Interface-Description

for the used machinery marketplace
of www.landwirt.com
(import/export in XML via FTP/HTTP)

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list of contents

1. General

1.1 topic of this document

This document describes the standard-interface for import or export of used machines in or from the used machinery marketplace of www.landwirt.com. Base of the import or export is a xml-document transferred via FTP.

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2. Export from the used machinery marketplace

For export from our used machinery marketplace landwirt.com provides XML-data daily. The file can be stored on a customers server or the customer gets FTP-access to the interface-server of landwirt.com.

Export-time and transfer-strategy is individual and is agreed between landwirt.com and each customer.

The customer defines which dealers the XML-file should include. At the export-process all offers for these dealers will be exported, so the interface-partner has to insert new offers, update existing offers and delete offers not included anymore.

Pictures for offers are defined as URI's in the XML-file.

3. Import into the used machinery marketplace

The import into landwirt.com's machinery marketplace is also designed as daily service but is running a few times daily. The import checks if there is an existing XML-file and processes the file.

The interface is deleting offers not provided in the XML-file anymore, inserts new offers and updates existing offers from the XML-file. Each offer has to be provided with all data at any time, because not provided details are lost after update.

The customer has to provide the XML-file in a standardized format defined by landwirt.com

For import landwirt.com also provides two ways for transfer, it's up to the customer to provide FTP-access for download or transfer the data to the landwirt.com-interface-server.

Pictures for offers have to be transferred via FTP.

4. Import-/Export-XML

This section describes the structure of the xml-file used for import and export the same way. There is no DTD/XSD-based verification of the xml-file, the interface-software validates the data-file.

4.1 General structure of the xml-file

```
<?xml version="1.0" encoding="utf-8" standalone="yes"?>
<import version="2.0"> (bzw. <export version="2.0">)
    <firm>
        <contact_persons>
            <contact_person>
                    <!-- data record of contactperson -->
            </contact_person>
            <contact_person>
                    <!-- data record of contactperson -->
            </contact_person>
        </contact_persons>
        <offers>
            <offer>
                    <!-- data record for offer -->
            </offer>
            <offer>
                    <!-- data record for offer -->
            </offer>
        </offers>
    </firm>
</import> (bzw. </export>)
```

4.2 XML-elements

header: <?xml version="1.0" encoding="utf-8" standalone="yes"?>
The header is required in the xml-file. The encoding is set to utf-8, so the xml-file has to be utf-8 too.

elements: <import> and <export>
This element defines the file as import- or export-file.

attributes of <import> and <export>:
version	version of the xml-file, required to ensure a proper import-process (for the version of the document set to: "2.0")
groupid	ID for customer-group (will be announced to the customer by landwirt.com), not required for single-import
importdate	date of the import (format: JJJJ-MM-TT), optional
language	language setting for the import, optional

example: `<import version="2.0" groupid="12" importdate="2011-07-01">`

element: <firm>
Definition of the dealer, necessary to identify the dealer

attributes of <firm>:
id	landwirt.com-ID of the dealer, required
name	Name of the dealer, optional
country	country-code of the dealer, optional

example: `<firm id="3555" name="dealer-name" country="at">`

element: <contact_person>

Defines a dealers contactperson and is optional. If no contacts are defined the default-address will be displayed in the offer-detail-view.

attributes of <contact_person>:
id	landwirt.com's internal ID for the contactperson. This ID is provided in export-files.
extid	External ID for a contactperson. This ID is used for imports. landwirt.com updates the contactpersons based on this field, contactpersons will be inserted/updated/deleted with extid as key

elements of <contact_person>:

<name>	Full name of the contactperson, optional

***<name> is deprecated but still supported at the moment (replaced by first_name,last_name) ***

<first_name>	Firstname of contactperson, required
<last_name>	Lastname of contactperson, required
<gender>	Gender of contactperson, required
	possible values:
	- 1: male
	- 2: female
	example: <gender>1</gender>
<phone>	phone of contactperson, required
<email>	email of contactperson, required
<contact_pic>	Picture of contactperson, only JPEG allowed, optional
<languages>	
(<language>)	language(s) of contactperson, optional
	If no language is set, the language will be set to a 'default'
	language (based on the dealers country)

example:
```
<contact_persons>
    <contact_person id="2">
        <name>Peter Hafner</name>
        <first_name>Peter</first_name>
        <last_name>Hafner</last_name>
        <gender>1</gender>
        <phone>+43 664 51 000 52</phone>
        <email>peter.hafner@landwirt.com</email>
        <contact_pic>http://www.landwirt.com/hafner.jpg</contact_pic>
        <languages>
            <language>de</language>
            <language>en</language>
        </languages>
    </contact_person>
</contact_persons>
```

element: <offer>

Defines a dealers offer.

attributes of <offer>:

id	landwirt.com's internal ID for the offer. This ID is provided in export-files.
extid	External ID for an offer.This ID is used for imports, required for import. landwirt.com updates the offers based on this field. Offers will be inserted/upated/deleted with extid as key.
	NOTICE: ONLY NUMERIC VALUES allowed!!!!

example for export: <offer id="1234">
example for import: <offer extid="4321">

elements of <offer>:

