between objects and fields across OpenRTB 3.0, OpenRTB 2.5, OpenRTB 2.4 and OpenRTB 2.3. This standard has been used in the converter library developed by media.net and which is being released as an open-source project.

2. Request Mappings: ORTB 3.0 and ORTB 2.5/ 2.4/ 2.3

These mappings are used for converting requests between OpenRTB 3.0 and OpenRTB 2.5/2.4/2.3.

2.1. Object: OpenRTB

OpenRTB 3.0	OpenRTB 2.5/2.4/2.3
openrtb.ver	-
openrtb.domainspec	-
openrtb.domainver	-
openrtb.request	(Mappings for individual object fields noted below)

2.2. Object: OpenRTB > Request

Object Tree – openrtb.request.<parameter_name>

OpenRTB 3.0	OpenRTB 2.5/2.4/2.3
id	bidRequest.id
test	bidRequest.test
tmax	bidRequest.tmax
at	bidRequest.at
cur	bidRequest.cur
package	bidRequest.allimps
seat	bidRequest.bseat (bidRequest.ext.bseat for ORTB 2.4 and 2.3) or bidRequest.wseat depending on wseat value

OpenRTB 3.0	OpenRTB 2.5/2.4/2.3
wseat	NA (0 to activate bseat 1 to activate wseat)
cdata	bidRequest.user.customdata
ext	bidRequest.ext
source	(Mappings for individual object fields noted below)
item	(Mappings for individual object fields noted below)
context	(Mappings for individual object fields noted below)

2.2.1. Object: OpenRTB > Request > Source

Object Tree - *openrtb.request.source.<parameter_name>*

OpenRTB 3.0	OpenRTB 2.5/2.4/2.3
tid	bidRequest.source.tid (<i>bidRequest.ext.source.tid for ORTB v2.4 and v2.3</i>)
ts	bidRequest.source.ext.ts
ds	bidRequest.source.ext.ds
dsmapi	bidRequest.source.ext.dsmapi
cert	bidRequest.source.ext.cert
digest	bidRequest.source.ext.digest
pchain	bidRequest.source.pchain (<i>bidRequest.ext.source.pchain for ORTB v2.4 and v2.3</i>)
ext	bidRequest.source.ext (<i>bidRequest.ext.source.ext for ORTB v2.4 and v2.3</i>)

2.2.1.1 Object: OpenRTB > Request > Source > Ext

Object Tree: *openrtb.request.source.ext.<parameter_name>*

OpenRTB 3.0	OpenRTB 2.5/2.4/2.3
fd	bidrequest.source.fd <i>(bidrequest.ext.source.fd for ORTB v2.4 and v2.3)</i>

2.2.2. Object: OpenRTB > Request > Item

Object Tree - *openrtb.request.item.<parameter_name>*

OpenRTB 3.0	OpenRTB 2.5/2.4/2.3
id	bidRequest.imp.id
qty	bidRequest.imp.banner.ext.qty, bidRequest.imp.video.ext.qty, bidRequest.imp.audio.ext.qty, bidRequest.imp.native.request.native.plcmcnt
seq	bidRequest.imp.native.request.native.seq, bidRequest.imp.video.sequence, bidRequest.imp.audio.sequence, bidRequest.imp.banner.ext.seq
flr	bidRequest.imp.bidfloor
flrcur	bidRequest.imp.bidfloorcur
exp	bidRequest.imp.exp <i>bidRequest.imp.ext.exp (for ORTB v2.3)</i>
dt	bidRequest.imp.ext.dt
dlvy	bidrequest.imp.ext.dlvy
ext	bidrequest.imp.ext
private	bidRequest.imp.pmp.private_auction
metric	bidRequest.imp.metric

OpenRTB 3.0	OpenRTB 2.5/2.4/2.3
	<i>bidRequest.imp.ext.metric (for ORTB v2.4 and v2.3)</i>
deal	(Mappings for individual object fields noted below)
spec	(Mappings for individual object fields noted below)

2.2.2.1 Object: OpenRTB > Request > Item > Metric

Object Tree - *openrtb.request.item.metric.<parameter_name>*

OpenRTB 3.0	OpenRTB 2.5/2.4/2.3
type	bidRequest.imp.metric.type <i>(bidRequest.imp.ext.metric.type for ORTB v2.4 and v2.3)</i>
value	bidRequest.imp.metric.value <i>(bidRequest.imp.ext.metric.value for ORTB v2.4 and v2.3)</i>
vendor	bidRequest.imp.metric.vendor <i>(bidRequest.imp.ext.metric.vendor for ORTB v2.4 and v2.3)</i>
ext	bidRequest.imp.metric.ext <i>(bidRequest.imp.ext.metric.ext for ORTB v2.4 and v2.3)</i>

2.2.2.2 Object: OpenRTB > Request > Item > Deal

Object Tree - *openrtb.request.item.deal.<parameter_name>*

OpenRTB 3.0	OpenRTB 2.5/2.4/2.3
id	bidRequest.imp.pmp.deal.id
flr	bidRequest.imp.pmp.deal.bidfloor
flrcur	bidRequest.imp.pmp.deal.bidfloorcur
at	bidRequest.imp.pmp.deal.at
wseat	bidRequest.imp.pmp.deal.wseat

OpenRTB 3.0	OpenRTB 2.5/2.4/2.3
wadomain	bidRequest.imp.pmp.deal.wadomain
ext	bidRequest.imp.pmp.deal.ext

