DynamicView

Data Source Summary

February 2021

1   Introduction

Welcome to DynamicView™!

Generally speaking, DynamicView seeks to gather data of the following types: Order, Product, Marketing, Web Analytics, and Metrics Files. This document provides details of each file type (many of which are optional) under those classifications.

What if my data set doesn't perfectly match these described files? While a perfect match would be ideal, we understand that it isn't always possible. The DynamicAction team will work with you to transform your data to fit the DynamicAction processing logic when necessary. Internally the DynamicAction team has access to multiple partial data definitions that can be used to input data to the model. While these may not cater to every possible complex data rule set, they will allow the vast majority to be covered where there are suitable keys within the data to enable it to be joined.

General Guidelines:
- Not all fields are mandatory but the more fields provided the better as they ultimately drive additional metrics and actions.
- All files should be transferred on a daily interval. Weekly transfers can be accommodated but may result in loss of functionality.
- Not all files or fields are applicable to all businesses.
- Where feasible, it is preferred for the fields in each file to be ordered as outlined in this document. If certain fields are not available, please leave them blank.
- Where feasible, please output the files using the requested data types. For example, all requested date/timestamp fields should follow the format "YYYY-MM-DD hh:mm:ss".
- When the same field is listed in more than one file (e.g. Order ID, Product ID), the fields should match across source files. If this is not the case, we will require a mapping in order to join them.
- Please conform to standard file formats
- Please use a header row on all files using the field headers outlined in this document.

2   File Properties

The exact definition of the integration parameters will be defined during the detailed analysis work conducted with each integration provider. However, an overview of the general requirements is given below to assist in the discussions regarding source systems.

2.1   File Type

DynamicAction supports a number of file types including CSV, XML and Excel (XLS and XLSX) with a clear preference for CSV. Internally, we use tab separated text files. Any files where a field may contain the delimiter character should be enclosed in double quotes (").

CSV, Delimited text and Excel files must have a header row.

2.2   Transfer Method

The preferred data file transfer method is via reliable APIs that DynamicAction can call. In the absence of an API, the DynamicAction standard method for file transfer is SFTP. This provides a secure and encrypted medium as well as a location for file transfer. Whether this is a "push" or a "pull" transfer can be agreed prior to setting up the file.

If you are not able to implement APIs or SFTP, we will consider FTP and email, but only with your approval and understanding that these are not secure means of file transfer.

When the data is controlled by a 3rd party we will typically have a pre-built connector and all that is required are the authorization credentials to allow us to access your data.

2.3   Schedule and Timing of Transfers

The export and transfer of each file should be a fully automated process to ensure regular and timely delivery of files. The specific timing of the transfer of files will be agreed with the individual integration providers, but it should be noted that DynamicAction must wait for the final file each day before proceeding with processing.

All files should be delivered daily. Each file should contain records for the whole of the previous day from 00:00:00 to 23:59:59. (Note: Weekly transfers can be accommodated but may result in a loss of functionality and timeliness.)

Ideally, the systems from which source data is extracted should be set up for the same time zone. This ensures that the data gathered from the different data sources all falls within the same period of time. If this is not the case, this should be raised as an issue with your DynamicAction Implementation team.

2.4   File Naming Conventions

Daily files should be sent with a standard naming convention of:

{ClientName-Site}_{FileType}_{yyyy-mm-dd}_{dateperiod}.csv

For example: ClientXYZ-Australia_OrderLines_2012-11-18_daily.csv

If providing a weekly file, the preferred naming convention is:

{ClientName-Site}_{FileType}_{StartDate}_{EndDate}_weekly.csv

For example: ClientXYZ-Germany_Returns_2012-11-11_2012-11-17_weekly.csv

3   Data Considerations and Transformations

The number of data sources and fields that DynamicAction™ can ingest can be daunting when considered in totality. It is worth noting that no client will utilize every field or populate them in exactly the same way. Typically, we prefer to contain discussion of the specific fields within each file to the focused group responsible for each file. Hence, this document only gives an overview of the data required to enable the identification of those groups.

When considering the source systems there are some key questions that should be kept in mind.