<int_id>   This is the „official identifier" for an offer, optional
            intID is displayed in offer-detail-view as „Internal ID" and helps the
            dealer to identify the right offer in case of inquiries
            example: <int_id><![CDATA[FV916-001]]></int_id>

<interninfo> This field is for internal notes for an offer, optional,
            interninfo is only for internal use and not displayed
            anywhere (and also not considered on export)
            example: <interninfo><![CDATA[some notes here!!!]]></interninfo>

<owner_info> Use this field for information about the previous owner of the
            machine. This field is not considered on import at the moment,
            but it is considered on export.
            example: <owner_info><![CDATA[2 previous owners, owner at the moment: Mr. X!!]]></owner_info>

<owner>   Who is the owner of the machine at the moment?
            This field is also only considered on export, not on import.
            possible values:
                -   1: dealer property
                -   2: mediation sale
            example: <owner id="2" value="mediation sale"/>

<changed>   Time of last change (concerning data and picture-changes)
            example: <changed>2015-09-25 10:00:09.0</changed>

<cat>   Main-category, required
            attributes:
                id   landwirt.com-ID of main-category, required
                value   landwirt.com-label of main-category, optional
            example: <cat id="1" value="tractors"/>

<subcat>   Sub-category, required
            attributes:
                id   landwirt.com-ID of sub-category, required
                value   landwirt.com-label of sub-category, optional
            example: <subcat id="24" value="standard tractors"/>

Find more details about main- & sub-categories in section 5 „Categories and definitions".

\<brand\>   offer-brand, optional
                attribute:
                    value   brand-name
                example: \<brand value="Fendt"/\>

The system tries to match the right brand by your delivered brand-name. Take note that correct notation is important for matching! If you don't provide any brand-name, the offer will be assigned to brand-name „others".

\<type\>   model-/type-name, required
                example: \<type\>\<![CDATA[Titan]]\>\</type\>

\<quality\>   Condition, required
                possible values:
                    -   0: used machine
                    -   1: demo machine
                    -   2: new machine
                example: \<quality\>0\</quality\>

\<contactid\>   ID of main-contact-person, optional, Only contacts defined in
                \<contact_persons\>-section are allowed, other contact-ID's will be
                ignored. The system is expecting the extID on import, on export the
                landwirt.com-contactperson-ID will be provided. This contact is
                shown in detail-view first and is also used in print list etc.
                example: \<contactid\>1\</contactid\>

\<additional_contacts\>
  (\<contactid\>)
                Defines further contact-persons, optional, only assigned if a main-
                contact is already assigned to the offer. If you are not providing a
                main-contact, the \<additional_contacts\>-section will be ignored.
                The system is   expecting the extID on import, on export the
                landwirt.com-contactperson-ID will be provided.
                example: \</additional_contacts\>
                         \<contactid\>2\</contactid\>
                         \<contatid\>3\</contactid\>
                     \</additional_contacts\>

\<price\>   price of machine, required
                attributes:
                    value   sales-price (only integer allowed), required
                    currency   currency-shortcut of sales-price, required
                example: \<price value="5490" currency="EUR"/\>

<vatoption>   tax rate-information, required
                 attributes:
                     id   landwirt.com-ID for tax rate
                     value   on export: tax rate-"description"
                                 on import: Opportunity for interface-partners to
                                 provide a tax rate (price value has to contain tax in
                                 this case)
                 examples:
                     export: <vatoption id="1" value="inkl. 20% Mwst"/>
                     import: <vatoption id="1"/>
                                 <vatoption value="20"/>

On import the id OR value has to be provided for each offer! landwirt.com developed an „Online-Service" to retrieve all possible vatoption-ID's. There are multiple tax rates for each country, so it is possible to get the valid ID's with all necessary information by passing a country_code. Set a language with parameter „lang" to define the speech of the information. Each vatoption-ID is representing a valid tax rate for a country and is unique. You can get tax rate definitions here: http://www.landwirt.com/gebrauchte/data/get_vatoptions.php5?token=xxx

As an alternate way to define a tax rate, you can also pass an integer as value. In this case the price is always „including tax".

Example (all tax rates for germany in hungarian speech):
http://www.landwirt.com/gebrauchte/data/get_vatoptions.php5?country=de&lang=hu&token=xxx

!!!IMPORTANT!!!
get_vatoptions doesn't provide any information without password (token). Contact us to ask for a valid token, we will activate this service for you!