2.2.2.3 Object: OpenRTB > Request > Item > Spec

Object Tree - *openrtb.request.item.spec.**placement**.<parameter_name>*

OpenRTB 3.0	OpenRTB 2.5/2.4/2.3
tagid	bidRequest.imp.tagid
ssai	bidRequest.imp.ext.ssai
sdk	bidRequest.imp.displaymanager
sdkver	bidRequest.imp.displaymanagerver
reward	bidRequest.imp.ext.reward
wlang	bidRequest.wlang (<i>bidRequest.ext.wlang for ORTB v2.4 and v2.3</i>)
secure	bidRequest.imp.secure
admx	bidRequest.imp.ext.admx
curlx	bidRequest.imp.ext.curlx
ext	bidRequest.imp.ext
display	(Mappings for individual object fields noted below)
video	(Mappings for individual object fields noted below)
audio	(Mappings for individual object fields noted below)

Object: OpenRTB > Request > Item > Spec > Placement > Display

Object Tree - *openrtb.request.item.spec.placement.display.<parameter_name>*

OpenRTB 3.0	OpenRTB 2.5/2.4/2.3
pos	bidRequest.imp.banner.pos
instl	bidRequest.imp.instl
topframe	bidRequest.imp.banner.topframe
ifrbust	bidRequest.imp.iframebuster
clktype	bidRequest.imp.clickbrowser <i>bidRequest.imp.ext.clickbrowser (for ORTB v2.3)</i>
ampren	bidRequest.imp.ext.ampren
ptype	bidRequest.imp.banner.ext.ptype/ bidRequest.native.request.native.plcmtype
context	bidRequest.imp.banner.ext.context/ bidrequest.native.request.native.context
mime	bidRequest.imp.banner.mimes
api	bidRequest.imp.[banner native].api
ctype	bidRequest.imp.banner/native.ext.ctype
w	bidRequest.imp.banner.w
h	bidRequest.imp.banner.h
unit	bidRequest.imp.banner.ext.unit
priv	bidRequest.imp.banner/native.ext.priv
displayfmt	(Mappings for individual object fields noted below)
nativefmt	(Mappings for individual object fields noted below)
event	(Mappings for individual object fields noted below)
ext	bidRequest.imp.banner.ext, bidrequest.imp.native.ext

Object: OpenRTB > Request > Item > Spec > Placement > Display > DisplayFMT

Object Tree - *openrtb.request.item.spec.placement.display.displayfmt.<parameter_name>*

OpenRTB 3.0	OpenRTB 2.5/2.4/2.3
w	bidRequest.imp.banner.format.w (<i>bidRequest.imp.banner.ext.format.w for ORTB v2.3</i>)
h	bidRequest.imp.banner.format.h (<i>bidRequest.imp.banner.ext.format.h for ORTB v2.3</i>)
wratio	bidRequest.imp.banner.format.wratio (<i>bidRequest.imp.banner.ext.format.wratio for ORTB v2.4</i> <i>bidRequest.imp.banner.ext.format.wratio for ORTB v2.3</i>)
hratio	bidRequest.imp.banner.format.hratio (<i>bidRequest.imp.banner.ext.format.hratio for ORTB v2.4</i> <i>bidRequest.imp.banner.ext.format.hratio for ORTB v2.3</i>)
expdir	bidRequest.imp.banner.expdir
ext	bidRequest.imp.banner.format.ext (<i>bidRequest.imp.banner.ext.format.ext for ORTB v2.3</i>)

Object: OpenRTB > Request > Item > Spec > Placement > Display > NativeFMT

Object Tree - *openrtb.request.item.spec.placement.display.nativefmt.<parameter_name>*

OpenRTB 3.0	OpenRTB 2.5/2.4/2.3
ext	(Mappings for individual object fields noted below)
asset	(Mappings for individual object fields noted below)

Object: OpenRTB > Request > Item > Spec > Placement > Display > NativeFmt > Ext

Object Tree -

openrtb.request.item.spec.placement.display.nativefmt.ext.<parameter_name>

OpenRTB 3.0	OpenRTB 2.5/2.4/2.3
Adunit	bidrequest.imp.native.request.native.adunit
contextsubtype	bidrequest.imp.native.request.native.contextsubtype
layout	bidrequest.imp.native.request.native.layout
ver	bidrequest.imp.native.request.native.ver

Object: OpenRTB > Request > Item > Spec > Placement > Display > NativeFmt > Asset

Object Tree -

openrtb.request.item.spec.placement.display.nativefmt.asset.<parameter_name>

OpenRTB 3.0	OpenRTB 2.5/2.4/2.3
id	bidRequest.imp.native.request.native.asset.id
req	bidRequest.imp.native.request.native.asset.required
title	bidRequest.imp.native.request.native.asset.title
img	bidRequest.Imp.native.request.native.asset.img
video	(Mappings for individual object fields noted below)
data	bidRequest.imp.native.request.native.asset.data
ext	bidRequest.imp.native.request.native.asset.ext

Object: OpenRTB > Request > Item > Spec > Placement > Display > NativeFMT > Asset
> Title

OpenRTB 3.0	OpenRTB 2.5/2.4/2.3
len	bidRequest.imp.native.request.native.asset.title.len
ext	bidRequest.imp.native.request.native.asset.title.ext

Object: OpenRTB > Request > Item > Spec > Placement > Display > NativeFMT > Asset
> Img

