



TurboEdit Data Feed Specification

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Introduction / Definition of Terms

AutoEdit is the online vehicle management system of AutoExposure. TurboEdit is a subset of the AutoEdit system which provides productivity tools and the automation of data. This document describes the data feed and image ftp parts of the TurboEdit service.

Data Feed Benefits

The data feed service enables the bulk upload of data via csv, or tab delimited files compatible with most DMS systems including Kerridge. Dealerships who maintain a DMS are strongly advised to setup a data feed as it removes the burden of having to maintain two sets of data and helps keep your web data current.

The TurboEdit system completes partial data from DVLA registration lookup and can generate full standard fit descriptions with an optional CAP data license.

Images can also be ftp'd and associated with vehicles entered manually through the AutoEdit web admin.

Prerequisites

Administration privileges and an ftp account are required before any data can be transferred. An ftp account should be requested from within the TurboEdit / Datafeeds part of the system login. Please allow up to 2 working days for a response.

Data Feed Formats and Setup

The system supports two file formats:

- 1). TurboEdit
- 2). DMS12/14+ (AutoTrader multi photo format)

The TurboEdit is the most flexible and recommended format. The DMS12/14+ is made available to provide existing users of the AutoTrader format an easy way to import data. Our version includes a couple of enhancements to improve photo and CAP data handling, but it can be also used in the original format.

Please log into the system to finalise or modify a data feed setup. The rest of the document describes the available setup options and data feed specs.



File Delimiters, Text Qualifiers, Naming Conventions and Extensions.

Files can be sent zipped or unzipped with any labelling convention, although it is recommended that it be descriptive of the data being sent, e.g. AETA123987_21062005.csv or StarMotorGroup_21062005.csv.

If the file has a .csv extension the system will expect comma delimited data. E.g.

"Feed_ID", "Registration ", "Mileage", "Price"

"AETA123987", "A123XZY",36000,7995

"AETA123987", "B123XYZ",64000,10995

If the file has a .txt extension the system will expect a tab delimited data. E.g.

Feed_ID	Registration	Mileage	Price
AETA123987	A123XZY	36000	7995
AETA123987	B123XZY	64000	10995

The system will not import a file if it is comma delimited data with a .txt extension and vice versa.

DMS12/14+ file uploads are different in that the system expects comma delimited data regardless of extension. I.e. you can send comma delimited data with a .txt extension, as laid down by AutoTraders original documentation. The DMS12/14+ import does not support tab delimited data.

Csv descriptions containing commas must be qualified by double quotes ("). Text qualifying of other data is optional.

A header describing the fields must be provided either in the first row of the data file or as a separate file labelled header.csv or header.txt. Header field names must be as described in the data feed spec tables (pages 9 – 12).

Typically you would only provide relevant and required fields in the feed. If your data has fields which cannot be removed, these can be omitted by labelling them Spare1, Spare2, Spare3 ... in header.

Where a header is present in both data file and separate header file, the header file takes precedence. This enables original data file field names to be overridden in order to comply with the TurboEdit / AutoTrader specification.

Primary Keys and Strict Validation

For flexibility there are a number of different primary key options within the data feed settings;



- Auto – Vehicle_ID or Registration (default)
- Registration
- Vehicle_ID
- Vin

By default, strict validation is enforced on the set field(s). If duplications exist within the data, the system will abort and detail the duplications in a report sent to the report contact email address(es).

However, maintaining uniqueness can sometimes cause difficulties. This is particularly evident where different companies and or people maintain the feed and stock inventory.

Therefore an option exists to disable strict validation. In this scenario all duplicate records are omitted / deleted. Because of this, it amounts to a keep the feed running measure, and therefore strongly discouraged unless the data quality and management is such that it is the only option.

