SM Sync Data Importers Guide

Version: 1.9

Last Updated: May, 2025

Table of Contents

Change Log

Version	Changes	Update By
1.5.2	• Updates to User Tag Importer. Inclusion of JSON format. • Updates to User Importer. Inclusion of JSON format and deprecating User Unlinked	Joshua Foster
1.5.3	• Modifications to importer tables. Changed "Required" columns to "Required/Optional." • Changed relevant table cell values of "yes" to "Required" and "no" to "Optional." • Added paragraph to each importer section explaining that optional attributes must be consistently implemented; if included in one payload, must be included in all payloads.	Eric Feingold
1.5.4	• Modifications to Catalog format to account for use in Campaigns.	Dan Ochs
1.5.5	• Formatting changes	Eric Feingold
1.5.6	• Edit to Standard Transactions JSON file format for the store ID.	Dan Ochs
1.5.7	• Edit to reflect internal events NOT fired when loading data with SM Sync.	Eric Feingold
1.5.8	• Edits to date formatting in doc.	Eric Feingold
1.5.9	• New content in select field descriptions. Text colored red made black.	Eric Feingold
1.6.0	• POS changes for transaction data.	Eric Feingold
1.7.0	• DOB/YOB max value changed from 120 to 150. • For CSV format in user tag importer, either external_id or user_id can be used. • Optional fields added to section on event importer.	Eric Feingold
1.8.0	• Details supporting distinctions applicable to using V2 or V3 importers.	Eric Feingold
1.8.1	• Corrections and copyright change for footers. Also some Dynamo changes.	Eric Feingold
1.9.0	• New importers added.	Eric Feingold

Overview

Data Ingest

SessionM Sync (SM Sync) is designed to rapidly create or update batches of data records for the SessionM Platform, including data associated with users, transactions, events, venues, and product SKUs.

SM Sync jobs can accelerate the rate at which data is ingested by adding workers. The utility can perform both base and customer-defined model validations. One of the primary reasons SM Sync can run at an accelerated rate is its embrace of parallel processing logic. It employs a job splitter to break large jobs into smaller chunks, which are then processed in parallel by workers. Parallelism is provided by “goroutines” within worker nodes as well as by multiple worker nodes running in parallel.

Note that when SM Sync jobs load customer data, the customer *created* and customer *updated* internal events do not fire. Those events can be fired by calling the appropriate SM Sync section “Event Importer” after the customer update completes. This design ensures that data loading can occur as quickly as possible. So, if synchronization with 3rd party systems or events that need to be triggered is required, there is a method to fire them.

SM Sync Monitoring and Alerting

SM Sync has a corresponding front end utility called the ETL Controller, which shows the current progress of the ingest process. This is monitored by internal SessionM team members and select integration partners who will also be alerted if failures to the ingest occur. This tool is not yet ready to be shared with clients.

Coordinator Settings & Requirements

Strategy

Strategy is an attribute of a file set. Strategy specifies the order in which multiple individual file sets are handled. The current list of supported strategies is specified below.

Type	Description
All	Allows all file sets to be processed as they show up in the S3 bucket.
Sequential	Allows for sequential processing of the file sets. This processing is dependent on the previous file set being processed.
Stride	Stride is similar to sequential strategy. The additional constraints on Stride derive from its duration and offset. Duration: Time between two imports. Offset: Percentage of the stride duration when the files can be placed in the S3 bucket for the import to be processed. If all the file set files show up before the stride window starts, the set is marked “failed.”

Input File Configuration

Input files can be configured to be part of a specific file set. This is achieved by naming the file in a specific format or using the Coordinator UI to pick it automatically. The input files must be named in the format below:

new_<api_key>_<timestamp>_<file_set_name>_<type_suffix>.<ext>

Consult this table for descriptions of the format attributes:

Attribute Name	Description
new	Input file should begin with the string *new_*.

Attribute Name	Description
api_key	The 40 character *api_key* associated with the application.
timestamp	Time stamp specifying the chronological order for processing. Time stamp should be of this format: *YYYYMMDDHHmmSS* Files in the same set job must **all** have the same timestamp value.
file_set_name	The name of the file set. This is currently setup by SessionM via our ETL Coordinator tool internally and needs to be provided to you. This value is mapped by SessionM to a specific SM Sync job type. The current job types are *event_categories*, *event*, *messaging_preference*, *phone_number_deactivation*, *purchase*, *user*, *user_create*, *user_tag*, *user_unlinked*, *user_update*, *venue*, and *venue_tag*. Note that the user job type performs like an “upsert,” by which the user is inserted if they are not found or updated if they are found.
type_suffix	Type suffix that identifies the import type of the input file.
ext	The extension matching the file type expected by the importer. Currently, either JSON or CSV.

File Set Configuration

If a group of input files are to be in the same file set, ensure that they all have the same *api_key*, *timestamp* and *file set name*.

Set File Configuration

Files bearing names that do not adhere to the naming convention mentioned above are ignored. The *api_key*, *timestamp* and *file set name* are configured according to the file set configuration. The import type is specified by the *type_suffix*.

File Type Suffixes Conventions

Consult the table below for a list of file type suffixes:

Name	Importer	File Suffix	Description
User	User	"_user.csv"	Creates new user or updates existing user based on external ID.
User Create	User	"_user_create.csv"	Only creates new users based on external ID. Produces errors if users exist.
User Update	User	"_user_update.csv"	Only updates existing users based on external ID. Produces errors if users do not exist.
User	Users V2	"_user.csv"	Creates new user or updates existing user based on external ID.
User Create	Users V2	"_user_create.csv"	Only creates new users based on external ID. Produces errors if users exist.
User Update	Users V2	"_user_update.csv"	Only updates existing users based on external ID. Produces errors if users do not exist.
User Tag	User Tag	"_user_tag.csv"	Tags users (based on external ID) with specified tag.
Merge User	Merge	“_merge_user.csv”	Merges user accounts.
Transaction	Transaction	"_connect_transaction.json”	Processes transaction records for given customer profile.

Name	Importer	File Suffix	Description
Transaction v2	CloudPOS	“_connect_cloudpos.json”	Used when transaction batch size is large. Won’t return failed records in error file.
Event	Events	"_event.csv"	Creates events for users based on their external IDs.
Product Catalog	Product Catalog	“_connect_upload_catalog_v3.json”	Creates or replaces product catalog for given retailer based on supplied JSON tree data.
Location Catalog	Location Catalog	“_connect_upload_location_v3.json”	Creates or replaces location catalog for given retailer based on supplied JSON tree data.
Venues	Venue	"_venue.csv"	Creates or updates venues based on external ID.
Venues	Venue Tag	"_venue_tag.csv"	Creates or deletes a tag on venue.
Deprecated Importers			
Purchase	Purchase	"_purchase.json"	Creates transaction-based events for users based on external IDs.
Event Categories (Catalog)	Event Categories	"_event_categories.json"	Creates or replaces a catalog, based on supplied JSON tree data.
OrderStatus	Order Status	"_orderstatus.csv"	Updates status of offer orders for orders specified by order ID, offer ID, and external ID.

Name	Importer	File Suffix	Description
Unlinked User	Unlinked User	"_user_unlinked.csv"	Creates unlinked users if the users do not exist based on external ID. Updates existing users.

Customer Profile Data Importers

User Importer

The User Importer ingests customer profile data, which can consist of both standard and appended data within the SessionM Platform. The example table below shows the start of a customer profile, with *external_ID* being the unique ID of the customer. We recommend encrypting all personally identifiable information (PII) and provide us the key to decrypt the file. The CSV file should be comma delimited, and text qualified for the fields that have the delimiter (comma) included as a value.

Please note that while any importer attribute designated “Optional” is not required in a payload, its inclusion or exclusion must be applied to ALL instances of the attribute. In short, if an attribute is included in one payload, it must be included in all payloads.

Properties

Type	Key	Value	Notes for SessionM
User	*Supported encoding types:*	CSV/JSON	
	Suffix:	_user_tag	
	Header options:	lookup_key	Defines a record attribute to be used for user lookups. Can be either "external_id" or "email". Defaults to "external_id" when not set.
User Create	*Supported encoding types:*	CSV/JSON‡	
	Suffix:	_user_create	
	Header options:	lookup_key	Defines a record attribute to be used for user lookups. Can be either "external_id" or "email". Defaults to "external_id" when not set.

Type	Key	Value	Notes for SessionM
	Notes:	This importer does not try to find given users before inserting them into the database.	
User Update	*Supported encoding types:*	CSV/JSON‡	
	Suffix:	_user_update	
	Header options:	lookup_key	Defines a record attribute to be used for user lookups. Can be either "external_id" or "email". Defaults to "external_id" when not set.
	Notes:	This importer returns an error when the given user does not exist.	

Standard User Profile CSV File Format

The Standard User Profile format is a CSV file containing columns outlined below.

Column	Description	Type	Required/ Optional	Notes
external_id	The customer's ID for this user.	GUID	Depends	For JSON stream format, with "lookup_key" option set to "email", this field is not required. It must be set otherwise.
external_id @<type>	A set of *external_ids* for a particular type (ex: *external_id@facebook*).	JSON array of IDs	Optional	A user may have multiple *external_ids* of any given type. For empty *external_id@<type>*, the field must be "[]".