OpenRTB 3.0	OpenRTB 2.5/2.4/2.3
type	bidRequest.Imp.native.request.native.asset.img.type
mime	bidRequest.Imp.native.request.native.asset.img.mimes
w	bidRequest.Imp.native.request.native.asset.img.w
h	bidRequest.Imp.native.request.native.asset.img.h
wmin	bidRequest.Imp.native.request.native.asset.img.wmin
hmin	bidRequest.Imp.native.request.native.asset.img.hmin
wratio	bidRequest.Imp.native.request.native.asset.img.ext.wratio
hratio	bidRequest.Imp.native.request.native.asset.img.ext.hratio
ext	bidRequest.Imp.native.request.native.asset.img.ext

Object: OpenRTB > Request > Item > Spec > Placement > Display > NativeFMT > Asset
> Video

OpenRTB 3.0	OpenRTB 2.5/2.4/2.3
ptype	bidRequest.imp.native.request.native.asset.video.ext.ptype
pos	bidRequest.imp.native.request.native.asset.video.ext.pos
delay	bidRequest.imp.native.request.native.asset.video.ext.startdelay

OpenRTB 3.0	OpenRTB 2.5/2.4/2.3
skip	bidRequest.imp.native.request.native.asset.video.ext.skip
skipmin	bidRequest.imp.native.request.native.asset.video.ext.skipmin
skipafter	bidRequest.imp.native.request.native.asset.video.ext.skipafter
playmethod	bidRequest.imp.native.request.native.asset.video.ext.playbackmethod[0]
playend	bidRequest.imp.native.request.native.asset.video.ext.playbackend
clktype	bidRequest.imp.native.request.native.asset.ext.clickbrowser
mime	bidRequest.imp.native.request.native.asset.video.mimes
api	bidRequest.imp.native.request.native.asset.video.ext.api
ctype	bidRequest.imp.video.native.request.native.asset.protocols
w	bidRequest.imp.native.request.native.asset.video.ext.w
h	bidRequest.imp.native.request.native.asset.video.ext.h
unit	bidRequest.imp.native.request.native.asset.video.ext.unit
mindur	bidRequest.imp.native.request.native.asset.video.minduration
maxdur	bidRequest.imp.native.request.native.asset.video.maxduration
maxext	bidRequest.imp.native.request.native.asset.video.ext.maxextended
minbitr	bidRequest.imp.native.request.native.asset.video.ext.minbitrate
maxbitr	bidRequest.imp.native.request.native.asset.video.ext.maxbitrate
delivery	bidRequest.imp.native.request.native.asset.video.ext.delivery
maxseq	bidRequest.imp.native.request.native.asset.video.ext.ext.maxseq
linear	bidRequest.imp.native.request.native.asset.video.ext.linearity

OpenRTB 3.0	OpenRTB 2.5/2.4/2.3
boxing	bidRequest.imp.native.request.native.asset.video.ext.boxing allowed
comp	(Mappings for individual object fields noted below)
ext	bidRequest.imp.native.request.native.asset.video.ext

Object: OpenRTB > Request > Item > Spec > Placement > Display > NativeFMT > Asset
> Video > Comp

OpenRTB 3.0	OpenRTB 2.5/2.4/2.3
id	bidRequest.imp.native.request.native.asset.video.ext.banner. id
vcm	bidRequest.imp.native.request.asset.video.ext.banner.vcm
display	similar to display placement
ext	bidRequest.imp.native.request.native.asset.video.ext.banner. ext (only forward mapping)
comptype	bidRequest.imp.native.request.native.asset.video.ext.compa niontype

Object: OpenRTB > Request > Item > Spec > Placement > Display > NativeFMT > Asset
> Data

OpenRTB 3.0	OpenRTB 2.5/2.4/2.3
type	bidRequest.imp.native.request.native.asset.data.type
len	bidRequest.imp.native.request.asset.native.data.len
ext	bidRequest.imp.native.request.asset.native.data.ext

Object: OpenRTB > Request > Item > Spec > Placement > Display > Event

Object Tree - openrtb.request.item.spec.placement.display.event.<parameter_name>

OpenRTB 3.0	OpenRTB 2.5/2.4/2.3
type	bidRequest.imp.ext.event.type
method	bidRequest.imp.ext.event.method
api	bidRequest.imp.ext.event.api
jstrk	bidRequest.imp.ext.event.jstrk
wjs	bidRequest.imp.ext.event.wjs
pxtrk	bidRequest.imp.ext.event.pxtrk
wpx	bidRequest.imp.ext.event.wpx
ext	bidRequest.imp.ext.event.ext

Object: OpenRTB > Request > Item > Spec > Placement > Display > Ext

Object Tree - openrtb.request.item.spec.placement.display.ext.<parameter_name>

OpenRTB 3.0	OpenRTB 2.5/2.4/2.3
btype	bidRequest.imp.banner.btype
id	bidRequest.imp.banner.id
hmin	bidRequest.imp.banner.hmin
wmin	bidRequest.imp.banner.wmin
hmax	bidRequest.imp.banner.hmax
wmax	bidRequest.imp.banner.wmax

Object: OpenRTB > Request > Item > Spec > Placement > Video

Object Tree - openrtb.request.item.spec.placement.video.<parameter_name>

OpenRTB 3.0	OpenRTB 2.5/2.4/2.3
pptype	bidRequest.imp.video.placement (bidRequest.imp.video.ext.placement for ORTB v2.4 and v2.3)