Provided Fields and Data Completion

As few or many of the fields detailed in the spec tables can be provided. The data completion option in the data feed setup determines how data is completed:

Data Completion Option	Notes
None	The system will not attempt any form of data completion. Recommended for users who hold and export a full data set including DVLA and spec level descriptions.
Missing Fields (Recommended)	The system attempts to complete any fields not present in the data feed. In cases where you do not want a particular field, please provide the field with missing values.
Missing Values	The system will attempt to complete data where the field is present but a value is missing. <u>Please note that updates under this scheme will only clear mileage and price fields.</u>
Missing Fields & Values	The system will attempt to complete data where fields or values are missing. <u>Please note that updates under this scheme will only clear mileage and price fields.</u>

Reserve Fields

By default data provided in the feed takes precedence over automated data. The TurboEdit data feed spec has the option to take reserve data by appending **Reserve** to a field label. Fields with a reserve option are demoted by "Yes" in the TurboEdit Feed Spec table. This enables you to take advantage of the rich data automation can provide, whilst having a fall back to data provided in the feed.



Important Note on Data Completion

Data completion options have been designed to offer users maximum flexibility. A trade off is that undesirable results can occur should the options not be fully thought through. Before proceeding with set up, please take the time to consider how the presence of fields and settings interact. Pitfalls to look out for include;

- If set to "Missing Fields", the provided fields will not be auto completed, even if they are blank.
- Fields will not be blanked on update if set to "Missing Values" / "Missing Fields & Values"
- Fatal validation setting also affects how fields are handled in the event of a fatal validation error.

Recommendations:

Keep it simple. If your DMS contains sparse or partially completed data, consider only feeding the bare requirements, **Feed_ID, Registration, Price** and **Mileage**, and let the system do the rest. If your DMS contains full and rich data, consider feeding it in its entirety and switching data completion off.

If your DMS contains partial or poorly formatted data, utilize the Reserve field option. This will enable your website to carry rich details where a DVLA and CAP lookup can be formed, and fill in the blanks elsewhere.

Other Notes on Data Completion

- Please provide a CAP id and manufacture or registration dates where available. This maximises the systems data return rate.
- It is very important to provide registrations where available. This also maximises the systems data return rate.
- Bogus registrations are strictly forbidden as it can lead to invalid descriptions
- CapID, RegistrationDate, and VehicleType are special fields for which missing value are automatically populated for all Data Completion settings except "None". This is because these fields are required for full system operation.

Advanced Data Completion

In addition to a base (DLVA) level completion, the import system also fully integrates with the following optional CAP licenses:

License	Notes
Standard Fit	Returns a web optimum description such as central locking, alloy wheels, etc, and a longer more detailed manufacturer specific description such as 16" TWS Alloy Wheels, Blaupunkt RDS Radio Cassette, etc.
Technical Spec	Returns detail technical, performance and safety specs such as 0 – 60, top speeds, mpg, NCAP ratings, etc.
Image	Attaches an image from a comprehensive set of library photos



Please contact the office for more information regarding licensing on 0870 3600311.

Other Data Completion Settings

In addition to the data feed specific settings there are a number of other general system settings which affect how data is returned and displayed. Please refer to the Data Options area within the vehicle management login.

General Upload Settings

Within the TurboEdit area of the login are general upload settings, which control the destination of vehicles depending on the level of data completion. These settings also apply to data feed uploads.

A Note on Data Quality

Our system includes a data cleansing engine to ensure data uniformity. For example, if the system imports a vehicle Make = BMW, Model = 318i, Variant = "", this would be cleansed and stored as Make = BMW, Model = 3 SERIES, Model = 318i. Furthermore, on export if a portal expects another specific format such as BMW 3-Series 318i (with a dash), the system would return this, ensuring data quality at all times. The system also fixes common spelling mistakes such as CITERON and PEUGOET.

This feature can be switched off, but it is strongly discouraged.

Uploading Images

Up to 10 images can be supplied per vehicle. Images can be referenced in the data file, by url to an image on your server or ftp'd accompanying the data file. Images must have a .jpg extension, but can be sent with any labelling convention. It is recommended that images are sent with descriptive labels and are zipped, e.g. A123XYZ_1.jpg and StarMotorGroup_Photos_21062005.zip.

Images can also be sent independent of a data feed. Images must be labelled by either registration or stock id, and a photo numbers must separated by either _ - @ or ^. The appropriate settings must be set in the data feed setup area, otherwise the images will not import.