Column	Description	Type	Required/ Optional	Notes
email	The user's email address.	String	Depends	Stored as encrypted data. Required only when JSON stream format with "lookup_key" option set to "email" is used. The “email” field must be provided unless “enable_user_auto_create” is *true* in the *rewards_system* settings.
first_name	The user's first name.	String	Optional	
last_name	The user's last name.	String	Optional	
age	The age of the user in years.	Number	Optional	**It is strongly suggested that this be provided via either the 'yob' or 'dob' fields.** Directly specified age fields become incorrect over time. Should be between 13 and 150 years ago, if specified.
dob	The date of the user's birth in *YYYY-MM-DD* format.	Date	Optional	Should be between 13 and 150 years ago, if specified. Stored as encrypted data.
yob	The year of the user's birth in *YYYY* format.	Number	Optional	Should be between 13 and 150, if specified.

Column	Description	Type	Required/ Optional	Notes
state	The state or province in which the user resides. Should be an ISO-3166-1 Alpha-2 code.	String	Optional	
city	The name of the city in which the user resides.	String	Optional	
zip	The ZIP or postal code associated with the user's residence. Should follow the standards for the specific country. For US, this is 5-digit or zip+4. For Canada, 6 chars. For Japan, 7-digit.	String	Optional	
country	The country of the user in ISO-3166 format.	String	Optional	
address	The user's street address.	String	Optional	
address2	The user's street address (cont'd).	String	Optional	
gender	The gender of the user. Either 'm' for male, 'f' for female, or '' for unspecified.	String	Optional	

Column	Description	Type	Required/ Optional	Notes
hhi	The user's household income. Currently one of the following: "<$25K", "$25K-$50K", "$51K-$75K", "$76K-$100K", "$101K+", or "" for unspecified.	String	Optional	
locale	An IETF language tag, composed of a 2-letter ISO 639-1 language name and 2-letter ISO 3166-2 country subdivision (ex: en-US).	String	Optional	
opted_out	Specified if the user is *opted_out* of the loyalty program.	Boolean	Optional	If the column is not specified, it defaults to *false*.
phone_numbers	The user's phone numbers.	JSON array of Phone Number Fields	Optional	If the column is specified, it must be a valid JSON array string. This means that for empty phone numbers it must be either "null" or "[]". Look for more details at the phone numbers discussion below.

Column	Description	Type	Required/ Optional	Notes
{custom attribute}	Specify additional column for each custom profile attribute you want to include.	Any allowed appended data type	Optional	Any field not listed above is assumed to be an Appended Data field(aka Custom Attribute) by the ingest process. These fields, like any appended data fields, must be properly defined in the *user_profile* for them to be successfully imported. Data specified in these fields must adhere to the type (and validation) requirements specified there.

Additional Format Requirements

- All fields have a maximum length of 256 characters.
- Empty optional fields are OK.
- Any additional fields that are not specified above are acceptable, but **must** be added to the Appended Data for the user according the conventions we have outlined here: https://docs.sessionm.com/developer/APIs/Core/Customers/customers_customer_profile.htm#create-a-custom-profile. This **must** be done prior to ingestion as a setup step.

Phone Numbers Field JSON Format

Column	Description	Type	Required/Optional	Notes
phone_number	A phone number for the user.	String	Required	
phone_type	The type of phone number.	String	Optional	Must be one of the following: ("home", "mobile", "office", “fax”, and “other”)
preference_flags	Array of flags related to the phone number.	JSON Array	Optional	Array can contain only one or more of the values: ("primary")
verified_ownership	Indicates if ownership of the phone number has been verified.	Boolean	Optional	Defaults to *false*.

Optional JSON File Format

If it is easier for the customer to use the JSON format, they can format their request like this:

```
[
    {
        "external_id": "1234",
        "first_name": "John",
        "last_name": "Doe",
        "gender": "m",
        "dob": "1987-01-01",
        "hhi": "$25K-$50K",
        "ethnicity": null,
        "locale": "EN_US",
        "country": "usa",
        "state": "massachusetts",
        "city": "Boston",
        "zip": "02115",
        "appended_data": {
            "user_profile": {
                "some_string_field": "string",
                "some_int_filed": 64
            },
            "different_org_model": { // these match request_key in
             organization_model table.
                "some_string_field": "string",
                "some_int_filed": 64
            }
        }
    },
    {
        ...
    }
]
```

Users V2 Importer

The new Users V2 Importer utilizes the Customer API to process user updates, user creation and tier movements. This replaces the Users V1 importer which writes directly to the database, skipping logic we use when users are created and updated via the Core API. This ensures all user creation and updates are processed in a consistent way throughout our platform and allows platform level events to fire when user creates and updates occur. In relation to the Co-Brand Optimizer, importer allows users to achieve outcomes specific to signing up for credit cards or updating your user profile.

Properties

Type	Key	Value	Notes for SessionM
User	*Supported encoding types:*	CSV/JSON	
	Suffix:	_user	
	Header options:	lookup_key	Defines a record attribute to be used for user lookups. Can be either "external_id" or "email". Defaults to "external_id" when not set.
User Create	*Supported encoding types:*	CSV/JSON	
	Suffix:	_user_create	
	Header options:	lookup_key	
	Notes:	This importer does not try to find given users before inserting them into the database.	

Type	Key	Value	Notes for SessionM
User Update	*Supported encoding types:*	CSV/JSON	
	Suffix:	_user_update	
	Header options:	lookup_key	Defines a record attribute to be used for user lookups. Can be either “external_id,” “user_id” or “email.” Defaults to “external_id” when not set.
	Notes:	This importer returns an error when the given user does not exist.	

Standard User Profile File Format

The standard User Profile file format is a CSV file containing columns outlined below.

Column	Description	Type	Required/ Optional	Notes
external_id	The customer's ID for this user.	String or Integer	Depends	For JSON stream format, with "lookup_key" option set to "email" or “user_id”, this field is not required. It must be set otherwise.
external_id @<type>	A set of *external_ids* of a particular type (ex: *external_id@facebook*)	JSON array of IDs	Optional	A user may have multiple external IDs of any given type. For empty *external_id@<type>,* the field must be "[]".

Column	Description	Type	Required/ Optional	Notes
external_ids	A map of external id types to external ids (ex: "facebook": ["one", "two"])	JSON Object of IDs Array	Optional	A user may have multiple external_ids of any given type. Look at the JSON format example below.
user_id	The id for this user.	GUID	Depends	Required when JSON stream format with "lookup_key" option set to "user_id" is used.
email	The user's email address.	String	Depends	Stored as encrypted data. Required when JSON stream format with "lookup_key" option set to "email" is used. The "email" field must be provided unless - "enable_user_auto_create" is *true* and set in the SM Sync template settings - "enable_user_auto_create" is *true* in the rewards_system settings - "lookup_key" is not set to "email". Regular expression: `^[-a-zA-Z0-9!#$\%&+'*+\/=?^_` + "`" + `{\|}~]+(\.[-a-zA-Z0-9!#$\%&'*+\/=?^_` + "`" + `{|}~]+)*@(([a-zA-Z0-9]([-a-zA-Z0-9]*[a-zA-Z0-9]+)?){1,63}\.)+([a-zA-Z0-9]([-a-zA-Z0-9]*[a-zA-Z0-9]+)?){2,63}$`
first_name	The user's first name.	String	Optional	

Column	Description	Type	Required/ Optional	Notes
last_name	The user's last name.	String	Optional	
dob	The date of the user's birth in *YYYY-MM-DD* format	Date	Optional	Should be between 13 and 120 years ago, if specified. Stored as encrypted data.
yob	The year of the user's birth in *YYYY* format.	Number	Optional	Should be between 13 and 120, if specified.
state	The state or province of the user. Should be an ISO-3166-1 Alpha-2 code.	String	Optional	
city	The city name of the user.	String	Optional	
zip	The ZIP or postal code of the user. Should follow the standards for the specific country. For US, this is 5-digit or zip+4. For Canada, 6 chars. For Japan, 7-digit.	String	Optional	Regular expressions: USA: `^(\d{5})(?:-\d{4})?$` Canada:`^[ABCEGHJKLMNPRSTVXYabceghjklmnprstvxy]{1}\d{1}[A-Za-z]{1} *\d{1}[A-Za-z]{1}\d{1}$` Singapore: `^\d{6}$` Japan: `^\d{3}\-\d{4}$`
country	The country of the user in ISO-3166 format.	String	Optional	
address	The user's street address.	String	Optional	
address2	The user's street address, continued	String	Optional	

Column	Description	Type	Required/ Optional	Notes
gender	The gender of the user. 'm' or 'male' for male, 'f' or 'female' for female, 'x', 'non-binary' or 'nonbinary' for non-binary, 'u' or '' for unknown.	String	Optional	
hhi	The user's household income. Currently one of: "<$25K", "$25K-$50K", "$51K-$75K", "$76K-$100K", "$101K+", or "" for unspecified.	String	Optional	
ethnicity	The user's ethnicity. Currently one of: "african_american", "hispanic", "white_caucasian", "asian", "ethnicity_other"	String	Optional	
parental_status	The user's parental status. Either 'parent', 'not_parent', or '' (for unspecified).	String	Optional	
locale	An IETF language tag, composed of a 2-letter ISO 639-1 language name and 2-letter ISO 3166-2 country subdivision (ex: en-US).	String	Optional	
sm_effective_date	The timestamp that follows the RFC3339Micro format	String	Optional	