1. Do all the systems use the same Product ID, SKU, Order ID and Customer ID? DynamicAction links information across the entire enterprise and needs consistent IDs (or lookups to them) to be able to match this data. If the IDs are not consistent, which ID do you consider to be the master ID and how do you facilitate lookups across IDs?
2. Does the system hold granular data that can be linked to the Product, SKU or Order where relevant?
3. Can the export frequency provide the full data set? For example, can the exports occur daily? If not, does a less granular file still supply day to day changes in cost, inventory levels, etc.?
4. Can the system provide timely data? Options for data sources often include a reporting database or data warehouse. This often has the advantage of collating much of the data; thus limiting the integrations required, but it may lead to delays in delivering data to DynamicAction.

After receipt, audit and discussion of the data files, DynamicAction will commence with data transformation work that molds your data into the format required for processing. In some cases, data files will come directly from your systems and in other cases they will arrive directly from your third party partners. As you might expect, the closer your data files are to the requested format, the faster the implementation will be delivered.

The transformation logic assumes the same data formats with each processing run. As a result, it is vital to communicate any changes that you may wish to make to the files post implementation. If you intend to add new files or fields, please communicate these intentions to your Customer Success Manager well in advance so that the changes can be scheduled and tested.

4   Order Files

Data File	Description	Business Required
Orders	High level order information (e.g. order value, purchaser)	REQUIRED
Order Lines	Detail level order information (e.g. specific products ordered)	REQUIRED
External Sales	Data about orders that are not reported in DynamicAction but that affect sales velocity used to calculate Stock Cover (in order words, orders that deplete inventory but aren't part of the orders included in DynamicAction)	Recommended

The following tables specify the desired fields within each Order File type.

4.1   Orders File (Used for Web / Store / Other)

This file should contain all order-processed data, including cancellations and declines (i.e. cancelled and declined orders will appear in both the Orders and the Cancellations/Declines files).

Field	Description	Example	Type
Order ID	Unique Order identifier	8293844	String
Placed Timestamp	Date and time of when order was placed. (Time is optional) Format=YYYY-MM-DD hh:mm:ss	2013-06-25 17:32:11	Date (YYYY-MM-DD hh:mm:ss)
Channel	The channel the order is placed through. This has set values such as WEB or STORE	Web	String
Site	Site Identifier for a selling location. It allows for defining different product ranges, prices, etc. It is also the identifier when locations have access to different inventory pools. For the web channel it is typically the region of the site (e.g. US, UK, France, etc.)	France	String
Currency Code	Currency representing order value	USD	String
Sales	Total order value including VAT	97.43	Double
Sales Ex Tax	Total order value excluding VAT	90.00	Double
Order Type	Type of order placed (e.g. Online, Store Pickup, etc.)	Online	String

4.2 Orders Lines File (Used for Web / Store / Other)

Field	Description	Example	Type
Order ID	Unique Order identifier	8293844	String
Order Placed Timestamp	Date and time of when order was placed (Time is optional) Format=YYYY-MM-DD hh:mm:ss	2013-06-25 17:32:11	Date (YYYY-MM-DD hh:mm:ss)
SKU (Item ID)	Unique Stock Keeping Unit identifier for a specific product color/style, etc.	3984904	String
Product ID	Unique Product identifier	FEU-123	String
Quantity	Number of Units Sold of this product	2	Integer
Currency Code	Currency representing order value	USD	String
Sales	Value of item(s) purchased including VAT	20.55	Double
Sales Ex Tax	Value of item(s) purchased excluding VAT	18.00	Double
Promo Info	Pipe delimited {{Promo Classifier}}Promo Type::Promo Name=Amount the classifier can be "P" for product, "S" for shipping or "O" for other	{{P}}Percentage Offer::1/2 off sale=9.98|{{S}}Free Shipping::Spring 2017 Clearout=2.99	String
Other Offer Cost	Value of offer giveaways (e.g. free gift with purchase)	14.00	Double
Shipping Amount	Shipping charge collected from Customer including VAT	4.50	Double
Shipping Ex Tax	Shipping charge collected from Customer excluding VAT	4.00	Double
Shipping Cost	Cost to Ship item(s) purchased. Might be estimated based on shipping method	1.45	Double
Shipping Method	Customer selected shipping method (e.g. 1 Day, 2 Day)	Express	String
Is Backorder	Y/N flag if item ordered is backordered	N	String
Is Pre-order	Y/N flag if item ordered is a pre-order	N	String
Is Vendor Ship	Y/N flag if item ordered is shipped from vendor	N	String
Is Free Sample	Y/N flag if item was included in the order as a free sample	N	String
Unit Cost	Field where the product cost may be entered if different to the inventory files (it will only be used for calculating the profit of this particular line)	9.99	Float