Images are held pending, i.e. if a photo is sent for a vehicle which does not exist, it will be archived. The system will then associate the photo with the vehicle once it is entered. Images are held for up to 2 months before being deleted.

The system is designed to accept an optimum pixel size of 640 x 480 and file size of 50 – 90k. Photos of any other size can be uploaded, but Auto Exposure takes no responsibility for the presentational quality of photos which do not meet the recommendations.



Uploading Data, FTP and Drag & Drop

Two methods of upload are available:

- 1). FTP
- 2). Drag & Drop

To use FTP a suitable software client is required, Cute FTP, WS FTP etc. Login details are detailed within the TurboEdit / Datafeeds > Datafeed Settings part of the login.

The Drag & Drop facility requires Java Run Time 1.4.1+. The Drag & Drop hotspot is located within the TurboEdit / Datafeeds > Upload Vehicles part of the login. Benefits of the Drag & Drop feature include:

- Instantaneous import and feedback
- Client side optimisation of images (saving time and bandwidth)
- Convenience for people who access the system regularly
- Alternative method for people who experience problems with FTP due to firewalls or other reasons

If your computer does not have the appropriate run time installed, please visit www.java.com.

Group Data Feeds and Feed IDs

The system is designed to accept multiple feeds in a single data file. The Feed_ID(s) in the data file must match the Feed ID(s) within the data feed settings, otherwise the records will not import.

The account highlighted in bold within the data feed setup options is the primary account. To add a feed to the feed group, provide a feed id. To remove an account from the feed group, remove the feed id. Removing the primary account will remove the data feed entirely.

If your dealer group has branches not available to the list, please contact the office to have them mapped to your group account. Please note that administrative privileges are required for accounts you wish to add to the list.

Import Schedules

The system is scheduled to poll FTP uploads every 10 minutes, the photo archive every hour.



Other Housekeeping Tasks

Depending on fullness of the data provided, the system can occasionally import vehicles with incomplete details. Please also be aware that the system can place these vehicles into a pending folder, depending on the settings within an accounts general upload preferences. For more information please refer to the Data Feed and Automation Guide.

Photo Archive Tools

Tools are available to help users remove, rename and associate vehicles from the Photo Archive. These tools can be of particular use where association failed due to typing errors. These tools are available within the **Vehicle Management > TurboEdit / Datafeeds > Photo Archive** part of the login.

Reports and Error Handling

Upload and error reports are sent to the report / email contact specified within the systems data feed settings. This contact is also added to a mailing list notifying of data feed related issues. It is the contacts responsibility to monitor and respond to feed problems. Auto Exposure do not actively monitor individual feed activities.

Reporting Technical Issues

Please send reports of any bugs to bugs@autoexposure.co.uk. User issues or questions should be targeted at datafeeds@autoexposure.co.uk.

Using Data Feeds in Conjunction with Photography

Typically dealerships do not hold photos within their DMS, so they cannot be included in the data feed automation. The AutoEdit system generates a Photography Update Sheet to assist in the collation of photos;

Vehicle Management > Click **Print Media** Link > Select the **Photography Update Sheet** Option > and **Create**

The Photography Update Sheet details all the vehicles which require photos by Description and By Registration.

The description list provides assistance in cases where vehicle identification is easy, or the person is knowledgeable about stock locations.

The registration list enables someone to walk up and down lines of stock and identify vehicles by cross referencing. This is not nearly as time consuming as it sounds, and can help in cases where identification is not easy or a lot of photos need to be taken.



Back Feed of Data

Although the AutoEdit system, TurboEdit and data completion tools are designed primarily for use within Auto Exposure services, back data feeds can be arranged to populate websites maintained by third parties. If you are subscribed to CAP data, licensing restrictions may apply. Please contact the office on 0870 3600311 for more information.