Column	Description	Type	Required/ Optional	Notes
	defined as: "**yyyy-mm-dd**T**HH**:**MM**:**SS**.**ffffff**Z**NN**:NN**" where "Z**NN**:**NN**" specifies the timezone. The single letter "Z" should be used for UTC.			
opted_out	Specified if the user is opted_out of the loyalty program.	Boolean	Optional	If the column is not specified, it defaults to *false*. This is a legacy attribute that does not affect a customer profile's membership in loyalty programs. Consult your implementation team for instructions on how to specify a member has opted out of the program.
phone_numbers	The user's phone numbers.	JSON array of Phone Number Fields	Optional	CSV: If the column is specified it must be a valid JSON array string. This means that for empty phone numbers it must be either "null" or "[]". Look for more details at phone numbers section Look at the Phone Number example for the exact schema.
{custom attribute}	Specify additional column for each custom profile attribute you want to include.	Any allowed appended data type	Optional	Any field not listed above is assumed to be an Appended Data field(aka Custom Attribute) by the ingest process. These fields, like any appended data fields, must be properly defined in the *user_profile* for them to be successfully imported. Data specified in these fields must adhere to the type (and validation) requirements specified there.

User Tag Importer

The User Tag Importer ingests expiring user tags against an existing customer profile, which can then be leveraged for building audiences or targeting for campaigns. In the SessionM Platform, tags are arbitrary strings that act as keyword classifiers used for targeting and can be broken into two types: Counter-based tags or Expiring tags. This importer supports ONLY expiring tags at this time, where a defined end date is configured against the tag that serves as its TTL (Time to Live). The tag is always updated with the last updated date to the tag. So to force a tag to expire earlier, you can set *end_date* to a date in the past.

While any importer attribute designated “Optional” is not required in a payload, its inclusion or exclusion must be applied to ALL instances of the attribute. In short, if an attribute is included in one payload, it must be included in all payloads.

NOTE: The APIs support both counter-based and expiring tags, if a counter-based method is required.

Properties

Type	Key	Value	Notes for SessionM
User Tag	*Supported encoding types:*	CSV/JSON	
	Suffix:	_user_tag	
	Header options:	lookup_key	Defines a record attribute to be used for user lookups. Can be either "external_id", “user_id”, or "email". Defaults to "external_id" when not set.
	Notes:		

Standard User Tag CSV File Format

The Standard User Tag format is a CSV file containing columns outlined below.

Column	Description	Type	Required/ Optional	Notes
external_id	The unique external customer's ID for this user.	GUID	Depends	For JSON stream format, with "lookup_key" option set to "email", this field is not required. Otherwise, It must be set to either “external_id” or “user_id”.
user_id	The unique internal customer’s ID for this user.	GUID	Depends	For JSON stream format, with "lookup_key" option set to "email", this field is not required. Otherwise, It must be set to either “external_id” or “user_id”.
email	The user’s email address	String	Depends	Required only when JSON stream format with "lookup_key" option set to "email" is used.
end_date	The time in RFC3339 format for when the tag should expire.	String	Optional	The format for the string is YYYY-MM-DDTHH:MMSSZHH:MM. If end_date is not specified, it is calculated as 20 years from now.

Column	Description	Type	Required/ Optional	Notes
tag	The tag name.	String	Required	

Sample CSV Input

1	external_id,end_date,tag
2	ext_id_1,2020-01-01T00:00:00-00:00,tag_111
3	ext_id_3,2020-01-01T00:00:00-00:00,tag_333
4	ext_id_2,2020-01-01T00:00:00-00:00,tag_222

JSON Stream with “lookup_key” Set to “email”

```
{
	“lookup_key”: “email”
}
[
	{
		“tag”: “tag_111”,
		“end_date”: “2020-01-01T00:00:00-00:00”,
		“email”: “email1@sessionm.com”
	},
	{
		“tag”: “tag_222”,
		“end_date”: “2020-01-01T00:00:00-00:00”,
		“email”: “email2@sessionm.com”
	}
]
```

Merge User Importer

The Merge User importer enables the ability to process batched requests to merge user accounts in the SessionM Platform.

Properties

Type	Key	Value
Merge User	*Supported encoding types:*	CSV
	Suffix:	_merge_user

Merge User CSV File Format

The Merge User format is a CSV file containing columns outlined below.

Column	Description	Type	Required/Optional	Notes
primary_external_user_id	The customer's ID for the user that will continue to exist after merge.	String	Depends	One of *primary_external_user_id* and *primary_user_id* is required. If both are provided, then *primary_external_user_id* will be used by default.
primary_user_id	The internal SessionM ID for the user that will continue to exist after merge.	String		

Column	Description	Type	Required/Optional	Notes
merged_equal_user_id	The customer's ID for the user that will no longer exist after merge.	String	Depends	One of *merged_external_user_id* and *merged_user_id* is required. If both are provided, then *merged_external_user_id* will be used by default.
merged_user_id	The internal SessionM ID for the user that will no longer exist after merge.	String		

Transaction Data Importers

Transaction Importer

Importing transaction data allows SessionM to perform many different functions within the SessionM Platform, including but not limited to the following: tracking purchase attributions for points-based economies, tier calculation, product and offer recommendations, and for calculating RFM (recency, frequency, and monetary spend) scores while also presenting an ongoing purchase history for the customer within their individual profile.

While any importer attribute designated “Optional” is not required in a payload, its inclusion or exclusion must be applied to ALL instances of the attribute. In short, if an attribute is included in one payload, it must be included in all payloads.

NOTE: If you need access to the older version of this documentation, it has been moved to Appendix B.

Requirements

- Transaction files will be processed as they arrive in the SM Sync imports directory.
- Transaction files must confirm to the Standard Transaction File Format documented below.

Standard Transactions JSON File Format

The Transaction file format is a JSON file containing an array of Transactions to process. Transactions are JSON hashes containing attributes which are outlined below.

Transaction Format

Attribute	Description	Type	Required/ Optional	Notes
store_id	The SessionM store ID where the transaction took place.	String	Required	
user_id	The SessionM user ID of the person making the transaction.	String	Optional	

Attribute	Description	Type	Required/ Optional	Notes
request_id	The request ID.	String	Optional	If unspecified, SM Sync generates one using a hash of the filename and the transaction offset within the file.
pos_employee_id	A client system *employee_id*. Maximum of 20 characters.	String	Required	ID of the employee who should be associated to this transaction.
sm_employee_id	The SessionM *user_id* for the employee, which is only required for clients that have an employee reward program.	String	Optional	If transaction ID is not available from the customer, one can be generated by combining StoreID, RegisterID and Receipt Number.
table_id	The client system *table_id* for where the user was seated. Maximum of 20 characters.	String	Optional	Not needed for retail or e-commerce.
guest_count	The number of guests serviced by this transaction.	Integer	Optional	

Attribute	Description	Type	Required/ Optional	Notes
is_closed	Whether or not this is the final state for the transaction.	Boolean	Required	Should only be closed once the check is finalized and closed, also when any locked discounts will be applied.
is_voided	Whether or not this transaction was voided.	Boolean	Required	if true, any and all loyalty earnings gained from association to this transaction will be removed.
transaction_id	The unique identifier for the transaction. Maximum of 64 characters.	String	Required	Needed for any and all future updates for this transaction.
from_transaction_id	The parent transaction ID. Maximum of 64 characters.	String	Optional	For split transactions, this references the parent transaction that this transaction was split from
subtotal	The subtotal without tax included of the transaction. This subtotal should reflect all of the applied discounts.	Decimal	Required	
tax_total	The total amount of tax for the transaction.	Decimal	Required	

Attribute	Description	Type	Required/ Optional	Notes
open_time	A UTC time in RFC3339 format for when this transaction was opened or created.	String (DateTime)	Required	This value should remain consistent for all correspondence regarding this transaction.
modified_time	A UTC time in RFC3339 format for when this transaction was last modified and triggered the update call to SessionM.	String (DateTime)	Required	
guest_receipt_code	The globally unique across all client transactions receipt code printed on the guest check.	String	Optional	If no guest check is printed, this can be null.
channel	The channel that this transaction originated from. This could be something like “STORE” or “ECOM” or “KIOSK”. This is only used for client aggregation reporting, these values can be whatever the customer would like, just must be consistent across all instances of the same channel. Example values could be: “IN-STORE”, “CARRY OUT”, and “DRIVE THROUGH”.	String	Required	
items	The current collection of item objects that make up this transaction.	Array of Items	Required	
payments	The current collection of payment objects for this transaction. Note, if there are no payments applied, this should be an empty array.	Array of Payments	Required	

Attribute	Description	Type	Required/ Optional	Notes
discounts	The current collection of discount objects for this transaction. Note, if there are no discounts applied this should be an empty array.	Array of Discounts	Required	
culture	The culture at the point-of-sale.	String	Optional	