OpenRTB 3.0	OpenRTB 2.5/2.4/2.3
pos	bidRequest.imp.video.pos
delay	bidRequest.imp.video.startdelay
skip	bidRequest.imp.video.skip <i>(bidRequest.imp.video.ext.skip for ORTB v2.3)</i>
skipmin	bidRequest.imp.video.skipmin <i>(bidRequest.imp.video.ext.skipmin for ORTB v2.3)</i>
skipafter	bidRequest.imp.video.skipafter <i>(bidRequest.imp.video.ext.skipafter for ORTB v2.3)</i>
playmethod	bidRequest.imp.video.playbackmethod[0]
playend	bidRequest.imp.video.playbackend <i>(bidRequest.imp.video.ext.playbackend for ORTB v2.4 and v2.3)</i>
clktype	bidRequest.imp.clickbrowser <i>(bidRequest.imp.ext.clickbrowser for ORTB v2.3)</i>
mime	bidRequest.imp.video.mimes
api	bidRequest.imp.video.api
ctype	bidRequest.imp.video.protocols
w	bidRequest.imp.video.w
h	bidRequest.imp.video.h
unit	bidRequest.imp.video.ext.unit. Units of size used for w and h attributes, default 1
mindur	bidRequest.imp.video.minduration
maxdur	bidRequest.imp.video.maxduration
maxext	bidRequest.imp.video.maxextended
minbitr	bidRequest.imp.video.minbitrate
maxbitr	bidRequest.imp.video.maxbitrate
delivery	bidRequest.imp.video.delivery
maxseq	bidRequest.imp.video.ext.maxseq

OpenRTB 3.0	OpenRTB 2.5/2.4/2.3
linear	bidRequest.imp.video.linearity
boxing	bidRequest.imp.video.boxingallowed
comp	(Mappings for individual object fields noted below)

Object: OpenRTB > Request > Item > Spec > Placement > Video > Comp

Object Tree - openrtb.request.item.spec.placement.video.comp.<parameter_name>

OpenRTB 3.0	OpenRTB 2.5/2.4/2.3
id	bidRequest.imp.video.banner.id
vcm	bidRequest.imp.video.banner.vcm
display	similar to display placement
ext	bidRequest.imp.video.banner.ext (only forward mapping)
comptype	bidRequest.imp.video.companiontype

Object: OpenRTB > Request > Item > Spec > Placement > Audio

Object Tree - openrtb.request.item.spec.placement.audio.<parameter_name>

OpenRTB 3.0	OpenRTB 2.5/2.4/2.3
delay	bidRequest.imp.audio.startdelay
skip	bidRequest.imp.audio.ext.delay
skipmin	bidRequest.imp.audio.ext.skipmin
skipafter	bidRequest.imp.audio.ext.skipafter
playmethod	bidRequest.imp.audio.ext.playmethod
playend	bidRequest.imp.audio.ext.playend
feed	bidRequest.imp.audio.feed
nvol	bidRequest.imp.audio.nvol

OpenRTB 3.0	OpenRTB 2.5/2.4/2.3
mime	bidRequest.imp.audio.mimes
api	bidRequest.imp.audio.api
ctype	bidRequest.imp.audio.protocols
mindur	bidRequest.imp.audio.minduration
maxdur	bidRequest.imp.audio.maxduration
maxext	bidRequest.imp.audio.maxextended
minbitr	bidRequest.imp.audio.minbitrate
maxbitr	bidRequest.imp.audio.maxbitrate
delivery	bidRequest.imp.audio.delivery
maxseq	bidRequest.imp.audio.maxseq
comptype	bidRequest.imp.audio.companiontype
ext	bidRequest.imp.audio.ext
comp	(Mappings for individual object fields noted below)

Object: OpenRTB > Request > Item > Spec > Placement > Audio > Comp

Object Tree - openrtb.request.item.spec.placement.audio.comp.<parameter_name>

OpenRTB 3.0	OpenRTB 2.5/2.4/2.3
id	bidRequest.imp.audio.banner.id
vcm	bidRequest.imp.audio.banner.vcm
display	Similar to displayplacement
ext	bidRequest.imp.audio.banner.ext (only forward mapping)

2.2.3. Object: OpenRTB > Request > Context

Object Tree - openrtb.request.context.<parameter_name>

The Context object include the following sub objects:

- [Site](#)
- [User](#)
- [Device](#)
- [Regs](#)
- [Restrictions](#)
- [App](#)
- [Dooh](#)

2.2.3.1 Object: OpenRTB > Request > Context > Site

Object Tree - openrtb.request.context.site.<parameter_name>

OpenRTB 3.0	OpenRTB 2.5/2.4/2.3
id	bidRequest.site.id
name	bidRequest.site.name
pub	(Mappings for individual object fields noted below)
content	(Mappings for individual object fields noted below)
domain	bidRequest.site.domain
cat	bidRequest.site.cat
sectcat	bidRequest.site.pagecat
pagecat	bidRequest.site.pagecat
cattax	bidRequest.site.ext.cattax
privpolicy	bidRequest.site.privacypolicy
keywords	bidRequest.site.keywords
page	bidRequest.site.page

OpenRTB 3.0	OpenRTB 2.5/2.4/2.3
ref	bidRequest.site.ref
search	bidRequest.site.search
mobile	bidRequest.site.mobile
amp	bidRequest.site.ext.amp
ext	bidRequest.sit.ext

Object: OpenRTB > Request > Context > Site > Pub

Object Tree - openrtb.request.context.site.pub.<parameter_name>

OpenRTB 3.0	OpenRTB 2.5/2.4/2.3
id	bidRequest.site.publisher.id
name	bidRequest.site.publisher.name
domain	bidRequest.site.publisher.domain
cat	bidRequest.site.publisher.cat
cattax	bidRequest.site.publisher.ext.cattax
ext	bidRequest.site.publisher.ext