Field	Description	Example	Type
Current Price	The current price on the website for the product. Only required if it is different to that held in the inventory files (e.g. unique price for customer segment)	20.55	Float
Full Price	The full price on the website for the product. Only required if it is different to that held in the inventory files (e.g. unique price for customer segment)	25.00	Float

4.3   External Sales File (Used for Web / Store / Other)

Field	Description	Example	Type
Product Id	Unique Product identifier	FEU-123	String
SKU (Item ID)	Unique Stock Keeping Unit identifier for a specific product color/style, etc.	3984904	Integer
Stock Location ID	The identifier to specify which stock location the demand is against	Warehouse 1	String
External Units Sold	Number of units sold in locations not reported in DynamicAction but that are fulfilled from inventory reported in DynamicAction	1	Integer

5 Operations Files

Data File	Description	Business Required
Returns	Returns by Order ID (e.g. products returned, reason)	Optional

The following tables specify the desired fields within each Operations File type.

5.1 Returns File (Used for Web / Store / Other)

Field	Description	Example	Type
Order ID	Unique Order identifier	8293844	String
SKU (Item ID)	Unique Stock Keeping Unit identifier for a specific product color/style, etc.	3984904	String
Product ID	Unique Product identifier of returned product	FEU-293	String
Return Quantity	The number of units returned	1	Integer
Return Timestamp	Date and time when the return was made. (Time is optional) Format=YYYY-MM-DD hh:mm:ss	2013-06-25 17:32:11	Date (YYYY-MM-DD hh:mm:ss)
Channel	The channel the order is placed through. This has set values such as WEB or STORE	Web	String
Site	Site Identifier for a selling location. It allows for defining different product ranges, prices, etc. It is also the identifier when locations have access to different inventory pools. For the web channel it is typically the region of the site (e.g. US, UK, France, etc.)	France	String
Return Reason Code	The reason for the returned order (e.g. Damaged, Size Issue, Style/Color Issue, Differs from Web Description, Differs from Ordered, Better Price, Missed Delivery Date)	Damaged	String
Return to Stock	Y/N flag on whether or not the item was added back into the in-stock inventory count	Y	String
Return Refund Amount	The amount refunded to the customer as a result of the return	18.54	Double
Currency Code	The currency in which the refund was granted	USD	String

6   Product Files

Data File	Description	Business Required
Product Properties	Product detail by Product ID (e.g. Name, Brand, Category)	REQUIRED
Stock Location Inventory	Inventory details for the warehouses, i.e. details required of locations where stock is stored but is not a selling location	Recommended
Selling Location Inventory	Inventory details for the online sites, i.e. details required of locations where stock is sold but is not a stored	Recommended
Fulfillment Network (if required)	Used to define which stock locations are available for different selling locations (e.g. if a single warehouse doesn't supply all sites)	Recommended
Product Ratings	User ratings and review data by product	Optional
Product Attributes	Custom Attributes of products (e.g. Gem Type, Buyer)	Optional
Product Image URLs	Image URLs to product photos to offer additional context for the products being analyzed	Recommended
Price Comparisons	Competitor price data by product	Optional

The following tables specify the desired fields within each Product File type.

6.1   Product Properties File (Used for Web / Store / Other)

The Product Properties file should contain a full data set each time it is sent.