Item Format

Attribute	Description	Type	Required/Optional
line_id	The unique - within this transaction- ID for this transaction line item. This is used for reference for modifiers and line item discounts. These values should remain consistent across subsequent requests.	String	Required
item_id	The client system unique *item_id*. Maximum of 45 characters.	String	Required
quantity	The quantity purchased for this item.	Decimal	Required
unit_price	The unit price for 1.0 quantity for this item.	Decimal	Required
subtotal	The subtotal for this line. This should reflect *unit_price* * quantity = subtotal.	Decimal	Required
tax_included	The amount of tax represented in the subtotal. This should only be used when the *unit_price* includes tax and should not be used for check level tax such as sales tax.	Decimal	Required

Attribute	Description	Type	Required/Optional
modifies_line_id	If this item is a modifier for another item, this is the line_id of the item it modifies. Modifier prices should not be reflected within the *unit_price* or subtotal of the item being modified.	String	Optional

Payment Format

Attribute	Description	Type	Required/Optional
payment_id	The unique, to this transaction, payment ID assigned by the client system. Maximum of 64 characters.	String	Required
amount	The total amount of this payment applied to the transaction.	Decimal	Required
type	The type of this payment. Example values: “Cash”, “Credit Card”, “Gift Card”, “Certificate”. Maximum of 20 characters.	String	Required
payment_time	The date and time when this payment was applied. This should be JavaScript JSON date time format. (yyyy-MM-ddTHH:mm:ss.fffZ) and be passed as the UTC date and time.	String (DateTime)	Required
user_id	The user ID that is applied to this payment.	String	Required

Attribute	Description	Type	Required/Optional
user_id_type	Required when user_id is passed. This is used to determine the lookup type for a loyalty account. The lookup type provided must be configured as a required field and guaranteed unique within the program configuration. Legal values: “SessionM_ID” and “External_ID”.	String	Required
additional_user_id	An additional user ID that is applied to this payment. Depending on program structure, this could be used for reporting purposes or where multiple user accounts within a hierarchy should both be rewarded.	String	Optional
additional_user_id_type	Required when *additional_user_id* is passed. This is used to determine the lookup type for a loyalty account. The lookup type provided must be configured as a required field and guaranteed unique within the program configuration. Legal values: “SessionM_ID” and “External_ID”.	String	Optional
receipt_code	The globally unique, across all client transactions, receipt code printed on the payment check. If a user was looked up and a user_id was provided, this can be null.	String	Optional

Discount Format

Attribute	Description	Type	Require/ Optional
reference_id	The reference ID of the discount. If this is a SessionM provided discount, this should be the provided user offer ID. If this a discount provided from another system, it should be the identifier that uniquely identifies this discount within the transaction.	String	Required
reference_id_type	Used to be echoed back in Discounting APIs.	String	Required
pos_discount_id	If passed, can be used to apply the discount from the point of sale side linking the discount details below to the discount on the point of sale for reporting purposes.	String	Optional
status	When this is provided in the response from any of the Discounting APIs it should be echoed back in subsequent transaction updates. Valid values are “LOCKED” or “REDEEMED” or “INFO” or “OFFLINE”. Note: The OFFLINE status should ONLY be used for offline transactions. This skips any validation/restriction checks and forces the offer to be removed from the user’s wallet. In the event the offer is no longer available due to expiration or being used by another online transaction, this fails without notification back to the point of sale. OFFLINE should only ever be used to ensure an offer is no longer available in a user’s wallet.	String	Optional
display_name	The name of the discount.	String	Required
image_url	Image URL associated with this discount.	String	Optional

Attribute	Description	Type	Require/ Optional
discounted_line_ids	If discount is applied to one or more items within the transaction, this should contain the *line_id* of what items were discounted. If this is a check level discount not applied to any specific items, this can be null.	Array of Strings	Optional
discount_source	The source system for the discount. Example: If this discount was provided by SessionM, the source should be “SessionM”. If this is a discount, such as an employee discount, the source could be “POS”.	String	Required
amount	Amount of the discount applied to the check.	Decimal	Required
stack_order	The order in which this discount was applied. If it is the only discount on the check, this value should be 0. (For multiple discounts, use order example: 0 => 1 => 2 => 3 => etc.)	Integer	Required
applied_time	The date and time that this discount was applied to the transaction. This should be JavaScript JSON date time format (*yyyy-MM-ddTHH:mm:ss.fffZ*) and be passed as the UTC date and time.	String (DateTime)	Required
user_id	Returned from the Lock and Redeem calls, this is the SessionM user’s identification.	String	Optional

Sample JSON Input File


```
[
  {
    "store_id": "1234x",
    "request_id": "1",
    "pos_employee_id": "e123",
    "sm_employee_id": "sm123",
    "table_id": "12x",
    "guest_count": 3,
    "is_closed": true,
    "is_voided": false,
    "transaction_id": "deadbeef-12346",
    "from_transaction_id": "deadbeef-12345",
    "subtotal": 9.95,
    "tax_total": 62,
    "open_time": "2018-06-29T19:49:14.257Z",
    "modified_time": "2018-06-29T19:49:14.257Z",
    "guest_receipt_code": "tx123abc",
    "channel": "STORE",
    "culture": "en-US",
    "items": [
      {
        "line_id": "abc123",
        "item_id": "sku12345",
        "quantity": 2,
        "unit_price": 4.98,
        "subtotal": 9.96,
        "tax_included": 0.00,
        "modifies_line_id": "asdf"
      },
      ...
    ],
    "payments": [
      {
        "payment_id": "payment-abc123",
        "amount": 9.95,
        "type": "Cash",
        "payment_time": "2018-06-29T19:49:14.257Z",
        "user_id": "A831208D-903E-4D25-BC34-D27F2F2950BD",
        "user_id_type": "SessionM_ID",
        "additional_user_id": "C0A0C062-B389-4BAD-A985-11594E9E9170",
        "additional_user_id_type": "SessionM_ID",
        "receipt_code": "tx123abc"
      },
      ...
    ],
    "discounts": [
      {
        "reference_id": "offer2345",
        "reference_id_type": "cool discount",
        "pos_discount_id": "discount123",
        "status": "REDEEMED",
        "display_name": "penny off",
        "image_url": "https://thumbs.gfycat.com/AnnualIlliterateApatosaur-size_restricted.gif",
        "discounted_line_ids": ["abc123"],
        "discount_source": "POS",
        "amount": 0.01,
        "stack_order": 1,
        "applied_time": "2018-06-29T19:49:14.257Z",
        "user_id": "A831208D-903E-4D25-BC34-D27F2F2950BD"
      },
      ...
    ]
  }
]
```

CloudPOS Importer

Some batch transaction integrations that require large record counts will require this importer due to its use of the CloudPOS Send Transaction API which processes transaction records asynchronously.

Standard CloudPOS Transaction JSON File Format

The CloudPOS Transaction format is a JSON file containing columns outlined below.

Level	Attribute	Description	Type	Required/ Optional
root	store_id	The internal ID for a store or location where the transaction occurred.	String	Required
root	client_id	Unique identifier for the environment (aka retailer_id).	String	Required
root	request_id		String	Optional
root	culture		String	Optional
root	business_login_id		String	Optional
root	request_payload		Object	Required
request_payload	pos_employee_id	Client system *employee_id* for the employee who should be associated to this transaction. Maximum of 20 characters.	String	Required
request_payload	sm_employee_id	SessionM *user_id* for the employee, which is only	String	Optional

Level	Attribute	Description	Type	Required/ Optional
		required for clients that have an employee reward program.		
request_payload	table_id	Client system *table_id* for where the user was seated. For retail or e-commerce, this value is not used. Maximum of 20 characters.	String	Optional
request_payload	guest_count	Number of guests serviced by this transaction.	Integer	Required
request_payload	is_closed	Indicates whether this is the final state for the transaction. Should only be closed once the check is finalized and closed. This is when any discounts that were locked will be applied.	Boolean	Required
request_payload	is_voided	Indicates whether this transaction was voided. If a transaction is voided, the value is true . Any and all loyalty earnings gained from association to this transaction will be removed.	Boolean	Required
request_payload	transaction_id	Unique transaction identifier that should correspond to any and all future updates for this transaction. Maximum of 64 characters.	String	Required
request_payload	from_transaction_id	In the event of a split transaction, this should reference the parent transaction that this	String	Optional

Level	Attribute	Description	Type	Required/ Optional
		transaction was split from. Maximum of 64 characters.		
request_payload	subtotal	Subtotal without tax included of the transaction. This subtotal should reflect all of the applied discounts.	Decimal	Required
request_payload	tax_total	Total amount of tax for the transaction. If the tax for a certain item was included in the *tax_included* property of the Item object, it should not be included in the total tax accounted for in this property.	Decimal	Required
request_payload	open_time	Date and time that this transaction was opened or created. This value should remain consistent for all correspondence regarding this transaction. Should be JavaScript JSON date time format. (*yyyy-MM-ddTHH:mm:ss.fffZ*) and be passed as the UTC date and time.	String(DateTime)	Required
request_payload	modified_time	Date and time that this transaction was last modified and triggered the update call to SessionM. Should be JavaScript JSON date time format. (*yyyy-MM-ddTHH:mm:ss.fffZ*) and be passed as the UTC date and time.	String(DateTime)	Required

