

adacado[®] We make ads that matter.

Data Feed Best Practices

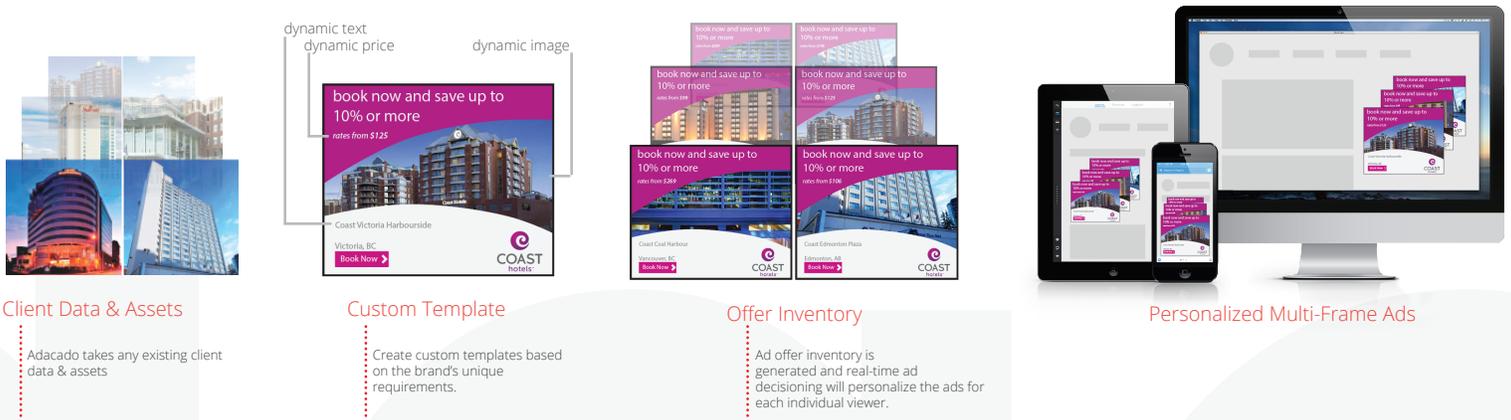


Introduction

Adacado is a powerful and flexible real time creative (RTC) advertising platform designed expressly for agencies and advertisers to create successful data driven RTC display campaigns. A key element of real time creative campaigns is the use of data feeds for the large scale generation and automated updates of ad content. This document provides an overview of best practices and guidelines for the use of data feeds in creating an Adacado real time creative campaign.

How it works?

As illustrated in the diagram below, Adacado takes existing advertiser data and assets and combines them with custom designed creative templates to generate thousands upon thousands of individual “ad frame” variations. When an Adacado ad impression is served, ad frames are dynamically selected according to the specific targeting setup of the campaign, thus delivering a personalized ad to each individual viewer across any type of device. Data feed updates can be automated to enable frequent creative and content updates to live campaigns, without having to traffick new ad tags.



Data Sources and Formats

Adacado can work with a variety of data formats:

- XML:** XML feeds are the preferred format.
- API:** For clients with API's, Adacado can work with both REST or SOAP based APIs, with either XML or JSON outputs.
- CSV or TXT:** Spreadsheet or flat files in CSV or TXT format are also acceptable. With flat files it is important the file is tab or comma delimited and contains a header row.
- RSS:** RSS feeds are another format we can work with.
- SITE SCRAPER:** In the event a client does not have a data feed or source as listed above, Adacado can use its own scraper technology to scrape assets and content off the advertiser's website.

Data Content & Structure

Quality data feeds have both the following types of data:

- CONTENT DATA:** The data feed should contain fields for every dynamic asset to be used as content within the ads. For example, a retailer's data feed would typically include content fields such as product name, product image URL, price, sale price and destination URL.
- META/TARGETING DATA:** Targeting or metadata is a critical element of any data feed. Targeting data is information about products/offers in the data feed that may not necessarily be used as content. For example, in a retail data feed, targeting data might include: category, subcategory, best-seller, in-stock/out-of-stock, or gender.