Field	Description	Example	Type
Product ID	Unique Product identifier or a Set ID if this record describes a Product Set	FEU-123	String
Product Name	The name of the product	Marathon 10 Sneakers	String
Brand	The manufacturer of the product	Adidas	String
Product Category1	Top level of product categorization hierarchy	Women	String
Product Category2	Second level of product categorization hierarchy	Activewear	String
Product Category3	Third level of product categorization hierarchy	Sneakers	String

6.2   Stock Location Inventory (Warehouse) (Used for Web / Other)

The Product Inventory file(s) should contain a full data set each time it is sent. The inventory data is split into Warehouse Stock, Store Stock and Inventory Selling Location feeds. If this complexity is not required, the feed specifications may be joined into a single feed.

Field	Description	Example	Type
Date	The date on which the inventory stock level was counted	2013-06-25	Date (YYYY-MM-DD)
Location ID	The warehouse identifier	US-East	String
Product ID	Unique Product identifier	FEU-123	String
SKU (Item ID)	Unique Stock Keeping Unit identifier for a specific product color/style, etc.	3984904	String
Is Supplier Owned	Y/N flag on ownership of stock. If Y then the stock is not counted towards inventory value	N	String
Is Non-Stockable	Y/N flag signifying whether a stock unit value is expected	N	String
Stock Units	A count of the number of stock units available to sell via direct channels (e.g. fulfilled from the warehouse(s) or from store if available to sell via direct channel)	6	Integer
Unit Cost	The cost of the product (excluding VAT)	12.45	Float
Is Reorderable	Y/N flag specifying whether it is possible to order more stock from suppliers	N	String

6.3   Inventory Selling Location (Used for Web / Other)

The Product Inventory file(s) should contain a full data set each time it is sent. The inventory data is split into Warehouse Stock, Store Stock and Inventory Selling Location feeds. If this complexity is not required, the feed specifications may be joined into a single feed.

Field	Description	Example	Type
Date	The date on which the inventory stock level was counted	2013-06-25	Date (YYYY-MM-DD)
Site	Site Identifier for a selling location. It allows for defining different product ranges, prices, etc. It is also the identifier when locations have access to different inventory pools. For the web channel it is typically the region of the site (e.g. US, UK, France, etc.)	France	String
Product ID	Unique Product identifier	FEU-123	String

Field	Description	Example	Type
SKU (Item ID)	Unique Stock Keeping Unit identifier for a specific product color/style, etc.	3984904	String
Publish Date	Date SKU available on site	2013-08-12	Date (YYYY-MM-DD)
Is Markdown	Y/N flag for items in markdown	N	String
Is Discontinued	Y/N flag for discontinued items	N	String
Is Core	Y/N flag to identify core items	N	String
Season Start Date	For seasonal items, the start date of the season	2013-08-12	Date (YYYY-MM-DD)
Season End Date	For seasonal items, the end date of the season	2013-12-24	Date (YYYY-MM-DD)
Is Sellable	Y/N flag for identifying items items added to site pre-release	Y	String
Is Backorder	Y/N flag if backordered (end-of-day position)	N	String
Is Pre-order	Y/N flag if a pre-order item (end-of-day position)	N	String
Current Price	The price at which the product is available for purchase on the site	20.00	Float
Current Price Ex Tax	If available, the ex-tax value	16.00	Float
Full Price	The original full price (prior to markdown) at which the product was listed for purchase	25.00	Float
Full Price Ex Tax	If available, the ex-tax price	19.00	Float
Currency	Currency identifier for the prices. Only needed when multiple currencies are used	GBP	String
Backorder Units	The number of units currently backordered	5	Integer
Pre-Order Units	The number of units currently pre-ordered	0	Integer
Waitlist Units	The number of units for which customers are on the waitlist	0	Integer

6.4   Fulfillment Network File (Used for Web / Store / Other)

This file is only required if a fulfillment network needs to be defined for selling locations that can source inventory from multiple inventory locations.