Level	Attribute	Description	Type	Required/ Optional
request_payload	guest_receipt_code	The globally unique across all client transactions receipt code printed on the guest check. If no guest check is printed, this can be null.	String	Optional
request_payload	channel	Channel from which this transaction originated. For example, “STORE” or “ECOM” or “KIOSK”. Only used for client aggregation reporting. Values can be whatever the customer would like, but must be consistent across all instances of the same channel. Example values could be “IN-STORE”, “CARRY OUT”, and “DRIVE THROUGH”.	String	Required
request_payload	culture		String	Optional
request_payload	custom_data	Additional transaction-level data that can be carried into the SessionM Platform for custom use cases. Intentions for use must be vetted with the SessionM Team prior to implementation to ensure that data can be leveraged properly.	JSON	Optional
request_payload	business_def_collection	Current collection of business defined objects for this transaction. Business defined objects allow a user of the platform to define	JSON	Optional

Level	Attribute	Description	Type	Required/ Optional
		custom attributes that will be ingested by the SessionM Platform. Please work with your SessionM team to define use cases around this collection. Note, if there are no business defined attributes applied to the transaction, this should be an empty array.		
request_payload	items	Current collection of item objects that make up this transaction.	Array of Item	Required
request_payload	payments	Current collection of payment objects for this transaction. Note, if there are no payments applied this should be an empty array.	Array of Payment	Required
request_payload	discounts	Current collection of discount objects for this transaction. Note, if there are no discounts applied this should be an empty array.	Array of Discount	Required

Item Format

Attribute	Description	Type	Required/Optional
line_id	The unique - within this transaction- ID for this transaction line item. This is used for reference for modifiers and line item	String	Required

Attribute	Description	Type	Required/Optional
	discounts. These values should remain consistent across subsequent requests.		
item_id	The client system unique *item_id*. Maximum of 45 characters.	String	Required
quantity	The quantity purchased for this item.	Decimal	Required
unit_price	The unit price for 1.0 quantity for this item.	Decimal	Required
subtotal	The subtotal for this line. This should reflect *unit_price* * quantity = subtotal.	Decimal	Required
tax_included	The amount of tax represented in the subtotal. This should only be used when the *unit_price* includes tax and should not be used for check level tax such as sales tax.	Decimal	Required
modifies_line_id	If this item is a modifier for another item, this is the line_id of the item it modifies. Modifier prices should not be reflected within the *unit_price* or subtotal of the item being modified.	String	Optional

Attribute	Description	Type	Required/Optional
custom_data	Additional transaction-level data that can be carried into the SessionM Platform for custom use cases. Intentions for use must be vetted with the SessionM Team prior to implementation to ensure that data can be leveraged properly.	JSON	Optional

Payment Format

Attribute	Description	Type	Required/Optional
payment_id	The unique, to this transaction, payment ID assigned by the client system. Maximum of 64 characters.	String	Required
amount	The total amount of this payment applied to the transaction.	Decimal	Required
type	The type of this payment. Example values: “Cash”, “Credit Card”, “Gift Card”, “Certificate”. Maximum of 20 characters.	String	Required
payment_time	The date and time when this payment was applied. This should be JavaScript JSON date time	String (DateTime)	Required

Attribute	Description	Type	Required/Optional
	format. (yyyy-MM-ddTHH:mm:ss.fffZ) and be passed as the UTC date and time.		
user_id	The user ID that is applied to this payment.	String	Optional
user_id_type	Required when user_id is passed. This is used to determine the lookup type for a loyalty account. The lookup type provided must be configured as a required field and guaranteed unique within the program configuration. Legal values: “SessionM_ID” and “External_ID”.	String	Optional
additional_user_id	An additional user ID that is applied to this payment. Depending on program structure, this could be used for reporting purposes or where multiple user accounts within a hierarchy should both be rewarded.	String	Optional
additional_user_id_type	Required when *additional_user_id* is passed. This is used to determine the lookup type for a loyalty account. The lookup type provided	String	Optional

Attribute	Description	Type	Required/Optional
	must be configured as a required field and guaranteed unique within the program configuration. Legal values: “SessionM_ID” and “External_ID”.		
receipt_code	The globally unique, across all client transactions, receipt code printed on the payment check. If a user was looked up and a user_id was provided, this can be null.	String	Optional
custom_data	Additional transaction-level data that can be carried into the SessionM Platform for custom use cases. Intentions for use must be vetted with the SessionM Team prior to implementation to ensure that data can be leveraged properly.	JSON	Optional

Discount Format

Attribute	Description	Type	Required/Optional
reference_id	The reference ID of the discount. If this is a SessionM provided discount, this should be the provided user offer ID. If this a discount provided from another system, it should be the identifier that uniquely identifies this discount within the transaction.	String	Required
user_id	Returned from the Lock and Redeem calls, this is the SessionM user's identification.	String	Optional
reference_id_type	Will be used to be echoed back in Discounting APIs.	String	Required
pos_discount_id	If passed, can be used to apply the discount from the point of sale side linking the discount details below to the discount on the point of sale for reporting purposes.	String	Optional
status	When this is provided in the response from any of the Discounting APIs it should be echoed back in subsequent transaction updates.	String	Optional

Attribute	Description	Type	Required/Optional
	Valid values are “LOCKED” or “REDEEMED” or “INFO” or “OFFLINE”. Note: The OFFLINE status should ONLY be used for offline transactions. This skips any validation/restriction checks and forces the offer to be removed from the user’s wallet. In the event the offer is no longer available due to expiration or being used by another online transaction, this fails without notification back to the point of sale. OFFLINE should only ever be used to ensure an offer is no longer available in a user’s wallet.		
display_name	The name of the discount.	String	Required
image_url	The image URL associated with this discount.	String	Optional
discounted_line_ids	If this discount is applied to one or more items within the transaction, this should contain the *line_id* of what items were discounted. If this is a	Array of String	Required

Attribute	Description	Type	Required/Optional
	check level discount not applied to any specific items, this can be null.		
discounted_line_id_quantities	If this discount is applied to one or more items within the transaction, this should contain the quantity of the item referenced in “discounted_line_ids” the discount amount applies across.	Array of Integer	Optional
discount_source	The source system for the discount. Example: If this discount was provided by SessionM, the source should be “SessionM”. If this is a discount, such as an employee discount, the source could be “POS”.	String	Required
amount	The amount of the discount applied to the check.	Decimal	Required
stack_order	The order in which this discount was applied. If it is the only discount on the check, this value should be 0. (For multiple discounts, use order example: 0 => 1 => 2 => 3 => etc.)	Integer	Required

Attribute	Description	Type	Required/Optional
applied_time	The date and time that this discount was applied to the transaction. This should be JavaScript JSON date time format (*yyyy-MM-ddTHH:mm:ss.fffZ*) and be passed as the UTC date and time.	String (DateTime)	Required

Sample JSON Input File


```
[
 {
        "store_id": "{{store_id}}",
        "client_id": "{{retailer_id}}",
        "request_id": "{{$guid}}",
        "request_payload": {
                "is_closed": false,
                "channel": "STORE",
                "pos_employee_id": "1000",
                "table_id": "12",
                "transaction_id": "{{$guid}}",
                "guest_count": 1,
                "subtotal": 10,
                "tax_total": 0.70,
                "open_time": "2018-03-28T10:20:00Z",
                "modified_time": "2018-03-28T10:30:00Z",
                "items": [{
                        "line_id": "0",
                        "item_id": "1",
                        "quantity": 1,
                        "unit_price": 10,
                        "subtotal": 10,
                        "tax_included": 0.70,
                        "modifies_line_id": ""
                }],
                "payments": [{
                        "payment_id": "{{$guid}}",
                        "user_id": "84a0891e-6424-11ea-9de1-738dc3accece",
                        "user_id_type": "SessionM_ID",
                        "amount": 10.70,
                        "type": "CASH",
                        "payment_time": "2018-03-28T10:30:00Z",
                        "receipt_code": "26f0018f-1697-46b4-999a-4f28f29d0982"
                }],
                "discounts": []
        }
 }
]
```

Event Data Importer

The Events importer supports many different functions within the SessionM Platform, including: tracking engagement attributions for triggering messaging campaigns, points-based economies, and tier calculations. The importer also presents an ongoing engagement history for the customer within their individual profile.

While any importer attribute designated “Optional” is not required in a payload, its inclusion or exclusion must be applied to ALL instances of the attribute. In short, if an attribute is included in one payload, it must be included in all payloads.

NOTE: This is not for tracking transactions. Refer instead to the Transaction importer.

Standard Event CSV File Format

The Standard Event format is a CSV file containing columns outlined below.

Column	Description	Type	Required/ Optional	Notes
external_id	Unique customer's ID for the user who has the event fired.	GUID	Required	
event_name	The event name.	String	Required	
occurred_at	The time in RFC3339 format for when the event occurred.	String	Required	The format for the string is *YYYY-MM-DDTHH:MMSSZHH:MM*. If occurred_at is more than 10 minutes in the future, an error is thrown.
transaction_id	Unique transaction identifier.	String	Optional	

Column	Description	Type	Required/ Optional	Notes
context	Arbitrary piece of data related to the given transaction ID.	JSON object	Optional	The JSON object must be properly CSV escaped.