Object: OpenRTB > Request > Context > Site > Content

Object Tree - openrtb.request.context.site.content.<parameter_name>

OpenRTB 3.0	OpenRTB 2.5/2.4/2.3
id	bidRequest.site.content.id
episode	bidRequest.site.content.episode
title	bidRequest.site.content.title
series	bidRequest.site.content.series
season	bidRequest.site.content.season

OpenRTB 3.0	OpenRTB 2.5/2.4/2.3
artist	bidRequest.site.content.artist (<i>bidRequest.site.content.ext.artist for ORTB v2.3</i>)
genre	bidRequest.site.content.genre (<i>bidRequest.site.content.ext.genre for ORTB v2.3</i>)
album	bidRequest.site.content.album (<i>bidRequest.site.content.ext.album for ORTB v2.3</i>)
isrc	bidRequest.site.content.isrc (<i>bidRequest.site.content.ext.isrc for ORTB v2.3</i>)
url	bidRequest.site.content.url
cat	bidRequest.site.content.cat
cattax	bidRequest.site.content.ext.cattax
prodq	bidRequest.site.content.prodq (<i>bidRequest.site.content.ext.prodq for ORTB v2.3</i>)
context	bidRequest.site.content.context
rating	bidRequest.site.content.contentrating
urating	bidRequest.site.content.qagmediarating
mrating	bidRequest.site.content.userrating
keywords	bidRequest.site.content.keywords
live	bidRequest.site.content.livestream
srcrel	bidRequest.site.content.sourcerelationship
len	bidRequest.site.content.len
lang	bidRequest.site.content.language
embed	bidRequest.site.content.embeddable
producer	(Mappings for individual object fields noted below)
data	bidrequest.site.content.data (<i>bidrequest.site.content.ext.data for ORTB v2.3</i>)
ext	(Mappings for individual object fields noted below)

Object: OpenRTB > Request > Context > Site > Content > Producer

OpenRTB 3.0	OpenRTB 2.5/2.4/2.3
id	bidRequest.site.content.producer.id
name	bidRequest.site.content.producer.name
domain	bidRequest.site.content.producer.domain
cat	bidRequest.site.content.producer.cat
cattax	bidRequest.site.content.producer.ext.cattax
ext	bidRequest.site.content.producer.ext

Object: OpenRTB > Request > Context > Site > Content > Data

OpenRTB 3.0	OpenRTB 2.5/2.4/2.3
id	bidRequest.site.content.data.id
name	bidRequest.site.content.data.name
segment	bidRequest.site.content.data.segment
ext	bidRequest.site.content.data.ext

Object: OpenRTB > Request > Context > Site > Content > Data > Segment

OpenRTB 3.0	OpenRTB 2.5/2.4/2.3
id	bidRequest.site.content.data.segment.id
name	bidRequest.site.content.data.segment.name
value	bidRequest.site.content.data.segment.value
ext	bidRequest.site.content.data.segment.ext

Object: OpenRTB > Request > Context > Site > Content > Ext

OpenRTB 3.0	OpenRTB 2.5/2.4/2.3
videoquality	bidRequest.site.content.videoquality

2.2.3.2 Object: OpenRTB > Request > Context > User

Object Tree - openrtb.request.context.user.<parameter_name>

OpenRTB 3.0	OpenRTB 2.5/2.4/2.3
id	bidRequest.user.id
buyeruid	bidRequest.user.buyeruid
yob	bidRequest.user.yob
gender	bidRequest.user.gender
keywords	bidRequest.user.keywords
consent	bidRequest.user.ext.consent
geo	bidRequest.user.geo
data	bidRequest.user.data

Object: OpenRTB > Request > Context > User > Data

OpenRTB 3.0	OpenRTB 2.5/2.4/2.3
id	bidRequest.user.data.id
name	bidRequest.user.data.name
segment	bidRequest.user.data.segment
ext	bidRequest.user.data.ext

Object: OpenRTB > Request > Context > User > Data > Segment

OpenRTB 3.0	OpenRTB 2.5/2.4/2.3
id	bidRequest.user.data.segment.id
name	bidRequest.user.data.segment.name
value	bidRequest.user.data.segment.value
ext	bidRequest.user.data.segment.ext

2.2.3.3 Object: OpenRTB > Request > Context > Device

Object Tree - openrtb.request.context.device.<parameter_name>

OpenRTB 3.0	OpenRTB 2.5/2.4/2.3
type	bidRequest.device.devicetype
ua	bidRequest.device.ua
ifa	bidRequest.device.ifa
dnt	bidRequest.device.dnt
lmt	bidRequest.device.lmt
make	bidRequest.device.make
model	bidRequest.device.model
os	bidRequest.device.os
osv	bidRequest.device.osv
hvv	bidRequest.device.hvv
h	bidRequest.device.h
w	bidRequest.device.w
ppi	bidRequest.device.ppi
pxratio	bidRequest.device.pxratio
js	bidRequest.device.js
lang	bidRequest.device.language

OpenRTB 3.0	OpenRTB 2.5/2.4/2.3
ip	bidRequest.device.ip
ipv6	bidRequest.device.ipv6
xff	bidRequest.device.ext.xff
iptr	bidRequest.device.ext.iptr
carrier	bidRequest.device.carrier
mccmnc	bidRequest.device.mccmnc (<i>bidRequest.device.ext.mccmnc for ORTB v2.4 and v2.3</i>)
mccmnscsim	bidRequest.device.ext.mccmnscsim
contype	bidRequest.device.connectiontype
geofetch	bidRequest.device.geofetch (<i>bidRequest.device.ext.geofetch for ORTB v2.3</i>)
geo	bidRequest.device.geo
ext	bidRequest.device.ext