Automated Updates

Adacado's preferred method of campaign set up is to automate the data feed update process. The following points are the key details defined with the advertiser as part of Adacado's campaign set up process.

Location: The data feed must be accessible via a static URL or FTP. Adacado can retrieve files hosted by the advertisers, but if an advertiser cannot host the data feed themselves, Adacado can provide an FTP account for hosting the file.

Access Credentials: Please provide any necessary account credentials such as username, password, API key or IP whitelisting details so that Adacado can access the data. If Adacado is hosting, Adacado will provide credentials to the advertiser.

Consistent Filename: Ensure the data feed filename is consistent (e.g. datafeed.csv). Changing the filename will break the update process.

Update Frequency, Time & Time Zone: Frequency of updates will be defined as part of the campaign set up process. Note that this includes frequency and time/time-zone (e.g. daily updates, 1am, EST).

Frequently Asked Questions

EXISTING FEEDS: Can advertisers use an existing feed like a Google Product Feed?

Yes, Adacado can use existing data feeds the advertiser may already have or that have been created by other third party providers.

AUTOMATED UPDATES: Is the data feed update process automated?

Yes, Adacado's preferred method is to automate the data feed update process so clients can control ad content via the data feed.

FREQUENCY OF UPDATES: How frequently can data feeds be updated?

Adacado can process data feeds ranging from hourly to daily or weekly. Frequency of updates is determined at the time of campaign setup based on advertiser requirements and the size of the data feed.

UPDATES GOING LIVE: Once the data feed is updated, how long does it take for the changes to go live?

Data feed updates are normally pushed live and visible in the ads within 5 minutes of the update.

DATA FEED SIZE: Is there a size limit for data feeds?

There are no specific size limits enforced. Adacado routinely works with large data feeds so it's only a matter of understanding campaign requirements and update frequency.

MULTIPLE FEEDS: Can Adacado use multiple data feeds for a campaign?

Yes, Adacado can access multiple data feeds to construct and update a campaign. A common example is with travel advertisers that may provide a CSV file with all their hotel details and a separate API used to access daily price data.

EXTRA FIELDS: What if my data feed has extra fields and content, can the extra data be ignored?

Yes, Adacado can work with data feeds that have extra fields and content. Adacado will define specific rules for which fields to use and which ones to be ignored.

ALTERING DATA CONTENT: Can Adacado apply rules to alter or adjust data feed content?

Yes, Adacado uses XSLT to apply rules for transforming content within a data feed. Here a just a few example scenarios of transformation rules that Adacado can apply.

- Truncating text length after a designated character or word count.
- Add or remove specific text or characters to a parameter value (e.g. add a "\$" before a numerical price value)
- Transform date formats (e.g. change 10/18/2015 to 2015-10-18)
- Numerical calculations (e.g. apply a formula to change a temperature value from Celcius to Fahrenheit).

MISSING VALUES: What happens if a parameter within the data feed is missing a value (e.g. missing price or image)?

Adacado can apply different rules depending on the nature of the missing parameter.

OPTIONAL: If a parameter in the data feed is an optional asset within the creative design (e.g. sale price), Adacado can generate an ad frame for that data feed entry without the missing element.

REQUIRED: If a parameter is a required asset within the creative design (e.g. product image URL), Adacado will bypass the data feed entry and will not generate an ad frame for that product/offer.

ENCODING: Should the data feed use a particular encoding?

Yes, please ensure the data feed uses UTF-8 encoding. This is particularly important when dealing with text content in different languages using different font characters.

FEED UPDATE FAILURES: Does Adacado monitor data feed updates? What happens if there is a failure?

Yes, Adacado monitors all automated data feed updates. In the event of a data feed update failure, Adacado's managed services team receives a failure notification. Adacado will then assess the cause of the failure and address the matter accordingly.