TurboEdit Spec

Field	Max. size	Data type	Res. Opt.	Example	Notes
Feed_ID	50	Text			Accounts own ID to differentiate between multiple dealers in the file. Please set these values in the data feed setup area.
Vehicle_ID	50	Text			Please provide the vehicles own stock id. Must be unique as it is used to reference vehicles. System will fall back on registration if not provided.
Make	50	Text	Yes	Vauxhall	
Model	50	Text	Yes	Astra	
Variant	75	Text	Yes	1.8 LS	
EngineSize	4	Number	Yes	1800	Must be numeric
FuelType	10	Text	Yes	Diesel	
TransmissionType	15	Text		Auto	Has to be Manual or Auto, Automatic, Semi Automatic, Semi-Automatic, Semi Auto, Semi-Auto, or Tiptronic.
VehicleType	2	Number			Must be numeric. 1 = Car, 3 = Bike, 4 = Motorhome, 5 = Caravan, 6 = Boat, 7 = Light Comm, 8 = Ridge Comm, 9 = HGV, 10 = Trailer, 11 = Plant, 12 = Other. Records with Null or missing fields are considered Cars vehicles unless DVLA lookup can determine otherwise.
ManufactureDate	-	Date	Yes	01/01/2005	Please provide a full man. date where available to maximise the systems data return accuracy.
RegistrationDate	-	Date	Yes	01/01/2005	Please provide a full registration date where available to maximise the systems data return rate.
RegLetter	2	Text	Yes	Y or 52	
Registration	10	Text		A123ABC	Used to query data and reference vehicles. Must be provided if available.
Vin	17	Text		W0L0XCF0834151609	
NoDoors	1	Number	Yes	3	Must be numeric
BodyStyle	50	Text	Yes	Hatchback	Description of body style excluding doors, e.g. Hatchback, not 3 Door Hatchback.
Colour	60	Text	Yes	Green	
Mileage	8	Text		21000	Must be numeric
InsuranceGroup	2	Number	Yes	3	Must be numeric without any text, e.g. 3, not Insurance Group 3
BuyerType	1	Number			Determines type of vehicle sale. 1 Private Only, 2 is Private and Trade and 3 Trade Only. Records with Null or missing fields are considered retail only vehicles.
Price	6	Number		8495	Must be numeric
PricePlusVat	1	Y/N			Must be Boolean, e.g. Y/N, 1/0, true, false etc. Records with Null or missing fields are considered N. I.e. the price includes or is not subject to VAT.
PreviousPrice	6	Number		8995	Must be numeric
TradePrice ^T	6	Number			Must be numeric
TradePriceText ^T	20	Text			Text description to accompany trade price. For use on some trade websites only.



TradeCondition ^T	200	Text			Text description of vehicles condition. For use on some trade websites only.
Origin ^T	20	Text	Yes	UK	Has to be "UK", "Import", or "Grey Import". Records with Null or missing fields are considered UK vehicles.
ServiceHistory^T	50	Text			Must be "Full Service History", "Full Franchise Service History", "Service History", or "No Service History". Vehicles with Null or missing fields are considered undefined.
MotExpiry	-	Date		01/01/2005	Must be a valid date format
WarrantyExpiry	-	Date		01/01/2005	Must be a valid date format
NoRegKeepers	2	Number	Yes	3	Must be numeric, e.g. 3, not 3 Previous Owners.
NoRemotes	1	Number			Must be numeric
NoKeys	1	Number			Must be numeric
KeyIDNo	12	Text			
New	1	Y/N			Must be Boolean, e.g. Y/N, 1/0, true, false etc. Records with Null or missing fields are considered used vehicles.
Sold	1	Y/N			Must be Boolean, e.g. Y/N, 1/0, true, false etc. Records with Null or missing fields are considered unsold vehicles.
SpecialOffer	1	Y/N			Must be Boolean, e.g. Y/N, 1/0, true, false etc. Records with Null or missing fields are not considered special offers.
ExDemo^T	1	Y/N			Must be Boolean, e.g. Y/N, 1/0, true, false etc. Is the vehicle exdemo?
FranchiseApproved^T	1	Y/N			Must be Boolean, e.g. Y/N, 1/0, true, false etc. Is the vehicle franchise approved?
HPICheck	1	Y/N			Must be Boolean, e.g. Y/N, 1/0, true, false etc. Has the vehicle been HPI checked?
CarDataCheck	1	Y/N			Must be Boolean, e.g. Y/N, 1/0, true, false etc. Has the vehicle been car data checked?
V5 ^T	1	Y/N			Must be Boolean, e.g. Y/N, 1/0, true, false etc. Does the vehicle have a V5 document?
Description	1500	Text	Yes	Anti-Lock Brakes, Alarm, etc	Comma separated list of vehicles features.
PictureRefs or PictureRefN	255	Text		pic1.jpg, pic2.jpg, pic3.jpg	Either a comma separated list named PictureRefs, or individual reference fields named PictureRefN, where N is a number 1 – 10. A reference can either be provided as a url to an image on your server, e.g. http://www.website.co.uk/images/vehicles/101.jpg or a reference to an accompanying image, e.g. 101.jpg. First photo must be the master.
Cap_ID	5	Number		23002	Please provide a CAP id where available to maximise the systems data return rate.