Object: OpenRTB > Request > Context > Device > Geo

OpenRTB 3.0	OpenRTB 2.5/2.4/2.3
type	bidRequest.user.geo.type
lat	bidRequest.user.geo.lat
lon	bidRequest.user.geo.lon
accur	bidRequest.user.geo.accuracy (<i>bidRequest.user.geo.ext.accuracy for ORTB v2.3</i>)
lastfix	bidRequest.user.geo.lastfix (<i>bidRequest.user.geo.ext.lastfix for ORTB v2.3</i>)
ipserv	bidRequest.user.geo.ipservice (<i>bidRequest.user.geo.ext.ipservice for ORTB v2.3</i>)
country	bidRequest.user.geo.country

OpenRTB 3.0	OpenRTB 2.5/2.4/2.3
region	bidRequest.user.geo.region
metro	bidRequest.user.geo.metro
city	bidRequest.user.geo.city
zip	bidRequest.user.geo.zip
utcoffset	bidRequest.user.geo.utcoffset
ext	bidRequest.user.geo.ext

2.2.3.4 Object: OpenRTB > Request > Context > Regs

Object Tree - *openrtb.request.context.regs.<parameter_name>*

OpenRTB 3.0	OpenRTB 2.5/2.4/2.3
coppa	bidRequest.regs.coppa
gdpr	bidRequest.regs.ext.gdpr
ext	bidRequest.regs.ext

2.2.3.5 Object: OpenRTB > Request > Context > Restrictions

Object Tree - *openrtb.request.context.restrictions.<parameter_name>*

OpenRTB 3.0	OpenRTB 2.5/2.4/2.3
bcat	bidrequest.bcat
cattax	bidRequest.ext.cattax
badv	bidrequest.badv
bapp	bidrequest.bapp (bidRequest.ext.bapp for ORTB v2.3)
battr	union of bidRequest.imp[*].(video/banner/native).battr

OpenRTB 3.0	OpenRTB 2.5/2.4/2.3
ext	bidRequest.ext

2.2.3.6 Object: OpenRTB > Request > Context > App

Object Tree - *openrtb.request.context.app.<parameter_name>*

OpenRTB 3.0	OpenRTB 2.5/2.4/2.3
id	bidRequest.app.id
name	bidRequest.app.name
pub	bidRequest.app.publisher
content	bidRequest.app.content
domain	bidRequest.app.domain
cat	bidRequest.app.cat
sectcat	bidRequest.app.sectioncat
pagecat	bidRequest.app.pagecat
cattax	bidRequest.app.ext.cattax
privpolicy	bidRequest.app.privacypolicy
keywords	bidRequest.app.keywords
bundle	bidRequest.app.bundle
storeid	bidRequest.app.ext.cattax.storeid
storeurl	bidRequest.app.storeurl
ver	bidRequest.app.ver
paid	bidRequest.app.paid
ext	bidRequest.app.ext

2.2.3.7 Object: OpenRTB > Request > Context > Dooh

Object Tree - *openrtb.request.context.dooh.<parameter_name>*

OpenRTB 3.0	OpenRTB 2.5/2.4/2.3
venue	bidRequest.ext.dooh.venue
venuefixed	bidRequest.ext.dooh.venuefixed
venuefixedetime	bidRequest.ext.dooh.venuefixedetime
venuefixedetimedpi	bidRequest.ext.dooh.venuefixedetimedpi
venuefixedetimedpiext	bidRequest.ext.dooh.venuefixedetimedpiext
id	bidRequest.ext.dooh.id
name	bidRequest.ext.dooh.name
pub	bidRequest.ext.dooh.pub

3. Response Mappings: ORTB 3.0 vs ORTB 2.5/ 2.4/ 2.3

These mappings are used for converting responses between OpenRTB 3.0 and OpenRTB 2.5/2.4/2.3.

3.1. Object: OpenRTB

OpenRTB 3.0	OpenRTB 2.5/2.4/2.3
openrtb.ver	-
openrtb.domainspec	-
openrtb.domainver	-
openrtb.response	(Mappings for individual object fields noted below)

3.2. Object: OpenRTB > Response

Object Tree – openrtb.response.<parameter_name>

OpenRTB 3.0	OpenRTB 2.5/2.4/2.3
id	bidResponse.id
bidid	bidResponse.bidId
nbr	bidResponse.nbr
cur	bidResponse.cur
cdata	bidResponse.customdata
seatbid	(Mappings for individual object fields noted below)
ext	bidresponse.ext

3.2.1. Object: OpenRTB > Response > SeatBid

Object Tree – openrtb.response.seatbid.<parameter_name>

OpenRTB 3.0	OpenRTB 2.5/2.4/2.3/2.4/2.3
seat	bidResponse.seatbid.seat
package	bidResponse.seatbid.group
bid	(Mappings for individual object fields noted below)
ext	bidresponse.seatbid.ext

Object: OpenRTB > Response > SeatBid > Bid

Object Tree – openrtb.response.seatbid.bid.<parameter_name>

OpenRTB 3.0	OpenRTB 2.5/2.4/2.3/2.4/2.3
id	bidResponse.seatbid.bid.id
item	bidResponse.seatbid.bid.impid
price	bidResponse.seatbid.bid.price
deal	bidResponse.seatbid.bid.dealid
cid	bidResponse.seatbid.bid.cid
tactic	bidResponse.seatbid.bid.tactic (bidResponse.seatbid.bid.ext.tactic for ORTB v2.4 and v2.3)
purl	bidResponse.seatbid.bid.nurl
burl	bidResponse.seatbid.bid.burl (bidResponse.seatbid.bid.ext.burl for OTB v2.4 and v2.3)
lurl	bidResponse.seatbid.bid.lurl (bidResponse.seatbid.bid.ext.burl for OTB v2.4 and v2.3)