Data Feed Samples

XML Sample - Retail

```
<?xml version="1.0" encoding="UTF-8" standalone="true"?>
<Items>
<Item>
<SKU>46018</SKU>
<Category>Leather Bags</ProductCategory>
<ProductImage>http://www.site.com/catalog/product/image-1214469-46018.jpg</ProductImage>
<Description>Cross body brown leather bag</ProductDescription>
<Brand>Kate Spade</ProductBrand>
<ProductURL>http://www.site.com/product/brown-leather-bag-46108</ProductURL>
<Price>599</ProductPrice>
<SalePrice>550</ProductSalePrice>
<Gender>women</ProductGender>
<Feature_Label>sale</Feature_Label>
<currency>USD</currency>
</Item>
```

XML Sample -Travel (hotel)

```
<?xml version="1.0" encoding="UTF-8" standalone="true"?>
<Root xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
<Row>
<Hotel_Name>Super Hotel High Rise Suites Los Angeles</Hotel_Name>
<PropertyID>LAHRS</Hotel_Code>
<Hotel_City>Los Angeles</Hotel_City>
<Airport_IATAs>LAX, ONT, SNA</Airport_IATAs>
<Hotel_Image>http://cdn.superhotel.com/images/property/LAHRS</Hotel_Image>
<Hotel_URL>www.superhotel.com/property/reservations/index.html?propertyID=LAHRS</Hotel_URL>
</Row>
</Root>
```