<power>   power, required*
                 attributes:
                     unit   "kw" or "ps" (=horsepower)
                     value   power-value
                 example: <power unit="ps" value="360"/>

<width>   working-width in cm, required*
                 example: <width/>

<hours>   operating-hours, required*
                 example: <hours>500</hours>

<volume>   volume in m³, required*
                 example: <volume/>

\<capacity\>   capacity in litres, required*
               example: \<capacity/\>

\<year\>   year of build (format: YYYY), required*
               example: \<year\>2008\</year\>

\<description\>   offer-description, required
               example: \<description\>\<![CDATA[tractor is in perfect condition, no scratches]]\>\</description\>

\<picture\>   picture-name, optional (8 elements max, only jpeg alllowed)
               attributes:
                   id   consecutively numbered
                               (beginning with 0), required
                   name   filename (file has to be in same folder as xml-file or
                               filename has to include foldername too)
                               On export you find a URI here, required
               example: \<picture id="0" name="fendt_916_01.jpg"/\>

\<picid\>   ID of main-picture (must be one of the ID's from \<picture\>section),
               required
               example: \<picid\>0\</picid\>

\<property\>   Offer-environment, optional,this element allows you to define a lot of
               environment and details for your offer and can be defined multiple
               times.
               attributes:
                   short   property-shortcut, required
                   name   property-label, optional
                   id   consecutively numbered, (beginning with 0), required
               example (environment „4 wheel drive" for tractors):
               \<property id="0" short="allr" name="four-wheel drive"/\>

Find more details about properties in section 5 „Categories and definitions".

<customfield>	Further offer-details (defined by values), for example (e.g. thread depth (%),tire dimension,…)

                        attributes:

                                id   landwirt.com-ID of property, required

                                name   „title" of property, optional

                                value   property-value, required

                        example: ‹customfield id="3" name="thread depth (%)" value="50"›

Find more details about custom-fields in section 5 „Categories and definitions".

5. Categories and definitions

Please note that categories and definitions might change at any time, so we recommend to develop a „flexible" mapping-structure.

5.1 Categories

An always up to date list of all categories (XML) you can retrieve by opening http://www.landwirt.com/gebrauchte/data/get_categories.php5?token=xxx. This URl retrieves all main- and sub-categories of landwirt.com.

5.2 definitions (<property> and <customfield>)

An always up to date list of all properties and customfields (XML) is available at http://www.landwirt.com/gebrauchte/data/get_definitions.php5?token=xxx. This list defines all possible relations of properties/custom-fields to sub-categories.

You can set the speech for categories and definitions by passing the parameter „lang" the same way as for vatoptions (e.g. get_defintions.php5?lang=hu for hungarian speech)

!!!!IMPORTANT!!
get_categories, get_definitions (& get_vatoptions) do not provide any information without password (token). Contact us to ask for a valid token, we will activate this service for you!

5.2.1 <property>

Properties are defined by alphanumeric Codes (max. 4 characters). Each property is assigned to all subcategories they are valid for. At the moment it's possible to set 20 properties max. for each offer.

There are two kinds of properties:

selection-properties: Selection properties have predefined values, you can select only one of the provided values. If you set more than one value for a selection-property, the last in your XML will be assigned, all previous definitions will be overwritten.
Let's have a look at the drive-type for tractors as selection-property: Possible values for this property are chain-drive, four wheel drive & rear wheel drive. It doesn't make sense to set rear wheel drive AND four wheel drive for a tractor.

Yes/No-Properties This properties are 'standalone'-properties. They are not depending on other properties and also do not exclude any other properties.

In the property-list, selection-properties differ from yes-/no-properties by having an enclosing tag <selection_property>.

example-definition:
```
<subcat id="212">
    <!--selection-property>
    <selection_property name="drive">
        <property short="hra" name="rear wheel drive"/>
        <property short="allr" name="four wheel drive"/>
        <property short="RAUP" name="chain drive"/>
    </selection_property>
    <!--yes/no-properties>
    <property short="kli" name="air condition"/>
    <property short="krg" name="creep speed"/>
</subcat>
```

5.2.2 <customfield>

Use custom-fields to define properties by values.
example: <customfield id="3" name="thread depth front (%)" value="50">

6. Additional information

6.1 Pictures

- **Import**

  Filenames must be unique. Files have to be stored in the same folder as the XML-file (FTP-root). If you create any subfolders for pictures you have to add this information to the picture-path too. landwirt.com only allows JPEG as picture format. Max. size of pictures should be 1200x900 to ensure a quick FTP-transfer.

  All files are kept on your FTP-host, so you don't have to provide/transfer pictures more than one time. They only have to be transferred again after any changes. Please note that you have to include the elements <picture> and <picid> all the time in the XML-file, otherwise the offer-pictures will be deleted.
  .

- **Export**

  On export landwirt.com provides URl's for pictures instead of filenames. These pics are optimized & scaled versions of the original pictures to ensure fast loading time in our used machinery marketplace.

6.2 basic-properties for machines

The basic-properties <power>, <width>, <hours>, <volume>, <capacity> & <year> have be defined for each offer (marked in section 4.2 by required*). You will notice that it's not useful or possible to set reasonable values for each machine-type (for example: power for trailers), so leave it empty or set it to 0 in this case.

6.3 Interface vs. manual maintenance

There is no way to set an extID for an offer by hand. If you create any offers „manually", the system is not able to map and update these offers via interface. Manually created offers, which are provided in XML too will be in the system twice.
If you change & save interface-offers „manually", the offers will not be updated via interface anymore (to keep your manual changes). BUT: If you don't provide an offer in XML anymore, it will be deleted (it doesn't make a difference for deletion if there were manual changes or not).

7. XML-example

You can find a valid example for export-example here:
http://www.landwirt.com/gebrauchte/data/export_sample.xml