OpenRTB 3.0	OpenRTB 2.5/2.4/2.3/2.4/2.3
exp	bidResponse.seatbid.bid.exp
mid	bidResponse.seatBid.bid.adid (bidResponse.seatBid.bid.ext.adid for ORTB v2.3)
macro	bidResponse.seatbid.bid.ext.macro
media	(Mappings for individual object fields noted below)
ext	bidresponse.seatbid.bid.ext

Object: OpenRTB > Response > SeatBid > Bid > Macro

Object Tree – *openrtb.response.seatbid.bid.macro.<parameter_name>*

OpenRTB 3.0	OpenRTB 2.5/2.4/2.3/2.4/2.3
key	bidResponse.seatbid.bid.ext.macro.key
value	bidResponse.seatbid.bid.ext.macro.value
ext	bidResponse.seatbid.bid.ext.macro.ext

Object: OpenRTB > Response > SeatBid > Bid > Media

Object Tree – *openrtb.response.seatbid.bid.media.<parameter_name>*

OpenRTB 3.0	OpenRTB 2.5/2.4/2.3/2.4/2.3
ad	(Mappings for individual object fields noted below)

Object: OpenRTB > Response > SeatBid > Bid > Ext

Object Tree – *openrtb.response.seatbid.bid.ext.<parameter_name>*

OpenRTB 3.0	OpenRTB 2.5/2.4/2.3/2.4/2.3
protocol	bidresponse.seatbid.bid.protocol

Object: OpenRTB > Response > SeatBid > Bid > Media > Ad

OpenRTB 3.0	OpenRTB 2.5/2.4/2.3
id	bidResponse.seatbid.bid.crid
adomain	bidResponse.seatbid.bid.adomain
bundle	bidResponse.seatbid.bid.bundle
iurl	bidResponse.seatbid.bid.iurl
cat	bidResponse.seatbid.bid.cat
cattax	bidResponse.seatbid.bid.ext.cattax
lang	bidResponse.seatbid.bid.language (bidResponse.seatbid.bid.ext.language for ORTB v2.4 and v2.3)
attr	bidResponse.seatbid.bid.attr
secure	bidResponse.seatbid.bid.ext.secure
mrating	bidResponse.seatbid.bid.qagmediarating (bidResponse.seatbid.bid.ext.qagmediarating for ORTB v2.3)
init	bidResponse.seatbid.bid.ext.init
lastmod	bidResponse.seatbid.bid.ext.lastmod
display	(Mappings for individual object fields noted below)
video	(Mappings for individual object fields noted below)
audio	(Mappings for individual object fields noted below)

OpenRTB 3.0	OpenRTB 2.5/2.4/2.3
audit	(Mappings for individual object fields noted below)
ext	bidResponse.seatbid.bid.ext

Object: OpenRTB > Response > SeatBid > Bid > Media > Ad > Display

OpenRTB 3.0	OpenRTB 2.5/2.4/2.3
mime	bidResponse.seatbid.bid.ext.mime
api	bidResponse.seatbid.bid.api (bidResponse.seatbid.bid.ext.api for ORTB v2.3)
ctype	bidResponse.seatbid.bid.ext.ctype
w	bidResponse.seatbid.bid.w
h	bidResponse.seatbid.bid.h
wratio	bidResponse.seatbid.bid.wratio (bidResponse.seatbid.bid.ext.wratio for ORTB v2.4 and v2.3)
hratio	bidResponse.seatbid.bid.hratio (bidResponse.seatbid.bid.ext.hratio for ORTB v2.4 and v2.3)
priv	bidResponse.seatbid.bid.ext.priv
adm	bidResponse.seatbid.bid.adm
curl	bidResponse.seatbid.bid.ext.curl
banner	(Mappings for individual object fields noted below)
native	bidResponse.seatbid.bid.adm
event	bidResponse.seatbid.bid.ext.event.
ext	bidResponse.seatbid.bid.ext

Object: OpenRTB > Response > SeatBid > Bid > Media > Ad > Display > Banner

OpenRTB 3.0	OpenRTB 2.5/2.4/2.3
img	bidResponse.seatbid.bid.ext.banner.img
link	bidResponse.seatbid.bid.ext.banner.link
ext	bidResponse.seatbid.bid.ext.banner.ext

Object: OpenRTB > Response > SeatBid > Bid > Media > Ad > Display > Native

OpenRTB 3.0	OpenRTB 2.5/2.4/2.3
ext	bidresponse.seatbid.bid.adm.native.ext
link	(Mappings for individual object fields noted below)
asset	(Mappings for individual object fields noted below)

Object: OpenRTB > Response > SeatBid > Bid > Media > Ad > Display > Native > Ext

OpenRTB 3.0	OpenRTB 2.5/2.4/2.3
imptrackers	bidresponse.seatbid.bid.adm.native.imptrackers
jstracker	bidresponse.seatbid.bid.adm.native.jstrackers

Object: OpenRTB > Response > SeatBid > Bid > Media > Ad > Display > Native > Link

OpenRTB 3.0	OpenRTB 2.5/2.4/2.3
url	bidresponse.seatbid.bid.adm.native.link.url
urlfb	bidresponse.seatbid.bid.adm.native.link.fallback
trkr	bidresponse.seatbid.bid.adm.native.link.clicktrackers
ext	bidresponse.seatbid.bid.adm.native.link.ext