Catalog Data Importers

Product (SKU) Catalog Importer

The Product Catalog importer supports multiple functions within the SessionM Platform, including but not limited to the following:

- Setup of targeted promotional campaigns based on purchase events
- Managing offer restrictions and eligibility
- Product and offer recommendation data
- Storing the transactions against the customer profile. It's a best practice to provide a hierarchical set of product data, with multiple levels of categorization. Doing so provides a simpler user experience for marketers looking to select products or groups of products. This file format is also not a *.csv* file, but a *.json* file.

While any importer attribute designated "Optional" is not required in a payload, its inclusion or exclusion must be applied to ALL instances of the attribute. In short, if an attribute is included in one payload, it must be included in all payloads.

NOTE: If you need access to the older version of this documentation, it has been moved to Appendix B.

Product Catalog

Key	Type	Description	Required/ Optional	Notes
nodes	Array	Node array.	Required	An array of child nodes with a size of at least one.

Node

Key	Type	Description	Required/ Optional	Notes
name	String	Category name. While category names can differ when under different parent categories, the category name must be unique for	Required	Non-empty, valid category name.

Key	Type	Description	Required/ Optional	Notes
		each category that resides within the same level of the catalog hierarchy.		
category_id	String	Category ID. If existing catalog does not use “Category IDs,” IDs should be generated for each category prior to import. Category IDs should remain consistent upon subsequent uploads. Generated IDs should be provided by the client to ensure consistency when catalogs are updated.	Required	Non-empty, valid category name.
description	String	Description for category.	Optional	
children	Array	Child array.	Depends	An array of child nodes, or nil only if subcategories are populated. Contains at least one child node, if no subcategories. No duplicate item ID is allowed under the same category, but one item can be listed under different categories.
subcategories	Array	Node array.	Depends	An array of child nodes, or nil only if children are populated. Contains at least one subcategory, if no children.

Key	Type	Description	Required/ Optional	Notes
				No duplicate category ID is allowed within the store catalog.
external_ids	Map[String]String	External IDs map.	Optional	Used in *connect_upload_catalog_v3* catalog_id must match *external_ids[POSKey]*

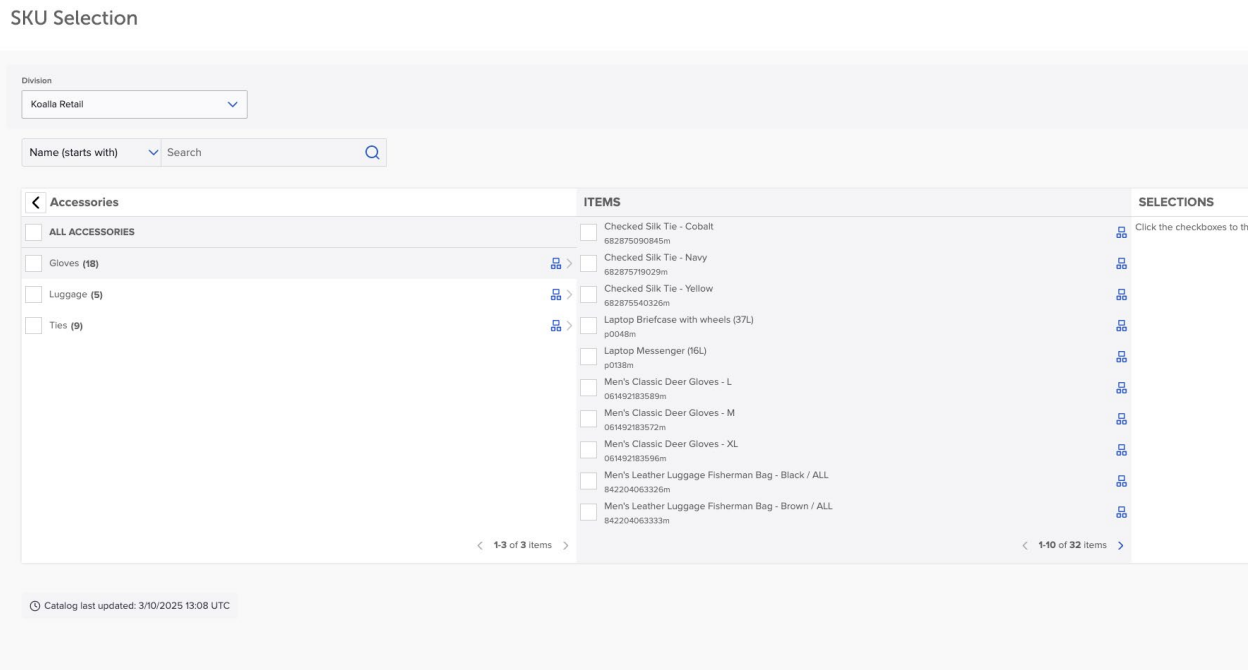
A Node represents a node of a tree. A Node is a node with a non-null array of children and/or non-null array of subcategories. Unlike the Node in the Catalog Event Categories Importer, a Node object here can have **both** child nodes and subcategories. Categories and Items cannot share the same IDs.

Child Elements

Key	Type	Description	Required/ Optional
id	String	Item ID. Item IDs (that represent the same item) can duplicate within the same catalog, but must not duplicate within the same parent category. Non-empty, valid item name. Whenever the item name appears in the catalog hierarchy, it must be the same for a given item_id.	Required
sku	String	Stock Keeping Unit - A universal value across the client/brand to identify a product. This value should be the same for an item across all stores/channels within a client's catalogs. While required, in special use cases the SKU requirement can be overridden upon ingest.	Optional

Key	Type	Description	Required/ Optional
name	String	Name of the item. Non-empty, valid item name. Whenever the item name appears in the catalog hierarchy, it must be the same for a given item_id.	Required
description	String	Description of the item.	Optional
is_modifier	Bool	Indicates if the item modifies another item within the transaction. For example, in the restaurant industry, food toppings are typically modifiers. If the item is a modifier, field set to “true”.	Optional
items_modified	[]String	Array of Item IDs that this item is a modifier for. Only used when the item is a modifier.	Optional
external_ids	Map[String]String	External IDs map. Used in *connect_upload_catalog_v3* *external_ids[SKU]* and id must match *external_ids[POSKey]*	Optional

Sample UI



Example of Product Hierarchy in SessionM for Retail Clothing

Example JSON Format of a Product Hierarchy


```
[
  {
    "nodes":
    [
      {
        "name":"Wine",
        "description":"Delicious fermented grape product",
        "category_id":"8ecce9a1f30df32d3708f030b37a9002",
        "subcategories":
        [
          {
            "name":"White Wine",
            "description":"Wine from white grapes",
            "category_id":"9df49509fec363f6827525ed7304e6fd",
            "children":
            [
              {
                "id":"8",
                "name":"Standing Stone Chardonnay Ice Wine"
              },
              {
                "id":"10",
                "name":"Standing Stone Riesling Ice Wine"
              },
              {
                "id":"13",
                "name":"Standing Stone Riesling Ice Wine"
              }
```

```
            ]
        },
        {
            "name":"Fortified Wine",
            "description":"Wine with extra punch",
            "category_id":"382a98704e73dc8782eeebac14d7f1da",
            "children":
            [
                {
                    "id":"9",
                    "name":"Standing Stone Gewurzdraminer Ice Wine"
                },
                {
                    "id":"11",
                    "name":"Standing Stone Vidal Ice Wine"
                }
            ]
        },
        {
            "name":"Red Wine",
            "description":"Wine from red grapes",
            "category_id":"9df49509fec363f6827525ed7304e6f0",
            "children":
            [
                {
                    "id":"12",
                    "name":"Star Lane Cabernet Sauvignon"
                },
                {
                    "id":"16",
                    "name":"Chateau Ste. Michelle Merlot"
                },
                {
                    "id":"3452",
                    "name":"Chateau Ste. Michelle Merlot"
                },
                {
                    "id":"18",
                    "name":"Steak House Cabernet Sauvignon"
                },
                {
                    "id":"19",
                    "name":"Stefano Farina Barbera"
                }
            ]
        }
    ]
},
{
    "name":"Cheese",
    "category_id":"8ecce9a1f30df32d3708f030b37a9003",
    "subcategories":[
        {
            "name":"Gouda",
            "category_id":"9df49509fec363f6827525ed7304e6f1",
            "children":
            [
                {
                    "id":"1",
```

```
                        "name":"Strong Gouda"
                    },
                    {
                        "id":"2",
                        "name":"Medium Gouda"
                    },
                    {
                        "id":"3",
                        "name":"Mild Gouda"
                    }
                ]
            },
            {
                "name":"Brie",
                "category_id":"382a98704e73dc8782eeebac14d7f1d2",
                "children":
                [
                    {
                        "id":"44",
                        "name":"Hard Brie"
                    },
                    {
                        "id":"55",
                        "name":"Soft Brie"
                    }
                ]
            },
            {
                "name":"Havarti",
                "category_id":"9df49509fec363f6827525ed7304e6f3",
                "children":
                [
                    {
                        "id":"666",
                        "name":"Grape Havarti"
                    },
                    {
                        "id":"777",
                        "name":"Apple Havarti"
                    },
                    {
                        "id":"888",
                        "name":"Melon Havarti"
                    }
                ]
            }
        ]
    }
  ]
}
]
```

Location Catalog Importer

The Location Catalog importer supports multiple functions within the SessionM Platform, including but not limited to the following:

- Setup of targeted promotional campaigns based on purchase events
- Managing offer restrictions and eligibility
- Segmentation and reporting by origin of transactions
- Storing the transactions against the customer profile. It's a best practice to provide a hierarchical set of location data, with multiple levels of categorization. Doing so provides a simpler user experience for marketers looking to select locations or groups of locations. This file format is also not a *.csv* file, but a *.json* file.