CSV Sample - Auto

make	model	year	vin	price	condition	description	image_urls	Landing_Page_urls
Dodge	Challenger	2015	2C3CDZAT9FH719349	32185	New	All advertised prices exclude	https://content.homenetiol.com/614/23335/640x480/71267e175ff47a0b4f8b4	https://getdodge.com/614/23335/640x480/71267e175ff47a0b4f8b40e7bedda7.jpg
Dodge	Challenger	2015	2C3CDZB65FH758375	29975	New	All advertised prices exclude	https://content.homenetiol.com/614/23335/640x480/fbbd2e4718814b9ffdfc	https://getdodge.com/614/23335/640x480/fbbd2e4718814b9ffdfc5c00510.jpg
Dodge	Challenger	2015	2C3CDZAG6FH805283	26985	New	All advertised prices exclude	https://content.homenetiol.com/614/23335/640x480/1b1d43e0f23749b69c2c89	https://getdodge.com/614/23335/640x480/1b1d43e0f23749b69c2c892716449b0.jpg
Dodge	Challenger	2015	2C3CDZAG1FH805287	26985	New	All advertised prices exclude	https://content.homenetiol.com/614/23335/640x480/14207035fa304c3fb9703	https://getdodge.com/614/23335/640x480/14207035fa304c3fb9703c68991d35f.jpg
Dodge	Challenger	2015	2C3CDZAT8FH861496	31590	New	All advertised prices exclude	https://content.homenetiol.com/614/23335/640x480/7e9006374b0c4208743c	https://getdodge.com/614/23335/640x480/7e9006374b0c4208743cbeed7943f.jpg
Dodge	Challenger	2015	2C3CDZAG6FH851509	24899	New	2015 Dodge Challenger SXT.	https://content.homenetiol.com/614/23335/640x480/58d3e6f4e404f108f925f	https://getdodge.com/614/23335/640x480/58d3e6f4e404f108f925f1504d7d961.jpg
Dodge	Challenger	2015	2C3CDZAT6FH856118	35085	New	Please call for information	https://content.homenetiol.com/614/23335/640x480/733e056056a64e5d9f6a45	https://getdodge.com/614/23335/640x480/733e056056a64e5d9f6a4517d4357de6.jpg
Dodge	Challenger	2015	2C3CDZAT6FH86534	35085	New	Please call for information	https://content.homenetiol.com/614/23335/640x480/575c9548ab46470484b6b1	https://getdodge.com/614/23335/640x480/575c9548ab46470484b6b12cd59614e2.jpg
Dodge	Challenger	2015	2C3CDZB76FH850895	34370	New	Please call for information	https://content.homenetiol.com/614/23335/640x480/94d08044c93740278b6f4	https://getdodge.com/614/23335/640x480/94d08044c93740278b6f41c12175520.jpg
Dodge	Challenger	2015	2C3CDZB76FH843285	40770	New	Please call for information	https://content.homenetiol.com/614/23335/640x480/04757479b2c4473be01b2	https://getdodge.com/614/23335/640x480/04757479b2c4473be01b21e63c3a9f8.jpg
Dodge	Challenger	2015	2C3CDZAT2FH822130	34390	New	Please call for information	https://content.homenetiol.com/614/23335/640x480/c29e5403d0ba4a32a6a63f	https://getdodge.com/614/23335/640x480/c29e5403d0ba4a32a6a63f9075065.jpg
Dodge	Challenger	2015	2C3CDZB74FH843284	40770	New	Please call for information	https://content.homenetiol.com/614/23335/640x480/f025e354237941028502c2	https://getdodge.com/614/23335/640x480/f025e354237941028502c26c4472e2b.jpg
Dodge	Challenger	2015	2C3CDZB74FH843286	40770	New	Please call for information	https://content.homenetiol.com/614/23335/640x480/65e38269e7c745329f67e	https://getdodge.com/614/23335/640x480/65e38269e7c745329f67e7a04d4f5b3.jpg
Dodge	Challenger	2015	2C3CDZAG6FH88810	27990	New	Please call for information	https://content.homenetiol.com/614/23335/640x480/48d379a9d48348879ed55	https://getdodge.com/614/23335/640x480/48d379a9d48348879ed5577af51522a.jpg
Dodge	Challenger	2015	2C3CDZAG6FH88811	27990	New	Please call for information	https://content.homenetiol.com/614/23335/640x480/stock_images/5/2015D00004	https://getdodge.com/614/23335/640x480/stock_images/5/2015D00004_640_01.jp
Dodge	Challenger	2015	2C3CDZAG6FH895392	27990	New	Please call for information	https://content.homenetiol.com/614/23335/640x480/8403452a3c714c89b8c51d	https://getdodge.com/614/23335/640x480/8403452a3c714c89b8c51d24951091c.jpg
Dodge	Challenger	2015	2C3CDZAG6FH892847	42865	New	Please call for information	https://content.homenetiol.com/614/23335/640x480/stock_images/5/2015D00004	https://getdodge.com/614/23335/640x480/stock_images/5/2015D00004_640_01.jp
Dodge	Challenger	2015	2C3CDZB74FH892893	41885	New	Please call for information	https://content.homenetiol.com/614/23335/640x480/stock_images/5/2015D00004	https://getdodge.com/614/23335/640x480/stock_images/5/2015D00004_640_01.jp
Dodge	Challenger	2015	2C3CDZAG6FH912190	27990	New	Please call for information	https://content.homenetiol.com/614/23335/640x480/stock_images/5/2015D00004	https://getdodge.com/614/23335/640x480/stock_images/5/2015D00004_640_01.jp
Dodge	Challenger	2015	2C3CDZB76FH888737	41675	New	Please call for information	https://content.homenetiol.com/614/23335/640x480/stock_images/5/2015D00004	https://getdodge.com/614/23335/640x480/stock_images/5/2015D00004_640_01.jp
Dodge	Challenger	2015	2C3CDZAG6FH906464	27990	New	Please call for information	https://content.homenetiol.com/614/23335/640x480/stock_images/5/2015D00004	https://getdodge.com/614/23335/640x480/stock_images/5/2015D00004_640_01.jp
Dodge	Challenger	2015	2C3CDZAT9FH912200	32990	New	Please call for information	https://content.homenetiol.com/614/23335/640x480/stock_images/5/2015D00004	https://getdodge.com/614/23335/640x480/stock_images/5/2015D00004_640_01.jp
Dodge	Challenger	2015	2C3CDZAG6FH912197	27990	New	Please call for information	https://content.homenetiol.com/614/23335/640x480/stock_images/5/2015D00004	https://getdodge.com/614/23335/640x480/stock_images/5/2015D00004_640_01.jp
Dodge	Challenger	2015	2C3CDZD11FH901167	53365	New	Please call for information	https://content.homenetiol.com/614/23335/640x480/stock_images/5/2015D00004	https://getdodge.com/614/23335/640x480/stock_images/5/2015D00004_640_01.jp

