

DOOH: Digital Out Of Home

Architecture Overview

Adhese supports DOOH through dedicated endpoints, which allow:

- Media asset distribution
- Playlist generation for screens/players
- Proof-of-play tracking
- Player-level targeting and reporting

A typical DOOH setup contains the following components:

- Screens
 - Digital Signage CMS / Player
 - Adhese Ad Server
 - Server-side data mapping
 - Reporting and Proof-of-Play Tracking
-

Implementation prerequisites

Before starting, ensure that the following are available:

Adhese Requirements

- Active Adhese account
- DOOH feature enabled by Adhese support
- Configured Inventory & templates
- Configured player ID target

Player / CMS Requirements

- Ability to perform HTTP GET requests
- JSON parsing support
- Local asset caching support
- Video/image playback support
- Ability to fire tracking URLs

Adhese DOOH endpoints

Assets Download Endpoint (Heads-up)

Ensure that the *Use in headsup* setting is activated for all your DOOH formats. You can perform this action in the admin UI.

Use in headsup file

This is an optional endpoint used to retrieve and cache all active creative assets for a DOOH position. The response structure is fixed and cannot be customised.

Request example

```
https://headsup-[customer].adhese.org/api/headsup/download-list/sl[positioncode]
```

Response example

```
{
  "media": [
    {
      "ad": {
        "id": "https://pool-demo.adhese.com/pool/lib/ad1.mp4",
        "mime": "video/mp4",
        "curl": "https://pool-demo.adhese.com/pool/lib/ad1.mp4",
        "checksum": "abc123"
      }
    }
  ]
}
```

Detailed information on the headsup endpoint can be found [here](#)

Playlist Endpoint

Adhese provides two stack endpoints for retrieving a playlist.

1. The **/m/stack/** endpoint, which retrieves a list with a limit on the number of ads in the response

2. The `/e/stack/` endpoint, which doesn't have a predefined limit

Request example

```
/m/stack/: https://ads-[customer].adheses.com/m/stack/sl[positioncode]/pi[player ID]?max_ads=[amount]
/e/stack/: https://ads-[customer].adheses.com/e/stack/sl[positioncode]/pi[player ID]
```

Example response

```
{
  "ads": [
    {
      "id": "https://pool-demo.adheses.com/pool/lib/562_2nd_1.mp4",
      "dur": 28.07,
      "proofOfPlay": "https://ads-demo.adheses.com/track/3474/sl357/tlnone/piplayer_id/A2?1746011926824",
      "error": "https://ads-demo.adheses.com/track/3474-PLAY_ERROR_[ERRORCODE]/sl357/tlnone/piplayer_id/A2/?1746011926824"
    },
    {
      "id": "https://pool-demo.adheses.com/pool/lib/561_2nd_1.mp4",
      "dur": 11.45,
      "proofOfPlay": "https://ads-demo.adheses.com/track/3444/sl357/tlnone/piplayer_id/A2?1746011926824",
      "error": "https://ads-demo.adheses.com/track/3444-PLAY_ERROR_[ERRORCODE]/sl357/tlnone/piplayer_id/A2/?1746011926824"
    },
    {
      "id": "https://pool-demo.adheses.com/pool/lib/560_2nd_1.mp4",
      "dur": 18.85,
      "proofOfPlay": "https://ads-demo.adheses.com/track/3455/sl357/tlnone/piplayer_id/A2?1746011926824",
      "error": "https://ads-demo.adheses.com/track/3455-PLAY_ERROR_[ERRORCODE]/sl357/tlnone/piplayer_id/A2/?1746011926824"
    }
  ]
}
```

Common Fields

Field	Description
id	Creative URL

dur	Duration in milliseconds
proofOfPlay	Tracking URL after playback
error	Tracking URL for playback errors

The response structure consists of an array of *ads*, each containing several objects. The object structure is linked to the Advar template that was used to create the campaigns. This template is maintained either in Adhese itself or in the configured GitHub repository for your account.

Detailed information on the stack endpoint can be found [here](#)

Player ID target

You can provide extra target information through the request by adding extra target sections to the URL: **/[prefix][value]/**. One example of such a target is the player ID, which has the prefix 'pi', as shown in the above example. This ID can be used for:

- Player/screen level targeting and reporting
- Location-based targeting and reporting

Providing extra target / reporting data

Player / store location and other custom metadata can be provided server-side by uploading a **player => metadata mapping** in Adhese.

Each metadata property will be linked to its own target prefix. This data will be mapped automatically to incoming requests based on the player ID and will become available for targeting and reporting purposes.

Adhese requires the player ID prefix - or any other target prefixes - to be configured by support.

Operational Recommendations

Asset Caching

Always cache assets locally to:

- Reduce bandwidth
- Avoid playback interruptions
- Improve offline resilience

Offline Mode

Players should continue playback using:

- Last valid playlist
- Cached creatives

Troubleshooting

Issue	Possible Cause
Empty media array	No active campaigns or targeting-related issues
Endpoint redirects	DOOH endpoints not enabled
Headsup endpoint empty	No active campaigns or <i>Use in heads-up</i> format config disabled
Playback errors	Unsupported codec or corrupt file
No reporting	Proof-of-play URL not triggered

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