Field	Description	Example	Type
Date	The date on which the inventory stock level was counted	2013-06-25	Date (YYYY-MM-DD)
Channel	The channel for the site which has set values such as WEB or STORE (required to fully specify site in next field)	Web	String
Site	Site Identifier for a selling location. It allows for defining different product ranges, prices, etc. It is also the identifier when locations have access to different inventory pools. For the web channel it is typically the region of the site (e.g. US, UK, France, etc.)	France	String
Location ID	The warehouse identifier	France-East	String
Product ID	Unique Product identifier	FEU-123	String
SKU (Item ID)	Unique Stock Keeping Unit identifier for a specific product color/style, etc.	3984904	String

6.5   Product Ratings File (Used for Web / Store / Other)

Field	Description	Example	Type
Product ID	Unique Product identifier or Set ID if sets are rated or reviewed	FEU-123	String
Ratings Count	Count of number of product ratings submitted	135	Double
Review Count	Count of number of product reviews submitted	120	Double
Average Review Rating	Average review rating	4.2	Float

6.6   Product Attributes File (Used for Web / Store / Omni)

Field	Description	Example	Type
Product ID	Unique Product identifier	FEU-123	String
Attribute Number	Attribute identifier (1-50)	1	Integer
Attribute Value	The value of the attribute e.g. season code, product status, last receipt date (stock)	Top Seller	String

6.7 Product Image URL File (Used for Web / Store / Other)

The Product Image URL file should contain a full data set each time it is sent.

Field	Description	Example	Type
Product ID	Unique Product identifier	FEU-123	String
Product Image URL	The image URL of the product. It is used in DynamicAction to help users better recognize (have additional context) to the products being analyzed.	http://ecx.images-amazon.com/images/I/51qw2d75R8L._AA160_.jpg	String

6.8 Price Comparison File (Used for Web / Store)

Field	Description	Example	Type
Channel	The channel the comparison is for. This has set values such as WEB or STORE	Web	String
Product ID	Unique Product identifier	FEU-123	String
Competitor Name	Name of competitor selling the same product	Amazon	String
Competitor Price	Price at which competitor is selling the product	95.00	Double
Currency	Currency identifier	EUR	String

7 Web Analytics Files

Data File	Description	Business Required
Page Sources Activity	Page data linked to the visit initiating Marketing Source	✓
Product Sources	Product data linked to the visit initiating Marketing Source	✓

The following tables specify the desired fields within each Web Analytics File type.

7.1 Page Sources Activity File (Used for Web)

Field	Description	Example	Type
Date	The date of the web activity	2013-06-20	Date (YYYY-MM-DD)
Marketing Channel	The Marketing Channel that initiated the visit	Display	String
Site	Site Identifier for a selling location. It allows for defining different product ranges, prices, etc. It is also the identifier when locations have access to different inventory pools. For the web channel it is typically the region of the site (e.g. US, UK, France, etc.)	France	String
Site Category	Categorization of site from which the data is sourced (e.g. Web, Mobile, etc.)	Mobile	String
Page Type	Type of page (e.g. Category, Search Results, Product Detail, Shipping, Payment, Shopping Cart, Order Confirmation, Login, My Account)	Search Results	String
Page Name	The name of the page	Product Detail: Asics GT-2170	String
Product ID	If a product detail page, the product ID being viewed, or the product set ID if this is a product set page.	FEU-123	String
Source Type	If a product detail page, the source of the product view (e.g. Search, Browse, Recommendation, etc.)	Search	String
Visits	Number of visits to page	30	Long
One Page Visits	Number of one-page visits to page	4	Long
Page Views	Number of page views to page	45	Long

Field	Description	Example	Type
Entry Page Views	Number of entry page views to page	7	Long
Exit Page Views	Number of exit page views from page	5	Long

7.2   Product Sources File (Used for Web)

Field	Description	Example	Type
Date	The date of the web activity	2013-06-20	Date (YYYY-MM-DD)
Marketing Channel	The Marketing Channel that initiated the visit	Display	String
Site	Site Identifier for a selling location. It allows for defining different product ranges, prices, etc. It is also the identifier when locations have access to different inventory pools. For the web channel it is typically the region of the site (e.g. US, UK, France, etc.)	France	String
Site Category	Categorization of site from which the data is sourced (e.g. Web, Mobile, etc.)	Mobile	String
Product ID	The Product ID being viewed. This should always be a Product ID, even if the product is in a set. Each product in the set should result in a separate Product View,	FEU-123	String
Product Views	Number of product views to product	61	Long
Items Added	Number of items for this product added to cart	17	Long
Units Sold	Number of items for this product in the order	10	Long