DMS12/14+ (AutoTrader Multi Photo) Spec

Field	Max. size	Data type	Example	Notes
Feed_ID	50	Text		Accounts own ID to differentiate between multiple dealers in the file. Please set these values in the data feed setup area.
Vehicle_ID	50	Text		Please provide the vehicles own stock id. Must be unique as it is used to reference vehicles. System will fall back on registration if not provided.
FullRegistration	10	Text	P123ABC	Used to query data and reference vehicles. Must be provided if available.
Colour	60	Text	Green	
FuelType	10	Text	Diesel	
Year	4	Number	1996	
Mileage	8	Text	21000	Must be numeric
BodyType	50	Text	Hatchback	Description of body style excluding doors, e.g. Hatchback, not 3 Door Hatchback.
Doors	1	Number	3	Must be numeric
Make	50	Text	Vauxhall	
Model	50	Text	Astra	
Variant	75	Text	1.8 LS	
EngineSize	4	Number	1800	Must be numeric
Price	6	Number	8495	Must be numeric
Transmission	15	Text	Auto	Has to be Manual or Auto, Automatic, Semi Automatic, Semi-Automatic, Semi Auto, Semi-Auto, or Tiptronic.
PictureRefs	255	Text	pic1.jpg, pic2.jpg, pic3.jpg	Either a comma separated list named PictureRefs. A reference can either be provided as a url to an image on your server, e.g. http://www.website.co.uk/images/vehicles/101.jpg or a reference to an accompanying image, e.g. 101.jpg. First photo must be the master.
ServiceHistory^T	1	Y/N		Must be Boolean, e.g. Y/N, 1/0, true, false etc.
PreviousOwners	2	Number		Must be numeric, e.g. 3, not 3 Previous Owners.
Description	255	Text		Not used, but field must still be present in the file.
FourWheelDrive	1	Y/N		Must be Boolean, e.g. Y/N, 1/0, true, false etc. Will be prepended to vehicle description on import. Please do not provide a value here if your data contains this info in your options field.
Options	1500	Text	Anti-Lock Brakes, Alarm, etc	Comma separated list of vehicles features.
Comments	255	Text		Any additional text such as Price excludes VAT etc. Will be appended to vehicle description on import. Options field must be provided for this field to display.
New	1	Y/N		Must be Boolean. "Y" for new vehicles, else "N" for used. Records with Null or missing fields are considered Used vehicles.
Used	1	Y/N		Must be Boolean. "Y" for used vehicles, else "N" for new. Records with Null or missing fields will be considered Used vehicles.
Site	1	Text	B	Determines the trade status of a vehicle. "T" is to trade, "B" is to both trade and retail and "C" is to retail only. Records with Null or missing fields are considered retail only vehicles.
Origin ^T	20	Text	UK	Has to be "UK", "Parallel Import", or "Grey Import". Records with Null or missing fields are considered UK vehicles.
V5 ^T	1	Y/N		Must be Boolean, e.g. Y/N, 1/0, true, false etc. Does the vehicle have a V5 document?
Condition ^T	200	Text		Text description of vehicles condition. For use on some trade websites only.
ExDemo^T	1	Y/N		Must be Boolean, e.g. Y/N, 1/0, true, false etc. Is the vehicle exdemo?
FranchiseApproved^T	1	Y/N		Must be Boolean, e.g. Y/N, 1/0, true, false etc. Is the vehicle franchise approved?
TradePrice	6	Number		Must be numeric
TradePriceExtra	20	Text		Text description to accompany trade price. For use on some trade websites only.