While any importer attribute designated "Optional" is not required in a payload, its inclusion or exclusion must be applied to ALL instances of the attribute. In short, if an attribute is included in one payload, it must be included in all payloads.

Location Catalog

Column	Description	Type	Required/ Optional	Notes
nodes	Node array.	Array	Required	An array of child nodes with a size of at least one.

Node

Column	Description	Type	Required/Optional	Notes
name	Category name	String	Required	Valid category name; non empty.
category_id	Category identifier	String	Required	Valid category ID; non empty.

Column	Description	Type	Required/Optional	Notes
description	Description for category	String	Optional	
children	Child array	Array	Contains at least 1 child node if no sub-categories	An array of child nodes, or nil only if `subcategories are` re-populated. No duplicate location ID is allowed under same category, but one location can be listed under different categories.
subcategories	Node array	Array	Contains at least one subcategory if it has no children.	An array of child nodes or nil only if children are populated. No duplicate category ID is allowed within the store catalog.
external_ids	External IDs map.	map[string]string	Optional	

Child Elements

Column	Description	Type	Required/Optional	Notes
id	Unique ID of a store or location	String	Required	Valid location ID; not empty.

Column	Description	Type	Required/Optional	Notes
name	Name of the location	String	Required	Valid location name; non-empty.
description	Description of the location	String	Optional	
external_ids	External IDs map	Map[string]string	Optional	Additional identifiers and their type.

Metadata for Location Catalog Type

Column	Description	Type	Required/Optional	Notes
include_tax	Boolean data type	Boolean	Optional	Boolean data type. If set, will be used by Campaigns to determine whether tax should be included in rule evaluation and point calculation. Can be used in Loyalty rules for the same.
email	String data type	String	Required	Required for backwards compatibility. Not used in any features.
phone	String data type	String	Optional	

Column	Description	Type	Required/Optional	Notes
address_line_1	String data type	String	Optional	
address_line_2	String data type	String	Optional	
city	String data type	String	Optional	
state_province	String data type	String	Optional	
zip_postal_code	String data type	String	Optional	
country	String data type	String	Optional	
time_zone	String data type	String	Required	Must be valid TZ Identifier from tz database.
latitude	Double data type, e.g., 37.17776	double	Optional	
longitude	Double data type, e.g., 37.17776	double	Optional	

Column	Description	Type	Required/Optional	Notes
pos_id	String data type	String	Optional	
scan_expiration_time	Number of minutes, e.g. 1440	integer	Required	Required for backwards compatibility. Not used in any features.
sunday_hours	String data type	String	Optional	
monday_hours	String data type	String	Optional	
tuesday_hours	String data type	String	Optional	
wednesday_hours	String data type	String	Optional	
thursday_hours	String data type	String	Optional	
friday_hours	String data type	String	Optional	
saturday_hours	String data type	String	Optional	

Venue (Store/Location) Importer

The Venues data set supports multiple functions within the SessionM Platform, including but not limited to the following: setting up targeted promotional campaigns with location-based geofence triggering, managing offer restrictions and eligibility, segmenting audiences for campaign eligibility, and storing venue information associated with transactions against the customer profile. Although there are few fields that are required for locations, the more data provided, the simpler it will be for marketers to search and select from available locations.

Please note that while any importer attribute designated “Optional” is not required in a payload, its inclusion or exclusion must be applied to ALL instances of the attribute. In short, if an attribute is included in one payload, it must be included in all payloads.

Standard Venue Data CSV File Format

The Standard Venue Data format is a CSV file containing columns outlined below.

Column	Description	Type	Required/ Optional
external_id	The customer's external unique ID for this venue.	String	Required
store_id	The customer's ID for this venue (unique per brand).	String	Optional
brand	The name of the associated *mplace_brand*.	String	Required
name	The display name of the venue.	String	Optional
lat	The latitude of the venue. Format: 7 decimal points, such as 42.1231231.	Float	Required
lng	The longitude of the venue. Format: 7 decimal points, such as -71.3213213.	Float	Required
address	The street address of the venue.	String	Required
city	The city of the venue.	String	Required
state	The state of the venue. Should be an ISO-3166-1 Alpha-2 code.	String	Required
zip	The ZIP or postal code of the venue. Should follow the standards for the specific country. For US, this is 5-digit or zip+4. For Canada, 6 chars. For Japan, 7-digit.	String	Required

Column	Description	Type	Required/ Optional
country	The 3-letter country of the venue in ISO-3166 format.	String	Required
phone_number	The phone number of the venue. No format requirement.	String	Optional
time_zone	The time zone of the venue. TZ environment variable format, such as “America/New_York.”	String	Optional
dma	The DMA code of the venue. Note: the default is derived from the zip code.	String	Optional
status	The activation status of the venue. Could be one of the following: *Active*, *Inactive*, *Hidden*.	String	Optional
website_url	The website URL of the venue.	URL	Optional
geofence_radius	The radius of the geofence around the location in meters.	Float	Optional

Additional Format Requirements

- All fields have a maximum length of 256 characters.
- Empty optional fields are OK.

Venue Tag Importer

The Venues Tag data set allows for the addition of appended data relevant to a venue or location that can be used for search and targeting purposes. An example of this is to tag select quick-service restaurants to identify those venues with a drive-through.

Please note that while any importer attribute designated “Optional” is not required in a payload, its inclusion or exclusion must be applied to ALL instances of the attribute. In short, if an attribute is included in one payload, it must be included in all payloads.

Standard Venue Tag Data CSV File Format

- The Standard Venue Tag Data format is a CSV file containing columns outlined below.
- Venue data files should be full dumps. The venues for each brand specified fully replace the existing venues for the given brand.
- In the case of a bad/invalid data load, reversion is handled by manually reloading the last known good data dump.
- Venue updates must preserve venue IDs when reloading data for an existing external ID.

Column	Description	Type	Required/ Optional
external_id	The customer's external unique ID for this venue.	GUID	Required
brand	The name of the associated mplace_brand.	String	Required
tag	The tag name to add.	String	Required
action	Action to take ('Add', 'Remove').	String	Optional

Appendix A - Sample Customer CSV File

* Note that the *locale*, *active_flag*, *size*, and *affinity* columns are all custom appended data fields.

external_id,email,first_name,last_name,gender,dob,locale,country,state,city,zip,active_flag,size,affinity
99000000,fake99000000@example.com,Julia,Cox,,1952-10-22,en_US,USA,OH,morro bay,55942,false,,1.0
99000001,fake99000001@example.com,Timothy,Jackson,m,1932-05-07,en_US,USA,TX,elk grove,false,false,,1.0
99000002,fake99000002@example.org,Phillip,Campbell,f,1979-03-28,en_US,USA,VA,morro bay,false,false,,1.0
99000003,fake99000003@example.com,Stephen,Rogers,m,1966-06-16,en_US,USA,OR,burbank,false,false,,1.0

Appendix B - Previous Data Importer Versions

Purchase Event Importer

While still used in select instances, the Purchase Event importer is being deprecated in favor of the new Transaction importer. Unless explicitly instructed by the SessionM Integration team, please use the Transaction importer documentation above.

Please note that while any importer attribute designated “Optional” is not required in a payload, its inclusion or exclusion must be applied to ALL instances of the attribute. In short, if an attribute is included in one payload, it must be included in all payloads.

The following is an example set of data.

Event Format

Column	Description	Type	Required/ Optional	Notes
external_id	The unique customer ID of the user for whom the event has fired.	String	Required	
transaction_id	A unique transaction identifier.	String	Required	If transaction ID is not available from the customer, one can be generated by combining *StoreID*, *RegisterID* and *Receipt Number*.
occurred_at	The time in RFC3339 format for when the event occurred.	String	Optional	The format for the string is YYYY-MM-DDTHH:MMSSZHH:MM. occurred_at must be no more than 10 minutes in the future.
transaction_type	Type of transaction.	String	Optional	Purchase/Refund etc.

Column	Description	Type	Required/ Optional	Notes
purchase	Information about the item(s) involved in the purchase transaction.	Array of purchase items.	Required	
subtotal_amount	The sum of amounts.	Uint	Required	
channel	Store channel used to submit the transaction.	String	Optional	Example "instore", "online".
sub_channel	Store sub channel used to submit the transaction.	String	Optional	Example "app", "web".
store	Unique identifier of the store where the transaction occurred.	String	Optional	
pos_transaction_no	Customer facing receipt number.	String	Optional	It is not guaranteed unique and not the same as *transaction_id.*
register_no	Register ID.	String	Optional	
sales_associate_no	Sales associate ID.	String	Optional	

Purchase Item Format

Column	Description	Type	Required/ Optional	Notes
name	Unique identifier for the item in the product catalog. If one is not available, use event name.	String	Required	
description	Product description of the item.	String	Optional	
currency	Currency used for the item transaction.	String	Optional	
qty	Quantity of item.	Uint	Optional	
price_amount	Unit cost * qty in cents.	Uint	Optional	Total cost for an item type. Ex: an item costs 199 and a quantity of 3 are purchased; the value here would be 597.
amount	Actual amount the user paid for this item type.	Uint	Required	*price_amount - total discounts*. (Ex - If 3 of an item was purchased, this would be 3*unit cost - discounts.)
promotion_name	Name of the promotion on the item.	String	Optional	Used for lookups
discounts	Discount(s) applied to the purchase of the item.	Array of discount	Optional	
children	Add-on purchases associated with the purchase of an item.	Array of add-on	Optional	Example: flavor shot added to a beverage.