Object: OpenRTB > Response > SeatBid > Bid > Media > Ad > Display > Native > Asset

OpenRTB 3.0	OpenRTB 2.5/2.4/2.3
id	bidresponse.seatbid.bid.adm.native.asset.id
req	bidresponse.seatbid.bid.adm.native.asset.required
title	(Mappings for individual object fields noted below)
image	(Mappings for individual object fields noted below)
video	(Mappings for individual object fields noted below)
data	(Mappings for individual object fields noted below)
link	(Mappings for individual object fields noted below)
ext	bidresponse.seatbid.bid.adm.native.asset.ext

Object: OpenRTB > Response > SeatBid > Bid > Media > Ad > Display > Native > Asset
> Title

OpenRTB 3.0	OpenRTB 2.5/2.4/2.3
text	bidresponse.seatbid.bid.adm.native.asset.title.text
len	bidresponse.seatbid.bid.adm.native.asset.title.ext.len
ext	bidresponse.seatbid.bid.adm.native.asset.title.ext

Object: OpenRTB > Response > SeatBid > Bid > Media > Ad > Display > Native > Asset
> Image

OpenRTB 3.0	OpenRTB 2.5/2.4/2.3
url	bidresponse.seatbid.bid.adm.native.asset.img.url
w	bidresponse.seatbid.bid.adm.native.asset.img.w
h	bidresponse.seatbid.bid.adm.native.asset.img.h
type	bidresponse.seatbid.bid.adm.native.asset.img.ext.type
ext	bidresponse.seatbid.bid.adm.native.asset.img.ext

Object: OpenRTB > Response > SeatBid > Bid > Media > Ad > Display > Native > Asset
> Video

OpenRTB 3.0	OpenRTB 2.5/2.4/2.3
adm	bidresponse.seatbid.bid.adm.native.asset.video.vasttag
curl	bidresponse.seatbid.bid.adm.native.asset.video.ext.curl
ext	bidresponse.seatbid.bid.adm.native.asset.video.ext

Object: OpenRTB > Response > SeatBid > Bid > Media > Ad > Display > Native > Asset
> Data

OpenRTB 3.0	OpenRTB 2.5/2.4/2.3
value	bidresponse.seatbid.bid.adm.native.asset.data.value
len	bidresponse.seatbid.bid.adm.native.asset.data.ext.len
type	bidresponse.seatbid.bid.adm.native.asset.data.ext.type
ext	bidresponse.seatbid.bid.adm.native.asset.data.ext

Object: OpenRTB > Response > SeatBid > Bid > Media > Ad > Display > Native > Asset
> Data > Ext

OpenRTB 3.0	OpenRTB 2.5/2.4/2.3
label	bidresponse.seatbid.bid.adm.native.asset.data.label

Object: OpenRTB > Response > SeatBid > Bid > Media > Ad > Display > Native > Asset
> Link

OpenRTB 3.0	OpenRTB 2.5/2.4/2.3
url	bidresponse.seatbid.bid.adm.native.asset.link.url
urlfb	bidresponse.seatbid.bid.adm.native.asset.link.fallback

OpenRTB 3.0	OpenRTB 2.5/2.4/2.3
trkr	bidresponse.seatbid.bid.adm.native.asset.link.clicktrackers
ext	bidresponse.seatbid.bid.adm.native.asset.link.ext

Object: OpenRTB > Response > SeatBid > Bid > Media > Ad > Display > Event

OpenRTB 3.0	OpenRTB 2.5/2.4/2.3
type	bidResponse.seatbid.bid.ext.event.type
method	bidResponse.seatbid.bid.ext.event.method
api	bidResponse.seatbid.bid.ext.event.api
url	bidResponse.seatbid.bid.ext.event.url
cdata	bidResponse.seatbid.bid.ext.event.cdata
ext	bidResponse.seatbid.bid.ext.event.ext

Object: OpenRTB > Response > SeatBid > Bid > Media > Ad > Video

OpenRTB 3.0	OpenRTB 2.5/2.4/2.3
mime	bidResponse.seatbid.bid.ext.mime
api	bidResponse.seatbid.bid.api (bidResponse.seatbid.bid.ext.api for ORTB v2.3)
ctype	bidResponse.seatbid.bid.ext.ctype
dur	bidResponse.seatbid.bid.ext.dur
adm	bidResponse.seatbid.bid.adm
curl	bidResponse.seatbid.bid.ext.curl
ext	bidresponse.seatbid.bid.ext

Object: OpenRTB > Response > SeatBid > Bid > Media > Ad > Audio

OpenRTB 3.0	OpenRTB 2.5/2.4/2.3
mime	bidresponse.seatbid.bid.ext.mime
api	bidresponse.seatbid.bid.api (bidresponse.seatbid.bid.ext.api for ORTB v2.3)
ctype	bidresponse.seatbid.bid.ext.ctype
dur	bidresponse.seatbid.bid.ext.dur
adm	bidresponse.seatbid.bid.adm
curl	bidresponse.seatbid.bid.ext.curl
ext	bidresponse.seatbid.bid.ext

Object: OpenRTB > Response > SeatBid > Bid > Media > Ad > Audit

OpenRTB 3.0	OpenRTB 2.5/2.4/2.3
status	bidresponse.seatbid.bid.ext.status
feedback	bidresponse.seatbid.bid.ext.feedback
init	bidresponse.seatbid.bid.ext.audit.init
lastmod	bidresponse.seatbid.bid.ext.lastmod
corr	bidresponse.seatbid.bid.ext.corr
ext	bidresponse.seatbid.bid.ext