ServiceHistoryText	50	Text		Must be "Full franchise service history", "Full service history partially by franchise", "Full service history non franchise", "No service history", "Partial service history". Or TurboEdit descriptions "Full Service History", "Full Franchise Service History", " Service History", or "No Service History". Vehicles with Null or missing fields are considered undefined.
Cap_ID	5	Number	23002	Please provide a CAP id where available to maximise the systems data return rate.
VehicleType	2	Number		Must be numeric. 1 = Car, 3 = Bike, 4 = Motorhome, 5 = Caravan, 6 = Boat, 7 = Light Comm, 8 = Ridge Comm, 9 = HGV, 10 = Trailer, 11 = Plant, 12 = Other. Records with Null or missing fields are considered Cars vehicles unless DVLA lookup can determine otherwise.
RegistrationDate	-	Date	01/01/2005	Please provide a full registration date where available to maximise the systems data return rate.
ManufactureDate	-	Date	01/01/2005	Please provide a full man. date where available to maximise the systems data return accuracy.

Notes on DMS12/14+ Spec

- Red highlighting denotes additional fields to the original DMS14 spec. Please provide values for these fields wherever possible in order to maximise data return rates.
- Please note that this specification also differs from the original in that it allows images to be uploaded via a url.

General Notes on Data Feed Specs

- Bold highlighting denotes fields which display on websites. Other fields are reserved for internal use or feature in other services such as silent salesman.
- ^T denotes fields primarily for use on trade websites and must be provided if data is exported to TraderLink.

Other Feed Specifications

Custom one off specs can be setup but are subject to charge to cover the initial development work and any ongoing maintenance. Please send a sample file to development@autoexposure.co.uk and contact the office on 0870 3600311 for more information.

Caveats and Known Limitations

Image Handling

- Photos are not automatically deleted when a reference by Registration or Stock ID
- Photos are not automatically deleted when referenced in the feed if also subscribed to library photos



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- Photos are only ever updated during a data file import when referenced in the feed
 - Photo gallery upload tool is incompatible and therefore unavailable when on a data feed
 - Data feeds do not support video uploads. These must be attached manually
 - When on a data feed, AVI is only supported limitedly by a post process

AutoEdit Features

- Finance values cannot be passed in the feed, but each vehicle will be set to the accounts default values defined within AutoEdit. This only applies to accounts subscribed to the real time finance showroom feature
- 3rd party site export settings cannot be passed in the feed. Each vehicle import is set to undefined, which is an automatic send setting based on quota and price. Vehicles can be individually set explicitly On or Off manually from within the AutoEdit system. This only applies to accounts subscribed to AutoTrader, Ebay or Motors.
- Import does not currently support contract hire listings
- Import does not support extended texts (Website long, Silent salesman description, Silent salesman footer, Other websites, Trade 2 Trade, and AutoTrader)
- Import does not support categories. All vehicles are placed in the default category set within AutoEdit
- Vehicles cannot be manually added or deleted when on a data feed

Import formats

- The import does not support XML. This is because the format is too variable to be accepted by the automated framework and therefore requires custom programming. Users wishing to upload XML are advised to export the data to a flat .csv file or convert prior to upload
- The import requires well structured data including consistent number of columns and records without line breaks
- The import system provides a loose validation option which can be used to keep the import running if there are duplications in the data. However, this results in vehicles being omitted from publication, and therefore is unadvised. AutoExposure can take no responsibility for missing vehicles when this option is used.



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- Some data lookup services are provided by third parties which can fail very occasionally. Depending on system configuration these records can either be held pending or published straight to web. Data feeders are advised to regularly monitor the logs and take proactive measures. Unfortunately AutoExposure do not provide any data feed monitoring due to the automated nature of the arrangement. However, an option does exist to be fully managed by AutoExposure, in which case manual administration methods are used.