Add-on Format

Column	Description	Type	Required/ Optional	Notes
name	Unique identifier for the add-on item.	String	Required	
description	Product description of the add-on item.	String	Optional	
qty	Quantity of item.	Uint	Optional	
price_amount	Unit cost * qty in cents.	Uint	Required	Total cost for an item type. Ex: an item costs 199 and a quantity of 3 are purchased, the value here would be 597.
override_price_amount	Actual amount the user paid for this item.	Uint	Optional	Useful if price is overridden at the cash register
discounts	Discount(s) applied to the purchase of the item.	Array of discount.	Optional	

Discount Format

Column	Description	Type	Required/ Optional	Notes
amount	Amount of the item discount in cents.	Uint	Required	The format for the string is YYYY-MM-DDTHH:MMSSZHH:MM. If occurred_at is more than 10 minutes in the future, an error is thrown.
description	Description of the item discount	String	Required	
promotion_name	Name of the promotion providing the discount	String	Required	
promotion_code	Code of the promotion providing the discount	String	Required	

Sample JSON Input File


```
[
  {
    "external_id":"654321",
    "occurred_at": "2017-01-02T12:34:56-04:00",
    "transaction_id" : "54621415-93EF-4B98-BF4B-617F14A9B456",
    "transaction_type": "buy",
    "channel": "Retail",
    "sub_channel": "Lunch",
    "store": "Joe's Burger Joint #123",
    "subtotal_amount": 179,
    "purchase":
    [
       {
          "name": "Cola",
          "description": "A cold, refreshing carbonated beverage",
          "currency": "USD",
          "qty": 1,
          "price_amount": 199,
          "amount": 149,
          "discounts":
          [
             {
                "amount": 50,
                "description": "50 cent coupon",
                "promotion_name": "cola discount",
                "promotion_code": "50COLA"
             }
          ],
          "children":
          [
             {
                "name": "Cherry Flavor Shot",
                "description": "Cherry Yum",
                "qty": 1,
                "price_amount": 20
             }
          ]
       }
    ]
  }
]
```

Event Categories Importer (Product/SKU Hierarchy)

While still used in select instances, the Event Categories (product/SKU hierarchy) importer is being deprecated in favor of the new Store Catalog importer. Unless explicitly instructed by the SessionM Integration team, please use the Store Catalog importer documentation above.
This file format is also not a *.csv* file, but a *.json* file.

Please note that while any importer attribute designated “Optional” is not required in a payload, its inclusion or exclusion must be applied to ALL instances of the attribute. In short, if an attribute is included in one payload, it must be included in all payloads.

Node

Key	Type	Description	Required/ Optional	Notes
name	String	Category name.	Required	
category_id	String	Category ID.	Required	
children	Array	Child array.	Depends	An array of child nodes, or nil. Either children or subcategories should be populated, but not both.
subcategories	Array	Node array.	Depends	An array of child nodes, or nil. Either children or subcategories should be populated, but not both.

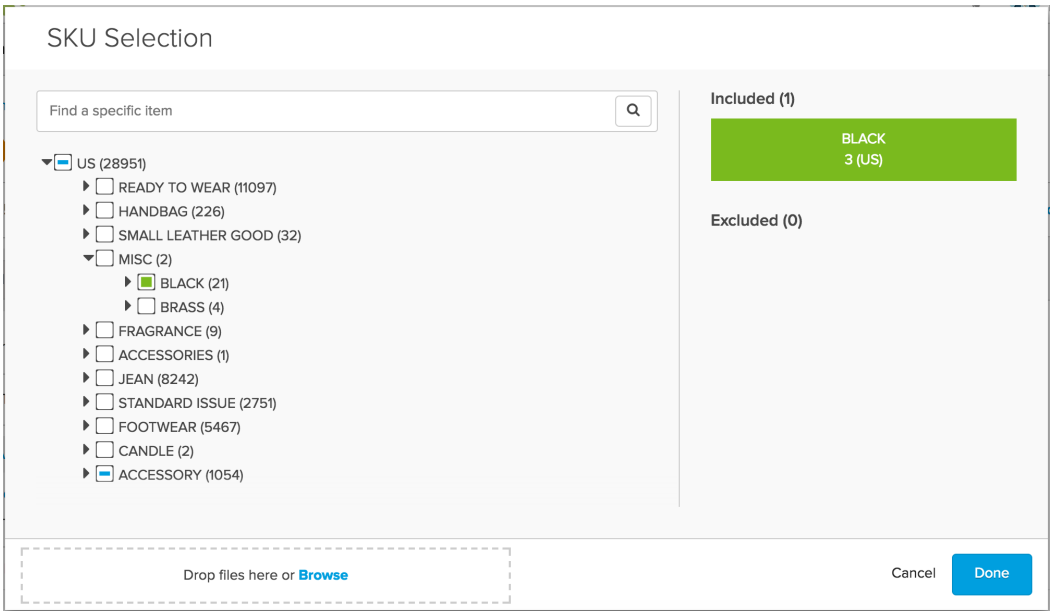
A Node represents a node of a tree (*event_categories*). A leaf node is a node with a non-null array of children. A branch node is a node with a non-nil subcategories array.
All nodes must have either their children **or** subcategories elements be non-null, but not both. Exactly one must be populated for any given node.

Child Elements

Key	Type	Description	Required/ Optional
id	String	event_data name	Required
display_name	String		Required

Sample UI

Child elements hold a leaf's data.



Example of Product Hierarchy in SessionM for Retail Clothing

Example JSON Format of a Product Hierarchy


```
[
 {
        "name": "Wine",
        "category_id": "8ecce9a1f30df32d3708f030b37a9002",
        "children": null,
        "subcategories": [
        {
        "name": "White Wine",
        "category_id": "9df49509fec363f6827525ed7304e6fd",
        "children": [
        {
        "id": "8",
```

```
            "display_name": "Standing Stone Chardonnay Ice Wine"
            },
            {
            "id": "10",
            "display_name": "Standing Stone Riesling Ice Wine"
            },
            {
            "id": "13",
            "display_name": "Standing Stone Riesling Ice Wine"
            }
            ],
            "subcategories": null
            },
            {
            "name": "Fortified Wine",
            "category_id": "382a98704e73dc8782eeebac14d7f1da",
            "children": [
            {
            "id": "9",
            "display_name": "Standing Stone Gewurzdraminer Ice Wine"
            },
            {
            "id": "11",
            "display_name": "Standing Stone Vidal Ice Wine"
            }
            ],
            "subcategories": null
            },
            {
            "name": "Red Wine",
            "category_id": "81092801b861076308da6e29b945ffcd",
            "children": [
            {
            "id": "12",
            "display_name": "Star Lane Cabernet Sauvignon"
            },
            {
            "id": "16",
            "display_name": "Chateau Ste. Michelle Merlot"
            },
            {
            "id": "3452",
            "display_name": "Chateau Ste. Michelle Merlot"
            },
            {
            "id": "18",
            "display_name": "Steak House Cabernet Sauvignon"
            },
            {
            "id": "19",
            "display_name": "Stefano Farina Barbera"
            }
            ],
            "subcategories": null
            }
            ]
  }
]
```

Order Status Importer

While still used in select instances, the Order Status importer is being deprecated as it is being replaced with recent changes to the Offers domain. Unless explicitly instructed by the SessionM Integration team, please do not use this importer.

Please note that while any importer attribute designated “Optional” is not required in a payload, its inclusion or exclusion must be applied to ALL instances of the attribute. In short, if an attribute is included in one payload, it must be included in all payloads.

Standard Order Status CSV File Format

The Standard OrderStatus format is a CSV file containing columns outlined below.

Column	Description	Type	Required/ Optional	Notes
transaction_id	The ID of the offer_order to update.	int32	Required	
offer_id	The ID of the offer in the offer_order.	int32	Required	
external_id	The unique customer's ID for the user who has the event fired.	GUID	Required	
review_state	The review_state of the offer_order.	review _state	Required	One of the following: “approved”, “rejected”, or “redemption_error”.
reviewed_at	The time in RFC3339 format for when the offer_order was reviewed.	String	Required	The format for the string is YYYY-MM-DDTHH:MMSSZHH:MM.
data	A JSON hash of metadata to store with the offer_order.	JSON hash	Optional	A hash of string → string values.

Sample JSON Input File

```
transaction_id,offer_id,external_id,review_state,reviewed_at,details
1234,2345,asdfasdf,approved,2017-10-01T12:34:56-05:00,"{""foo"":""bar""}"
```